MSDS

MATERIAL SAFETY DATA SHEET

Client	:	**Lingen Precision Medical Products (Shanghai) Co., Ltd.** No.59, Yewang Road, Yexie Industrial Park, 201609, Songjiang District, Shanghai, China
Prepared by	:	**Shenzhen CCT Testing Technology Co., Ltd.** 8th Floor, Area I, Building 1, Hanhaida Science and Technology Innovation Park, Guangming New District, Shenzhen, Guangdong, China
Report Date	:	**2020-06-17**
Report No.	:	**CCT20061203LRS**

**********FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S)**********

Shenzhen CCT Testing Technology Co., Ltd

Drafted By: Mark

Review By: Irence

Approved By: Tonyo

SHENZHEN CCT TESTING TECHNOLOGY CO., LTD. CCT Testing Service

SECTION 1.CHEMICAL PRODUCT INFORMATION

Product details:

Product name	:	Disposable virus sampling tube
Mode	:	MTM, VTM, ATM, UTM
Mark	:	/
TEL	:	021-57802277
Fax	:	86-21-64857822
E-mail	:	marketing@labtub.com

Supplier/Manufacturer

Applicant	:	Lingen Precision Medical Products (Shanghai) Co., Ltd.
Address	:	No.59, Yewang Road, Yexie Industrial Park, 201609, Songjiang District, Shanghai, China

Summary:

As specified by the client, This safety data sheet was prepared in accordance with Un GHS Rev.7, The EU CLP REGULATION(EC) No 1272/2013, and US OSH Hazard Communication Standards(29 CFR 1910.1200). Please refer to attached report for details.

SECTION 2.HAZARDS IDENTIFICATION

Emergency Overview	Not likely to be an irritant in the solid form. Not likely to form a dust in the solid filament form.
Potential Acute Health Effects:	**Inhalation:** Not likely to form an inhalable dust in the solid filament form and for the intended use. Thermal decomposition may result in release of toxic airborne contaminants. **Sensitization:** Not likely to result in a sensitizing effect under the intended use.
Potential Chronic Health Effects:	Carcinogenic Effects: No known carcinogenic effects Mutagenic Effects: No known mutagenic effects Teratogenic Effects: No known teratogenic effects Developmental Toxicity: No known developmental toxicity
Reported as carcinogen	Not applicable

SECTION 3. COMPOSITION /HAZARDOUS INGREDIENTS

Chemical Name	CAS No.	Content (wt%)
MTM		
Isothiocyanate Gua	----	23.6
Guanidine hydrochloride	50-01-1	10
NLS	----	0.5
TCEP	----	0.03
Tris-HCL	----	10
Chelating agent	----	1
Organic alcohol	----	11.5
Defoamer	----	0.2
Water	7732-18-5	43.17
VTM		
Bovine serum albumin BSA	17879-45-7	0.5
E-mem basic medium	----	0.96
Sodium bicarbonate	144-55-8	0.08
Phenol red solution	----	10
Benzylpenicillin potassium	132-98-9	2
Streptomycin sulfate	3810-74-0	
Gentamicin sulfate	1405-41-0	
Amphotericin B	1397-89-3	0.2
Sulfamethoxazole	723-46-6	2
Water	7732-18-5	84.26
ATM		
Sodium chloride	7647-14-5	0.3
Potassium chloride	7447-40-7	0.02
Calcium chloride	10035-04-8	0.01
Magnesium chloride (6 crystal water)	7786-30-3	0.02
Potassium dihydrogen phosphate	7778-77-0	0.02
Two sodium hydrogen phosphate (12 crystal water)	7558-79-4	0.29
Sodium mercaptoglycolate	367-51-1	0.1
Water	7732-18-5	99.24
UTM		
Sodium chloride	7647-14-5	0.7
Potassium chloride	7447-40-7	0.04

Calcium chloride	10035-04-8	0.014
Magnesium chloride	7786-30-3	0.01
Potassium dihydrogen phosphate	7778-77-0	0.11
Two sodium hydrogen phosphate (12 crystal water)	7558-79-4	0.06
Glucose	50-99-7	0.1
L-cysteine	52-90-4	0.05
L-glutamic acid	56-86-0	0.03
Sucrose	57-50-1	0.15
Gelatin	9000-70-8	0.1
Water	7732-18-5	94.736
Phenol red solution	----	1
Benzylpenicillin potassium	132-98-9	2
Streptomycin sulfate	3810-74-0	
Gentamicin sulfate	1405-41-0	
Amphotericin B	1397-89-3	0.2
Sulfamethoxazole	723-46-6	0.2
Bovine serum albumin BSA	17879-45-7	0.5

SECTION 4. FIRST AID MEASURES

Eye Contact:	Rinse immediately with plenty of water. Call a physician immediately.
Skin Contact:	Rinse immediately with plenty of water. If skin irritation persists, call a physician. Cool skin rapidly with cold water after contact with hot polymer
Inhalation:	Move to fresh air. Call a physician immediately if irritation persists.
Ingestion:	Drink water as a precaution. Never give anything by mouth to an unconscious person. Do not induce omitting without medical advice. Call a physician immediately.

SECTION 5. FIGHTING MEASURES

Suitable extinguishing Media	Water spray, dry chemical, foam. CO2 may be ineffective on large fires
Unsuitable extinguishing Media	Not applicable
Fire fighting instructions:	Fire fighters should wear positive pressure self-contained breathing apparatus and should be equipped with protective clothing. Keep people away and isolate fire area.
Special measures	Not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

Fire fighting instructions:	In case of spill sweep up material and place in containers for re-use or disposal.

SECTION 7. HANDING AND STORAGE

HANDING	Use normal good industrial hygiene and housekeeping practices. Take precautionary measures against static discharges.
STORAGE	Store in a cool, dry, well-ventilated area. Keep away from heat, sparks and flames. Keep containers closed. Avoid moisture contamination. Transferring dry pellets or granules between containers or charging into solvents can cause a build-up of static electricity which can be sufficient to cause fires and/or explosions in the presence of flammable materials. Equipment should provide a means of dissipating any charges that may develop.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Engineering Controls:	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits
Personal Protection:	Respiratory :In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Eyes : safety glasses with side-shields
Exposure Limits:	None known.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIED

Appearance:	Solid
Color:	Colorless/light red
Odor:	Slightly smelly
Density:	Not available.
Boiling Point:	Not available.
Melting Point:	Not available.
Flashpoint:	Not available.
Vapour pressure:	Not available.
Solubility in water:	Not available.
Viscosity:	Not available.
PH Value:	Not available.
Permission of solvent inhalation:	Not available.
Ignition temperature:	Not available.

SECTION 10. STABILITY AND REACTIVITY

Stability:	The product is stable.
Instability Temperature:	Not available
Incompatibility with various substances:	Reactive with oxidizing agents, metals, acids
Special Remarks on Reactivity:	Incompatible with air, unsaturated oils, 2-Nitrobenzaldehyde, strong oxidizers such as fluorine, chlorine trifluoride, and potassium peroxide.
Conditions to avoid:	Not available.
Special Remarks on Corrosivity:	Not available.
Polymerization:	Will not occur.

SECTION 11.TOXICOLOGICAL INFORMATION

Potential acute health effects	Inhalation: Non-irritating to the respiratory system. Ingestion: Not hazardous in normal industrial use. Skin: Non-irritating. Molten polymer will adhere to skin causing deep thermal burns. Eyes: May cause physical abrasion in contact with eyes. Molten polymer will cause serious burns to the eyes.
Toxicity to Animals:	LD50: Not available. LC50: Not available.
Chronic effects	No known significant effects or critical hazards.
Target organs	No known significant effects or critical hazards.
Special Remarks on Toxicity to Animals:	Not available.
Special Remarks on Chronic Effects on Humans:	May cause adverse reproductive effects.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:	Not available..
BOD5 and COD:	Not available.
Products of Biodegradation:	Not Determined
Toxicity of the Products of Biodegradation:	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation:	Not available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal:	Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14.TRANSPORT INFORMATION

This product applied to by sea, by air and by land

DOT Classification:	Not applicable.
IATA :	Not regulated as dangerous goods.
IMDG Class	Not applicable
UN-Unmber	Not applicable.
UN Proper shipping name	Not applicable.
Identification:	Not applicable.
Special Provisions for Transport:	Not applicable

SECTION 15. REGULATORY INFORMATION

《Dangerous Goods Regulation》
《Recommendations on Transport of Dangerous Goods Model Regulations》
《International Maritime Dangerous Goods》
《Technical Instructions for the Safe Transport of Dangerous Goods》
《Classification and code of dangerous goods》
《Occupational Safety and Health Act》(OSHA)
《Toxic Substances Control Act》(CPSA)
《Federal Environmental Pollution Control Act》(FEPCA)
《The Oil Pollution Act》(OPA)
《Superfund Amendments and Reauthorization Act III(302/311/312/313)》(SARA)
《Resource Conservation and Recovery Act》(RCRA)
《Safety Drinking Water Act》(CWA)
《California Proposition 65》
《Code of Federal Regulations》(CFR) In accordance with all Federal, State and local laws.

SECTION 16. REGULATORY INFORMATION

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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Safety Data Sheet (SDS) Report

SDS number: WUXH00099737

Applicant: WUXI NEST BIOTECHNOLOGY CO.,LTD
NO.530 XIDA Road，Wuxi Meicun Industrial Park, Jiangsu province, China

Issue Date: 2020-04-14

Sample Description:

The sample information was submitted and identified on client's behalf to be:

Product Name	:	Disposable sampler(VTM)
Physical State	:	Liquid
Data Received	:	Apr 08, 2020
Data Reviewed	:	Apr 14, 2020

Service Requested:

Based on the information provided by the applicant, the Safety Data Sheet (SDS) was generated in accordance with requirements of OSHA HazCom Standard (2012), for details please refer to attached pages.

Authorized By:
On Behalf Of Regulatory Affairs in Intertek Testing Services Ltd., Shanghai

Anna Wang
Regulatory Consultant

Intertek Health, Environmental &Regulatory Services (HERS)
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Tel: +86 021 53397917 ZIP: 200233
E-mail:hers@intertek.com

Safety Data Sheet

Disposable sampler(VTM)

WUXI NEST BIOTECHNOLOGY CO.,LTD

SDS Number:**WUXH00099737**

Version No:**1.0**
According to OSHA HazCom Standard (2012) requirements

Issue Date:**14/04/2020**
GHS.USA.EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	Disposable sampler(VTM)
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	Use according to manufacturer's directions.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Supplier Name	**WUXI NEST BIOTECHNOLOGY CO.,LTD**
Address	NO.530 XIDA Road, Wuxi Meicun Industrial Park, Jiangsu province, China
Telephone	0086-13814261600
Emergency Telephone	0086-18352528192
Email	QAmanager00@nest-wuxi.com
Importer Name	
Address	
Telephone	
Email	

Emergency phone number

Association / Organisation	
Emergency telephone numbers	
Other emergency telephone numbers	

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Not considered a Hazardous Substance by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). Not classified as Dangerous Goods for transport purposes.

Classification	Not Classified

Label elements

Hazard pictogram(s)	Not Applicable
SIGNAL WORD	**NOT APPLICABLE**

Hazard statement(s)

Not Applicable

Hazard(s) not otherwise classified

Not Applicable

Supplementary statement(s)

Not Applicable

Precautionary statement(s) General

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
24634-61-5	0.025	potassium sorbate
10043-52-4	0.014	calcium chloride
1405-41-0	0.005	gentamicin sulfate
143-74-8	0.001	phenol red
1397-89-3	0.000025	amphotericin B

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: ▸ Wash out immediately with water. ▸ If irritation continues, seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation.
Inhalation	▸ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary.
Ingestion	▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

Special protective equipment and precautions for fire-fighters

Fire Fighting	▸ Use water delivered as a fine spray to control fire and cool adjacent area. ▸ **Do not** approach containers suspected to be hot.
Fire/Explosion Hazard	▸ Non combustible. ▸ Not considered a significant fire risk, however containers may burn.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	▸ Clean up all spills immediately.

Continued...

	▸ Avoid breathing vapours and contact with skin and eyes.
Major Spills	▸ Clear area of personnel and move upwind. ▸ Alert Fire Brigade and tell them location and nature of hazard.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	▸ Limit all unnecessary personal contact. ▸ Wear protective clothing when risk of exposure occurs.
Other information	Not Applicable

Conditions for safe storage, including any incompatibilities

Suitable container	▸ Polyethylene or polypropylene container. ▸ Packing as recommended by manufacturer.
Storage incompatibility	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
calcium chloride	Calcium chloride	12 mg/m3	130 mg/m3	790 mg/m3

Ingredient	Original IDLH	Revised IDLH
Disposable sampler(VTM)	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
Personal protection	
Eye and face protection	▸ Safety glasses with side shields ▸ Chemical goggles. ▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.
Skin protection	See Hand protection below
Hands/feet protection	Wear general protective gloves, eg. light weight rubber gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. **OTHERWISE:** ▸ Overalls.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Red Liquid

Physical state	Liquid	**Relative density (Water = 1)**	Not Available
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available

Continued...

pH (as supplied)	Not Available	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Available	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Flammable	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water	Not Available	**pH as a solution (1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity	calcium chloride Oral (mouse) LD50: 1940 mg/kg[2] Oral (Rabbit) LD50: 1384 mg/kg[2] Oral (rat) LD50: 1000 mg/kg[2] phenol red Oral (rat) LD50: >600 mg/kg[2] potassium sorbate dermal (rat) LD50: >2000 mg/kg[1] Oral (rat) LD50: 3200-10500 mg/kg[2] gentamicin sulfate Oral (rat) LD50: >5000 mg/kg[2] amphotericin B Oral (rat) LD50: >5000 mg/kg[2]
Skin Irritation/Corrosion	Based on available data, the classification criteria are not met.
Serious Eye Damage/Irritation	Based on available data, the classification criteria are not met.
Respiratory or Skin sensitisation	Based on available data, the classification criteria are not met.
Mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductivity	Based on available data, the classification criteria are not met.
STOT - Single Exposure	Based on available data, the classification criteria are not met.
STOT - Repeated Exposure	Based on available data, the classification criteria are not met.
Aspiration Hazard	Based on available data, the classification criteria are not met.
Legend:	*1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise*

Continued...

	specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Disposable sampler(VTM)	Based on available data, the classification criteria are not met.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
phenol red	HIGH	HIGH
amphotericin B	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
phenol red	LOW (LogKOW = 3.02)
amphotericin B	LOW (LogKOW = -3.5441)

Mobility in soil

Ingredient	Mobility
phenol red	LOW (KOC = 1170000)
amphotericin B	LOW (KOC = 7692000)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. ▸ **DO NOT** allow wash water from cleaning or process equipment to enter drains. ▸ It may be necessary to collect all wash water for treatment before disposal. ▸ Recycle wherever possible. ▸ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

SECTION 14 TRANSPORT INFORMATION

Marine Pollutant	NO

Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

CALCIUM CHLORIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

PHENOL RED IS FOUND ON THE FOLLOWING REGULATORY LISTS

US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

POTASSIUM SORBATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

GENTAMICIN SULFATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Chemical Footprint Project - Chemicals of High Concern List

US - California Proposition 65 - Reproductive Toxicity

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

AMPHOTERICIN B IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

Continued...

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	No
Specific target organ toxicity (single or repeated exposure)	No
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	No

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

State Regulations

US. CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - CALIFORNIA PROPOSITION 65 - REPRODUCTIVE TOXICITY: LISTED SUBSTANCE

Aminoglycosides Listed

SECTION 16 OTHER INFORMATION

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
PC—STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Governmental Industrial Hygienists
STEL: Short Term Exposure Limit
TEEL: Temporary Emergency Exposure Limit。
IDLH: Immediately Dangerous to Life or Health Concentrations
OSF: Odour Safety Factor
NOAEL :No Observed Adverse Effect Level
LOAEL: Lowest Observed Adverse Effect Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index

Nomination No.: MPTJ2000003-01AE-US

Safety Data Sheet (SDS)

Product Name：Virus Sampling Kit

Report Version：Prepared according to American OSHA HazCom Standard (2012)

Application Company Name：Yocon Biology Technology Company

Application Company Address：3/F, Bldg.B, No.7, Fengxian Rd, Yong FENG Base, Haidian District

Contract Information：010-58711655

24 Hour Emergency Call：010-58711552

Report Edit time：2020-5-9

Editor

Reviewer

2020-5-11

Safety Data Sheet

Virus Sampling Kit

Version: V1.0.0.1
Report No.: MPTJ2000053-01AE-US
Creation Date: 2020/05/09
Revision Date: 2020/05/09

*Prepared according to American OSHA HazCom Standard (2012)

1 Identification of the chemical and supplier

Product identifier

Product Name	Virus Sampling Kit
Product Model	MT0301-1 MT0301-2
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	The virus sampling kit is based on Hank's solution. The solution contains inorganic salts, amino acids, and protein-stable ingredients. The virus sampling kit has a stable osmotic pressure, which provides astable transport and storage environment for nasopharyngeal swab samples. Samples are sent to the laboratory for follow-up testing to determine whether the collected samples are infected with the virus.
Uses advised against	For in vitro diagnosis only.

Details of the supplier of the Safety Data Sheet

Name of the company	Yocon Biology Technology Company
Address of the company	3/F, Bldg.B, No.7, Fengxian Rd, Yong FENG Base, Haidian District
Post code	100094
Telephone number	010-58711655
Fax number	010-58711655
E-mail address	Lihaifeng@yocon.com.cn

Emergency phone number

Emergency phone number	010-58711552

2 Hazards identification

Hazard classification according to GHS

Hazard classification according to GHS	Not applicable

Label elements

Hazard pictograms	Not applicable
Signal word	Not applicable

Hazard statements

Hazard statements	Not applicable

Precautionary statements

◆ Prevention

Prevention	Not applicable

◆ Response

Response	Not applicable

◆ Storage

Storage	Not applicable

◆ Disposal

Disposal	Not applicable

Other hazards

Not applicable

Hazard description

◆ Physical and chemical hazards

Liquid, toxic smoke/fumes in a fire.

◆ Health hazards

Inhaled	Inhalation of the product may produce adverse health effects or irritation of the respiratory tract following discomfort.
Ingestion	Accidental ingestion of the product may be harmful to the health of the individual.
Skin Contact	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
Eye	This product may cause temporary discomfort following direct contact with the eye.

◆ Environmental hazards

Please refer to 12th chapter of SDS.

3 Composition/information on ingredients

Component	Cas No.	EC No.	Concentration (weight percent, %)
Protein and amino acid	/	-	Commercial secrets
Sodium chloride	7647-14-5	231-598-3	0.8
D( )-Glucose	50-99-7	200-075-1	0.1
Potassium chloride	7447-40-7	231-211-8	0.04
Sodium bicarbonate	144-55-8	205-633-8	0.035
Magnesium sulfate heptahydrate	10034-99-8	600-073-4	0.02
Gentamicin	1403-66-3	215-765-8	Commercial secrets
Calcium chloride	10043-52-4	233-140-8	0.014
Disodium hydrogen phosphate heptahydrate	7782-85-6	616-512-8	0.012
Potassium dihydrogen phosphate	7778-77-0	231-913-4	0.006

Phenol red sodium salt	34487-61-1	252-057-8	0.002
Purified water	7732-18-5	231-791-2	97.897

4 First aid measures

Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin contact	No harm in general situation. First aid is not needed.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

1	Please see section 11.

Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Firefighting measures

Extinguishing media

Suitable extinguishing media	Use extinguishing media suitable for surrounding area.
Unsuitable extinguishing media	There is no restriction on the type of extinguisher which may be used.

Specific hazards arising from the substance or mixture

1	Development of hazardous combustion gases or vapor possible in the event of fire.
2	Not considered a significant fire risk, however containers may burn.

Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

1	Ensure adequate ventilation. Remove all sources of ignition.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment. Avoid breathing vapours, mist or gas.

Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

1	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
2	Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
3	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7 Handling and storage

Precautions for handling

1	Handling is performed in a well ventilated place.
2	Avoid contact with eyes.
3	Keep away from heat/sparks/open flames/ hot surfaces.

Precautions for storage

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

8 Exposure controls/personal protection

Control parameters

◆ Occupational Exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
Sodium chloride 7647-14-5	Latvia	-	5	-	-
Potassium chloride 7447-40-7	Latvia	-	5	-	-
Sodium bicarbonate 144-55-8	Latvia	-	5	-	-
Calcium chloride 10043-52-4	Latvia	-	2	-	-
	Canada - Ontario	-	5	-	-

◆ Biological limit values

Biological limit values	No relevant regulations

◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air (Series standard).

Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.

3	Set up emergency exit and necessary risk-elimination area.
4	Handle in accordance with good industrial hygiene and safety practice.

Personal protection equipment

General requirement	No special requirements, please see the description below.
Eye protection	In general situation, eye protection is not needed. In the production process, when contacting with vapour, tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).
Hand protection	In general situation, hand protection is not needed.
Respiratory protection	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and body protection	In general situation, skin and body protection are not needed.

9 Physical and chemical properties

Physical and chemical properties

Appearance	Colorless clear liquid
Odor	No odor
Odor threshold	No information available
pH	7.0~7.6 (20℃~25℃, Sample solution)
Melting point/freezing point(℃)	No information available
Initial boiling point and boiling range(℃)	>35
Flash point(Closed cup,℃)	No information available
Evaporation rate	No information available
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	Upper limit: No information available; Lower limit: No information available
Vapor pressure	No information available
Vapor density(Air = 1)	No information available
Relative density(Water=1)	No information available
Solubility(mg/L)	Miscible with water
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(℃)	No information available
Decomposition temperature(℃)	No information available
Viscosity(mm^2/s)	No information available

10 Stability and reactivity

Stability and reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.

Possibility of hazardous reactions	In contact with organic peroxides cause a fire immediately. In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	Organic peroxides. Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information

Acute toxicity

Component	Cas No.	LD_{50}(oral)	LD_{50}(dermal)	LC_{50}(inhalation,4h)
Gentamicin	1403-66-3	6600mg/kg(Rat)	No information available	No information available
Potassium dihydrogen phosphate	7778-77-0	No information available	>4640mg/kg(Rabbit)	No information available
Sodium chloride	7647-14-5	3000mg/kg(Rat)	>10000mg/kg(Rabbit)	No information available
D( )-Glucose	50-99-7	25800mg/kg(Rat)	No information available	No information available
Calcium chloride	10043-52-4	1000mg/kg(Rat)	No information available	No information available
Potassium chloride	7447-40-7	2600mg/kg(Rat)	No information available	No information available
Disodium hydrogen phosphate heptahydrate	7782-85-6	12930mg/kg(Rat)	No information available	No information available
Sodium bicarbonate	144-55-8	4220mg/kg(Rat)	No information available	No information available

Carcinogenicity

ID	Cas No.	Component	IARC	NTP
1	/	Protein and amino acid	Not Listed	Not Listed
2	7647-14-5	Sodium chloride	Not Listed	Not Listed
3	50-99-7	D( )-Glucose	Not Listed	Not Listed
4	7447-40-7	Potassium chloride	Not Listed	Not Listed
5	144-55-8	Sodium bicarbonate	Not Listed	Not Listed
6	10034-99-8	Magnesium sulfate heptahydrate	Not Listed	Not Listed
7	1403-66-3	Gentamicin	Not Listed	Not Listed
8	10043-52-4	Calcium chloride	Not Listed	Not Listed
9	7782-85-6	Disodium hydrogen phosphate heptahydrate	Not Listed	Not Listed
10	7778-77-0	Potassium dihydrogen phosphate	Not Listed	Not Listed
11	34487-61-1	Phenol red sodium salt	Not Listed	Not Listed
12	7732-18-5	Purified water	Not Listed	Not Listed

Others

	Virus Sampling Kit
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met

12 Ecological information

Acute aquatic toxicity

Component	Cas No.	Fish	Crustaceans	Algae
Sodium chloride	7647-14-5	LC_{50}: 7400mg/L (96h)(Fish)	EC_{50}: 2120mg/L (48h)(Crustaceans)	No information available
Magnesium sulfate heptahydrate	10034-99-8	LC_{50}: 2820mg/L (96h)(Fish)	EC_{50}: 344mg/L (48h)(Crustaceans)	No information available
Calcium chloride	10043-52-4	LC_{50}: 9500mg/L (96h)(Fish)	EC_{50}: 1400mg/L (48h)(Crustaceans)	No information available
Potassium chloride	7447-40-7	LC_{50}: 880mg/L (96h)(Fish)	EC_{50}: 141mg/L (48h)(Crustaceans)	No information available
Sodium bicarbonate	144-55-8	LC_{50}: 8600mg/L (96h)(Fish)	No information available	No information available

Chronic aquatic toxicity

Chronic aquatic toxicity	No information available

Persistence and degradability

Component	Cas No.	Persistence (water/soil)	Persistence (air)
Sodium chloride	7647-14-5	Low	Low
D( )-Glucose	50-99-7	Low	Low
Potassium chloride	7447-40-7	High	High
Sodium bicarbonate	144-55-8	Low	Low
Magnesium sulfate heptahydrate	10034-99-8	High	High
Purified water	7732-18-5	Low	Low

Bioaccumulative potential

Component	Cas No.	Bioaccumulative potential	comments

Sodium chloride	7647-14-5	Low	Log Kow=0.5392
D( )-Glucose	50-99-7	Low	Log Kow=-3.3
Potassium chloride	7447-40-7	Low	Log Kow=-0.4608
Sodium bicarbonate	144-55-8	Low	Log Kow=-0.4605
Magnesium sulfate heptahydrate	10034-99-8	Low	Log Kow=-2.2002
Purified water	7732-18-5	Low	Log Kow=-1.38

Mobility in soil

Component	Cas No.	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
Sodium chloride	7647-14-5	Low	14.3
D( )-Glucose	50-99-7	Low	10
Potassium chloride	7447-40-7	Low	14.3
Sodium bicarbonate	144-55-8	High	1
Magnesium sulfate heptahydrate	10034-99-8	Low	6.124
Purified water	7732-18-5	Low	14.3

Results of PBT and vPvB assessment

Component	Cas No.	Results of PBT and vPvB assessment (according to (EC) No 1907/2006)
Sodium chloride	7647-14-5	not PBT/vPvB
D( )-Glucose	50-99-7	not PBT/vPvB
Potassium chloride	7447-40-7	not PBT/vPvB
Sodium bicarbonate	144-55-8	not PBT/vPvB
Magnesium sulfate heptahydrate	10034-99-8	not PBT/vPvB
Gentamicin	1403-66-3	not PBT/vPvB
Calcium chloride	10043-52-4	not PBT/vPvB
Disodium hydrogen phosphate heptahydrate	7782-85-6	not PBT/vPvB
Potassium dihydrogen phosphate	7778-77-0	not PBT/vPvB
Phenol red sodium salt	34487-61-1	not PBT/vPvB
Purified water	7732-18-5	not PBT/vPvB

13 Disposal considerations

Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

14 Transport information

Label and Mark

Transporting Label	Not applicable

IMDG-CODE

IMDG-CODE	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

ICAO/IATA-DGR

ICAO/IATA-DGR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

UN-ADR

UN-ADR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Notes

Notes	5-25℃ transportation

15 Regulatory information

International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Protein and amino acid	×	×	×	×	×	×	×	×	×
Sodium chloride	√	√	√	√	√	√	√	√	√
D( )-Glucose	√	√	√	√	√	√	√	√	√
Potassium chloride	√	√	√	√	√	√	√	√	√
Sodium bicarbonate	√	√	√	√	√	√	√	√	√
Magnesium sulfate heptahydrate	×	×	√	√	√	√	×	√	×
Gentamicin	√	×	×	√	√	√	×	√	×
Calcium chloride	√	√	√	√	√	√	√	√	√
Disodium hydrogen phosphate heptahydrate	×	×	×	√	√	√	×	√	×
Potassium dihydrogen phosphate	√	√	√	√	√	√	√	√	√
Phenol red sodium salt	√	√	√	√	√	√	√	×	×
Purified water	√	√	√	√	√	√	√	√	√

【EINECS】 European Inventory of Existing Commercial Chemical Substances
【TSCA】 United States Toxic Substances Control Act Inventory
【DSL】 Canadian Domestic Substances List
【IECSC】 China Inventory of Existing Chemical Substances
【NZIoC】 New Zealand Inventory of Chemicals
【PICCS】 Philippines Inventory of Chemicals and Chemical Substances
【KECI】 Existing and Evaluated Chemical Substances
【AICS】 Australia Inventory of Chemical Substances
【ENCS】 Existing And New Chemical Substances

Note
"√" Indicates that the substance included in the regulations
"×" That no data or included in the regulations

16 Others

Information on revision

Creation Date	2020/05/09
Revision Date	2020/05/09
Reason for revision	-

Reference

[1]IPCS: The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home.
[2]IARC, website: http://www.iarc.fr/.
[3]OECD: The Global Portal to Information on Chemical Substances, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en.
[4]CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple.
[5]NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
[6]EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/.
[7]U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg.
[8]Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/.

Abbreviations and acronyms

CAS –Chemical Abstracts Service
PC-STEL- Short term exposure limit
DNEL - Derived No Effect Level
RPE - Respiratory Protective Equipment
LC_{50} - Lethal Concentration 50%
NOEC -No Observed Effect Concentration
PBT - Persistent, Bioaccumulative, Toxic
BCF - Bioconcentration factor (BCF)
IMDG-International Maritime Dangerous Goods
UN-The United Nations
NFPA-National Fire Protection Association
CMR - Carcinogens, mutagens or substances toxic to reproduction
PC-TWA - Time Weighted Average
IARC - International Agency for Research on Cancer
PNEC –Predicted No Effect Concentration
LD_{50} - Lethal Dose 50%
EC_{50} - Effective Concentration 50%
POW - Partition coefficient Octanol: Water
vPvB - very Persistent, very Bioaccumulative
ICAO/IATA-International Civil Aviation Organization/International Air Transportation Association
ACGIH-American Conference of Governmental Industrial Hygienists
OECD-Organization for Economic Co-operation and Development

Disclaimer

This Safety Data Sheet (SDS) was prepared according to OSHA HazCom Standard (2012). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user' s reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.04.2020 Revision: 22.04.2020

*
SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: GBO Buffer pH7.4 (PBS Solution)**

· **Article number:** HL0721
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Life cycle stages** IS Use at industrial Sites
· **Sector of Use** SU20 Health services
· **Application of the substance / the mixture** Tubes for transporting samples

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Greiner Bio-One GmbH
Bad Haller Str. 32
4550 Kremsmuenster, Austria
T: +43 7583 6791-0
www.gbo.com/preanalytics

· **Further information obtainable from:** msdsoffice@gbo.com
· **1.4 Emergency telephone number:** Poison Information Center: +44 845 4647, +44 8454 24 24 24

*
SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**
The product is not classified, according to the CLP regulation.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:** Void
· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

*
SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:** No special measures required.
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Generally the product does not irritate the skin.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:** If symptoms persist consult doctor.

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· ***4.2 Most important symptoms and effects, both acute and delayed*** *No further relevant information available.*
· ***4.3 Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

*
SECTION 5: Firefighting measures

· ***5.1 Extinguishing media***
· ***Suitable extinguishing agents:*** *Use fire extinguishing methods suitable to surrounding conditions.*
· ***5.2 Special hazards arising from the substance or mixture*** *No further relevant information available.*
· ***5.3 Advice for firefighters***
· ***Protective equipment:*** *Wear self-contained respiratory protective device.*

*
SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures*** *Not required.*
· ***6.2 Environmental precautions:*** *Dilute with plenty of water.*
· ***6.3 Methods and material for containment and cleaning up:***
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
· ***6.4 Reference to other sections***
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

*
SECTION 7: Handling and storage

· ***7.1 Precautions for safe handling*** *No special measures required.*
· ***Information about fire - and explosion protection:*** *No special measures required.*

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:*** *No special requirements.*
· ***Information about storage in one common storage facility:*** *Not required.*
· ***Further information about storage conditions:*** *None.*
· ***Storage class:*** *12*
· ***7.3 Specific end use(s)*** *No further relevant information available.*

*
SECTION 8: Exposure controls/personal protection

· ***Additional information about design of technical facilities:*** *No further data; see item 7.*

· ***8.1 Control parameters***
· ***Ingredients with limit values that require monitoring at the workplace:***
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· ***Additional information:*** *The lists valid during the making were used as basis.*

· ***8.2 Exposure controls***
· ***Personal protective equipment:***
· ***General protective and hygienic measures:***
The usual precautionary measures are to be adhered to when handling chemicals.
· ***Respiratory protection:*** *Not required.*
· ***Protection of hands:***
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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Trade name: GBO Buffer pH7.4 (PBS Solution)

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
Nitrile rubber, NBR
Butyl rubber, BR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** *Goggles recommended during refilling*

*
SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	*Fluid*
Colour:	*Colourless*
· **Odour:**	*Odourless*
· **Odour threshold:**	*Not determined.*
· **pH-value:**	*Not determined.*
· **Change in condition**	
Melting point/freezing point:	*Undetermined.*
Initial boiling point and boiling range:	*100 °C*
· **Flash point:**	*Not applicable.*
· **Flammability (solid, gas):**	*Not applicable.*
· **Decomposition temperature:**	*Not determined.*
· **Auto-ignition temperature:**	*Product is not selfigniting.*
· **Explosive properties:**	*Product does not present an explosion hazard.*
· **Explosion limits:**	
Lower:	*Not determined.*
Upper:	*Not determined.*
· **Vapour pressure:**	*Not determined.*
· **Density at 20 °C:**	*~1 g/cm³*
· **Relative density**	*Not determined.*
· **Vapour density**	*Not determined.*
· **Evaporation rate**	*Not determined.*
· **Solubility in / Miscibility with water:**	*Fully miscible.*
· **Partition coefficient: n-octanol/water:**	*Not determined.*
· **Viscosity:**	
Dynamic:	*Not determined.*
Kinematic:	*Not determined.*
· **Solvent content:**	
Water:	*<97.0 %*
VOC (EC)	*0.00 %*

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Solids content:	<2.5 %
· **9.2 Other information**	No further relevant information available.

*
SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **Primary irritant effect:**
· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:** Not hazardous for water.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

*
SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation** Smaller quantities can be disposed of with household waste.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

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Trade name: GBO Buffer pH7.4 (PBS Solution)

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· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, ADN, IMDG, IATA**	Void
· **14.2 UN proper shipping name**	
· **ADR, ADN, IMDG, IATA**	Void
· **14.3 Transport hazard class(es)**	
· **ADR, ADN, IMDG, IATA**	
· **Class**	Void
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	Void

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
· ***** Data compared to the previous version altered.**

SAFETY DATA SHEET according to Hazard Communication Standard (HCS) 29 CFR 1910.1200

SECTION 1.0 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Product name: PrimeStore Molecular Transport Medium® (MTM)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Transport medium for swabs

1.3 Details of the supplier of the safety data sheet

Name: Longhorn Vaccines and Diagnostics LLC
Address: 1747 Citadel Plaza, Ste 206, San Antonio, TX 78209

Telephone: USA (210) 826-0910
Email: info@lhnvd.com

1.4 Emergency telephone number

001-301-233-1551 (24 hours).

SECTION 2.0 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS classification according to 29 CFR 1910.1200 (OSHA HCS)

Hazard classes and hazard categories	Hazard statements
Acute toxicity, category 4, inhalation	H332
Skin corrosion, category 1C	H314
Serious eye damage, category 1	H318
Chronic aquatic toxicity, category 3	H412

For the full text of the H-Statements mentioned in this section, see section 16.

2.2 GHS Label elements

Hazard pictograms

Signal word: Danger

Hazard statements	
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P303 +P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 +P351 +P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P260	Do not breathe fumes/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.

2.3 Hazards not otherwise classified (HNOC)

Contact with acids liberates very toxic gas.

< 0.7% of the mixture consists of ingredients of unknown dermal toxicity.

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3.0 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	Percentage Range	CAS No.	Classification
Guanidine Thiocyanate	20 - 30	593-84-0	Acute Tox. 4; H302+H312+H332 Skin Corr. 1C; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412
Ethanol	19 - 25	64-17-5	Flam. Liq.2; H225 Eye Irrit.2; H319 Specific concentration limits: ≥ 50% Eye. Irrit. 2
N-Lauroylsarcosine Na^+	< 0.7	137-16-6	Acute Tox.2; H330 Skin Irrit.2; H315 Eye Dam.1; H318 Specific concentration limits: ≤ 34.5% Acute Tox. 4 > 34.5% Acute Tox. 2 > 30% Skin Irrit. 2; Eye damage 1 ≥ 1 - ≤ 30% Eye Irrit. 2

SECTION 4.0 FIRST AID MEASURES

4.1 Description of first aid measures

General advice

If exposed or in case of symptoms caused by eye or skin contact, inhalation or swallowing, consult a physician. Show this safety data sheet to the physician in attendance. Never give anything by mouth to an unconscious person. Do not leave affected person unattended.

In case of inhalation:	Remove patient immediately from source of exposure. Move to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
In case of eye contact:	Rinse immediately with plenty of water (also under the eyelids) for at least 15 minutes, holding the eye open. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain immediate medical attention.
In case of skin contact:	Wash off immediately with plenty of soap and water. Take off contaminated clothing and shoes immediately and wash before reuse. Obtain immediate medical attention.
In case of ingestion:	Immediately call a POISON CENTRE/doctor. Do not induce vomiting. Immediately rinse mouth with water and drink plenty of water (200-300ml).

4.2 Most important symptoms and effects, both acute and delayed

Product is a corrosive material. Causes severe burns by all exposure routes. May cause perforation of the stomach or oesophagus. Ingestion causes severe swelling, severe damage to delicate tissue and possible perforation.

4.3 Indication of any immediate medical attention and special treatment needed

Obtain immediate medical attention following inhalation, ingestion or skin, or eye contact. Treatment should be symptomatic and supportive.

SECTION 5.0 FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water spray, alcohol resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Produces hazardous combustion products of hydrogen sulphide, sulphur dioxide, ammonia, hydrocyanic acid, carbon oxides, nitric oxides.

5.3 Advice for firefighters

Self-contained breathing apparatus with full-face mask and full protective clothing. Containers may explode in heat of fire. Use water to cool fire-exposed containers and to disperse vapour. Prevent run-off from fire-fighting entering drains, sewers or watercourses.

5.4 Further information

None.

SECTION 6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Wear appropriate protective clothing - see Section 8. Do not breathe fumes/mist/vapours/spray. Avoid contact with skin and eyes.

6.2 Environmental precautions

Product or extinguishing media with product must not be allowed to enter soil, drains, sewers or watercourses. Do not flush into surface water or sanitary sewer system. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

6.3 Methods and material for containment and cleaning up

Absorb using earth, sand or other inert material then transfer into suitable, closed containers for disposal. Ventilate contaminated area thoroughly. Flush with water. Dispose of as hazardous waste.

6.4 Reference to other sections

See also Sections 8 and 13.

SECTION 7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Provide appropriate exhaust ventilation at machinery.

Do not inhale vapours, mists or aerosols. Avoid contact with eyes, skin and clothing. Keep away from heat.

Wear protective gloves/protective clothing/eye protection/face protection. Wash parts of the body in contact with substance thoroughly after handling. Do not eat, drink or smoke when using this product. See section 8.2 for occupational hygiene and exposure prevention measures.

7.2 Consideration for safe storage, including any incompatibilities

Store unused product at 2 to 25 Deg C. Store in the dark. Storage area should be dry, well ventilated, out of direct sunlight and separated from oxidants and acids. Store in tightly closed, original containers. Store away from sources of heat. Do not smoke eat or drink in areas of use and storage.

7.3 Specific end use(s)

Refer to Section 1.

SECTION 8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters:

Chemical Name	CAS No.	Value	Control parameters	Comments
Guanidine Thiocyanate	593-84-0			No Occupational Exposure Limit assigned
Ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m^3	USA - OSHA
		STEL	1,000 ppm	USA – ACGIH Threshold Limit Value (TLV)
		TWA	1,000 ppm 1,900 mg/m^3	USA - NIOSH
		PEL	1,000 ppm 1,900 mg/m^3	California permissible exposure limits for chemical contaminants
N-Lauroylsarcosine Na^+	137-16-6			No Occupational Exposure Limit assigned

8.2 Exposure controls

The measures appropriate for a particular workplace depend on how the material is used and on the potential for exposure. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal equipment, which is known to perform satisfactorily, should be used. Check workplace health risk assessment.

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. In case of insufficient ventilation, wear suitable respiratory equipment.

Personal protective equipment

There are multiple factors that will affect the specific requirements such as amount and concentration of the material, duration of exposure, frequency of exposure, permeability, contact temperature etc. See also Section 5.

Eye/face protection

Tightly fitting safety goggles/safety glasses with side protection.

Skin protection

Handling bulk mixture: Nitrile rubber gloves; break through time: > 480 min;

Glove thickness 0.4 mm. The exact choice of glove type depends on the type of work being undertaken. Gloves should be chosen in consultation with a glove manufacturer and after a full assessment of the working conditions. Gloves should be replaced regularly.

Body protection

Standard work wear for normal handling and use.

Respiratory protection

Required if vapours, mists or aerosols are generated.

Environmental exposure controls

Do not let product enter drains. Measures based on adequate handling practices and facilities, containment and filtered extraction intended to minimise exposure to the material should also minimise release of it to the environment. See also Section 6.2.

General hygiene

Wash hands after contact. Do not eat, drink or smoke in immediate work area. Remove contaminated clothing and protective equipment before entering eating areas.

SECTION 9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Colourless liquid
Odour	Alcohol-like
Odour threshold	No information available
pH	6.8 - 7.0 at 25 Deg C
Melting point/freezing point	No information available
Initial boiling point and boiling point range	>35 Deg C
Flash point	37 Deg C (closed cup)
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	Upper explosion limit: 13.5% Lower explosion limit: 2.5% (Ethanol)
Vapour pressure	No information available
Vapour density	No information available
Relative density	No information available
Solubility in water	Miscible
Solubility in other	No information available
Partition coefficient: n- octanol/water	Not applicable
Autoignition temperature	Does not self-ignite
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	Not classified as explosive
Oxidising properties	Not oxidising

9.2 Other information

This product does not sustain combustion, up to and including 75 Deg C, when tested in accordance with the L.2 Sustained Combustibility Test.

SECTION 10.0 STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions. Do not mix with bleach or other halogenated chemicals as this produces cyanide gas.

10.2 Chemical stability

Stable under normal temperature conditions. Light sensitive (Guanidine thiocyanate).

10.3 Possibility of hazardous reactions

Contact with acids or acid vapours may liberate cyanide vapours.

10.4 Conditions to avoid

Avoid temperatures above 40 °C. Avoid exposure to light.

10.5 Incompatible materials

Peroxides, oxidizing agents, acids and alkalis. Aluminium at higher temperatures.

10.6 Hazardous decomposition products
Hydrogen sulphide, sulphur dioxide, ammonia, hydrocyanic acid, carbon oxides, nitric oxides.

SECTION 11.0 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Guanidine thiocyanate

Acute toxicity
LD50, Oral Rat - 593 mg/kg (OECD Test Guideline 401).
ATE, Dermal - 1100
ATE, Inhalation - 1.5

Skin corrosion/irritation
Skin, Rabbit, 4 Hr – Corrosive (OECD Test Guideline 404).

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitisation
Unlikely to cause sensitisation in contact with skin.
No data available on respiratory sensitisation.

Specific target organ toxicity (STOT) - single exposure
No information.

Specific target organ toxicity (STOT) - repeated exposure
No information.

Aspiration hazard
Not applicable.

Germ cell mutagenicity
No indications of germ cell mutagenicity.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity
No indications of reproductive toxicity.

Other toxicological information
High doses may cause an adverse effect on the thyroid gland.

Ethanol

Acute toxicity
LD50, Oral Rat - 10,470 mg/kg (OECD Test Guideline 401).
LD50, Dermal Rat - > 2,000 mg/kg Body Weight
LC50, Inhalation Rat, 4 Hr - 124.7 mg/l (OECD Test Guideline 403).

Skin corrosion/irritation
Skin, Rabbit, 24 Hr – No skin irritation (OECD Test Guideline 404).

Serious eye damage/irritation
Eyes, Rabbit – Causes serious eye damage (OECD Test Guideline 405).

Respiratory or skin sensitisation
Unlikely to cause respiratory or skin sensitisation.
Guinea Pig, Maximisation Test – Negative (OECD Test Guideline 406).

Specific target organ toxicity (STOT) - single exposure
No data available.

Specific target organ toxicity (STOT) - repeated exposure
No data available.

Aspiration hazard
No data available.

Germ cell mutagenicity
Ames Test (Salmonella typhimurium) – Negative.
In vitro mammalian cell gene mutation test, mouse lymphoma cells – Negative (OECD Test Guideline 478).
Mouse, Male - Positive results obtained in some in vivo tests.

Carcinogenicity

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity
No data available.

Other toxicological information
Repeated dose toxicity, Oral, Male Rat - No observed adverse effect level 1,730 mg/kg. Lowest observed adverse effect level 3,200 mg/kg.

Affects include, irritant effects, respiratory paralysis, dizziness, narcosis, inebriation, euphoria, nausea, vomiting.

N-Lauroylsarcosine Na^+

Acute toxicity
LD50, Oral Rat - >5,000 mg/kg (OECD Test Guideline 401).
LD50, Dermal Rat - No data available.
LC50, Inhalation Rat, 4 Hr - >0.05 – 0.5 mg/l (OECD Test Guideline 403).

Skin corrosion/irritation
In vitro (skin) - Non-corrosive (OECD Test Guideline 431).
Causes skin irritation.

Serious eye damage
Causes serious eye damage.

Respiratory or skin sensitisation
No data available on respiratory sensitisation.
Unlikely to cause sensitisation in contact with skin.
Guinea pig, Maximisation test – Negative (OECD Test Guideline 406).

STOT - single exposure
No data available.

STOT - repeated exposure
No data available.

Germ cell mutagenicity
Ames test, Salmonella typhimurium - Negative.
Mutagenicity (mammalian cell test) – Chromosome aberration.
Human lymphocytes – Negative.
In vitro mammalian cell gene mutation test, mouse lymphoma test – Negative.

Carcinogenicity

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity
No data available.

SECTION 12.0 ECOLOGICAL INFORMATION

12.1 Toxicity

Guanidine thiocyanate	
Harmful to aquatic organisms with long lasting effects.	
Toxicity to fish	LC50, Poecilia reticulata (guppy), 96 Hr - 89.1 mg/l (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	EC50, Daphnia magna (Water flea), 48 Hr - 42.4 mg/l (OECD Test Guideline 202)
Ethanol	
Toxicity to fish	LC50, Pimephales (fathead minnow), 96 Hr, flow-through – 15,300 mg/l
Toxicity to daphnia and other aquatic invertebrates	EC50, Ceriodaphnia dubia (water flea), 48 Hr – 5,012 mg/l
Toxicity to algae	ErC50, Chlorella vulgaris (fresh water algae), 72 Hr – 275 mg/l (OECD Test Guideline 201)
Toxicity to bacteria	IC50, activated sludge, 3 Hr, static - >1,000 mg/l (OECD Test Guideline 209)
N-Lauroylsarcosine Na^+	
Toxicity to fish	LC50, Pimephales (Danio rerio), 96 Hr, semi-static - 107 mg/l (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	EC50, Daphnia magna (water flea), 48 Hr, static – 29.7 mg/l (OECD Test Guideline 202)
Toxicity to algae	NOEC, Desmodesmus subspicatus (green algae), 72 Hr, static – 9.2 mg/l (OECD Test Guideline 201)
Toxicity to bacteria	EC50, activated sludge, 3 Hr, static - >1,000 mg/l (OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability

Guanidine thiocyanate
No data available.

Ethanol
Readily biodegradable.

Biodegradability, aerobic (15 Days) – 95% (OECD Test Guideline 301E)
Biochemical Oxygen Demand (BOD) 930 – 1,670 mg/g
Theoretical Oxygen Demand (ThOD) – 2,100 mg/g

N-Lauroylsarcosine Na^+
Readily biodegradable.
Biodegradability, aerobic (28 Days) – 82% (OECD Test Guideline 301E)

12.3 Bioaccumulative potential

Guanidine thiocyanate
No data available.

Ethanol
Accumulation in organisms is unlikely.

N-Lauroylsarcosine Na^+
No data available.

12.4 Mobility in soil

Guanidine thiocyanate
No data available.

Ethanol
No data available.

N-Lauroylsarcosine Na^+
No data available.

12.5 Results of PBT and vPvB assessment
None of the ingredients are PBT or vPvB.

12.6 Other adverse effects
Harmful to aquatic organisms with long lasting effects.

SECTION 13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
This product must be disposed of as hazardous waste. Dispose of waste in accordance with local, state, and federal regulations. Incineration is the recommended method of disposal. Product must not be treated as household waste. Do not mix the product with bleach or other halogenated chemicals. Do not mix with other waste. Do not allow product to enter sewage system.

Contaminated packaging
Dispose of as unused product. Empty containers may contain hazardous residues. Contaminated containers or packaging must not be treated as household waste. Do not use bleach or other halogenated chemicals to clean or decontaminate containers or packaging. Do not mix with other waste.

SECTION 14.0 TRANSPORT INFORMATION

This product is dangerous for transport. If it is transported or offered for carriage it must be packaged, marked, labelled and documented in accordance with the applicable modal transport rules (**49 CFR** for Domestic Shipping within the USA, **IMDG Code** for international sea and **ICAO/IATA Technical Instructions** for international air).

UN number:	1760
UN proper shipping name:	CORROSIVE LIQUID, N.O.S. (GUANIDINE THIOCYANTE)
Transport hazard class:	8
Subsidiary hazard:	None
Packing group:	III
Environmental hazards:	Not Environmentally Hazardous / Not classified as a Marine Pollutant.
Reportable Quantity (RQ):	
Poison Inhalation Hazard:	No

SECTION 15.0 REGULATORY INFORMATION

15.1 This safety data sheet has been compiled according to Hazard Communication Standard (HCS) 29 CFR 1910.1200.

SARA 302 Components
This product does not contain any substances which are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This product does not contain any substances which are subject to the reporting requirements of SARA Title III, Section 313.

Massachusetts Right To Know Components
Gaunidinium thiocyanate - Not listed
Ethanol - Not listed
N-Lauroylsarcosine Na^+ - Not listed

Pennsylvania Right To Know Components
Gaunidinium thiocyanate - Not listed
Ethanol - Listed
N-Lauroylsarcosine Na^+ - Not listed

New Jersey Right To Know Components
Gaunidinium thiocyanate - Not listed
Ethanol - Listed
N-Lauroylsarcosine Na^+ - Not listed

California Proposition 65 Components
Gaunidinium thiocyanate - Not listed
Ethanol - Not listed
N-Lauroylsarcosine Na^+ - Not listed

SECTION 16.0 OTHER INFORMATION

Abbreviations and acronyms used in this SDS

ACGIH	American Conference of Governmental Industrial Hygienist's
EPA	Environmental Protection Agency
IARC	International Agency for Research on Cancer
IATA-DGR	International Air Transport Association-Dangerous Goods Regulations
ICAO-TI	International Civil Aviation Organization-Technical Instructions
IMDG	International Maritime Code for Dangerous Goods
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OECD	Organisation for Economic Co-operation and Development
OSHA	Occupational Safety & Health Administration
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible Exposure Limit
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Level
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienist's
EPA	Environmental Protection Agency
IARC	International Agency for Research on Cancer

Sources of data used for this SDS:

Suppliers safety data sheets.
European Chemicals Agency: http://echa.europa.eu/
US Regulatory Lists.

Hazard Statements referred to in this SDS

H302+H312+H332:	Harmful if swallowed, in contact with skin or if inhaled.
H314:	Causes severe skin burns and eye damage.
H315:	Causes skin irritation.
H318:	Causes serious eye damage.
H319:	Causes serious eye irritation.
H330:	Fatal if inhaled.
H412:	Harmful to aquatic life with long lasting effects.

Trinity Biotech

FlexTrans™

Viral & Chlamydial Transport Medium

REF	B1029-90C	25 Vials
REF	B1029-90D	50 Vials

INTENDED USE

The **Bartels FlexTrans™ Transport Medium** is intended to stabilize viruses and chlaymdiae, and suppress microbial contamination during transport of clinical specimens from the point of collection to the testing site. For *in vitro* Diagnostic Use. Store at room temperature, 2-8ºC or -70ºC.

PRINCIPLE

Cell culture isolation is an important tool in the diagnosis of viral and chlamydial infections. A specimen is collected from the site of suspected infection and immediately placed into specialized transport medium formulated to maintain viability of any viral or chlamydial organisms present in the specimen and suppress overgrowth of other microbial agents. Additionally, FlexTrans™ is non-inhibitory to cell culture, making it usable not only for transport but for cell culture inoculation. FlexTrans™ may also be used in rapid detection systems such as enzyme-linked immunosorbent assay (ELISA) and direct fluorescent testing. The specimen is transported on wet ice to the testing facility, where it is maintained at 2-8ºC until it can be processed.

PRODUCT DESCRIPTION

FlexTrans™ - 2 ml of transport medium in a 15 ml conical centrifuge tube, allowing specimen collection, transport and processing in the same container. Medium contains Minimal Essential Medium supplemented with L-glutamine and Hanks Salts, bovine serum albumin, sucrose, amphotericin B, gentamicin and streptomycin buffered with HEPES Buffer to a pH range of 7.0-7.4. Phenol red is added as a pH indicator. The transport tube also contains glass beads to aid in the disruption of patient cells in the specimen, with subsequent release of viruses or chlamydiae into the medium. FlexTrans™ is available in a variety of packaging formats. Please contact a Customer Service Representative in the U.S. at 1-800-325-3424, or outside the U.S. at (353) 1 276 9800 for additional information.

WARNINGS AND PRECAUTIONS

1. For *in vitro* diagnostic use.
2. FlexTrans™ should not be used beyond its expiration date.
3. All specimens and materials used to process them should be considered potentially infectious and handled in a manner which prevents infection of laboratory personnel. Decontamination is most effectively accomplished with a 0.5% sodium hypochlorite solution (1:10 dilution of household bleach).

STABILITY AND STORAGE

Prior to use, store at room temperature, 2-8ºC or -70ºC. The expiration dating on the vial applies to each storage temperature. The antifungal agent present in the FlexTrans™ kit may be light sensitive. It is recommended that the tubes are stored in the box or in the dark.

SPECIMEN COLLECTION

Proper specimen collection and handling are among the most important factors in successful detection of viruses and chlamydiae. Use sterile cotton or DACRON® swabs with plastic or wire shafts which are non-inhibitory to viruses and chlamydiae. Do **not** use calcium alginate swabs.

AUTOPSY OR BIOPSY SPECIMEN

1. Collect fresh tissue from appropriate site using a separate sterile instrument to cut and remove each sample. Each specimen need not be more than 1-2 cm in diameter.
2. Place each sample into an individual leakproof container and cover with sufficient transport medium to prevent drying of specimen.
3. Tissue specimens should not be formalinized or fixed.

CEREBROSPINAL FLUID (CSF)

1. Collect cerebrospinal fluid (CSF) in the usual manner.
2. Transfer up to 2 ml, equal to the amount of transport medium, into the vial.
3. If less than 1 ml of CSF is available, consult your laboratory for transport recommendations.

CERVIX FOR CHLAMYDIA CULTURE

1. Wipe the cervix prior to collection to remove WBC and mucus debris. Insert a sterile, large-tipped swab into the endocervix, rotate and remove. Discard this swab.
2. Insert a second, sterile swab into the cervical os to collect cells from the transitional zone. Rotate the swab vigorously in firm contact with cervical surface to facilitate the collection of columnar epithelial cells.
3. Withdraw swab without contacting vaginal surfaces.
4. Place swab into transport medium.

CERVIX FOR HERPES SIMPLEX CULTURE

1. Remove exocervical mucus with swab, and discard swab.
2. Insert fresh swab at least 1 cm into cervical canal, and rotate swab for 10 seconds.
3. Place swab into transport medium.
4. For detection of HSV shedding, collection of a vulvar sample may increase recovery.

CUTANEOUS/VESICULAR LESION

1. Gently cleanse vesicle using a swab moistened with sterile saline.
2. Aspirate fluid with a tuberculin syringe or collect lanced vesicle onto a swab.
3. If vesicle is absent, vigorously swab base of lesion.
4. Transfer fluid or swab into transport medium.

EYE

1. Gently swab the lower conjunctiva with a sterile, fine-tipped swab, collecting patient mucous membrane cells.
2. Place swab into transport medium.

NASOPHARYNX

1. Gently insert a sterile nasopharyngeal swab into one or both anterior nares to the posterior pharynx, rotate to collect mucous membrane cells and withdraw.
2. Place swab into transport medium.

RECTAL SWAB

1. Insert a sterile swab 1 cm past the anal sphincter, rotate in firm contact with the mucosal surface and withdraw.
2. Place swab into transport medium.

RESPIRATORY ASPIRATE

(The quantity and quality of respiratory specimens to be tested can be improved by aspiration).

1. Collect aspirates from nose, nasopharynx and/or oropharynx.
2. Aspirates may be collected using a plastic disposable premature infant feeding tube attached to a 10 ml syringe. Alternately, a suction catheter with a mucous trap may be utilized.
3. Transfer up to 3 ml of aspirate into transport medium.

STOOL

1. Collect specimen in a clean, dry container.
2. Transfer sufficient faeces into transport medium to make a 20-40% suspension.

THROAT

1. Swab the posterior pharynx and tonsillar crypts vigorously with a largetipped, sterile swab.
2. Place swab into transport medium.

URETHRA (PATIENT SHOULD NOT HAVE URINATED WITHIN ONE HOUR OF COLLECTION).

1. Insert a sterile, fine-tipped swab 2-4 cm into the male urethra, or 1 cm into the female urethra and hold in place for 5 seconds.
2. Rotate the swab several times to obtain columnar epithelial cells and withdraw.
3. Place swab into transport medium.

URINE

1. Collect a fresh, clean-catch specimen in a sterile container.
2. Transfer 2 ml into transport medium.

TRANSPORT AND STORAGE

After collection, store specimen tubes at 2-8ºC. All collected specimens should be transported on wet ice to the laboratory immediately after collection. Failure to transport and store specimens at 2-8ºC may lead to loss of viral or chlamydial infectivity. If the specimen cannot be processed within 2 days, freeze it at –70ºC; however, freezing should be avoided if at all possible. Specific requirements for shipping specimens should follow recommendations found in Titles 42 and 49 of the Code of Federal Regulations for Interstate Transport of Etiologic Agents.

PROCESSING

FOR CHLAMYDIA CULTURE

1. Rotate the swab in the transport medium, then press against the inside of the tube to allow excess fluid to drain back into the transport medium. Discard the swab into an appropriate disinfectant, such as 0.5% sodium hypochlorite solution (1:10 dilution of household bleach).
2. Disrupt cellular material in the transport medium by vortexing with sterile glass beads for 30-60 seconds, or sonicating at 10 kc/sec for the same length of time. This will enhance the release of cell-associated chlamydiae into the medium.
3. To remove bacterial, fungal and cellular debris, centrifuge the transport medium at 900xg for 5 minutes. Supernatant is then used as the cell culture inoculum. Futher clarification of heavily contaminated specimens may be accomplished by passing the specimen through a low retention 0.45 micron filter. The filtrate is then used as the inoculum.

FOR VIRAL EXAMINATION

If the transport tube contains a swab, it should be handled with sterile forceps. The swab should be rotated in the transport medium, then pressed against the inside of the tube to allow excess fluid to drain back into the transport medium. If specimens are to be used for both direct detection and culture isolation/confirmation, half of the cells should be removed by centrifugation at 300 to 500xg and used for the direct specimen for cell culture isolation. Discard the swab into an appropriate disinfectant, such as 0.5% sodium hypochlorite solution (1:10 dilution of household bleach).

DIRECT DETECTION

1. Add 2 ml of phosphate buffered saline (PBS) to the specimen. Resuspend cells and add an additional 6 ml of PBS.
2. Centrifuge specimen at 300 to 500xg for 10 minutes to pellet patient cells.
3. If the specimen contains mucous, it will be observed as a hazy layer immediately above the cell pellet. Using a sterile Pasteur pipette, remove all of the supernatant, including any mucous layer, and discard into sodium hypochlorite solution.
4. Add 2 ml of PBS to the specimen to re-suspend cell pellet. Add an additional 6 ml of PBS.
5. Centrifuge specimen at 300 to 500xg for 10 minutes.
6. Remove supernatant, including any mucous and discard into sodium hypochlorite solution.
7. Repeat steps 4-6 until cells are free of mucous.

8. Add 2-8 drops of PBS to make a slightly cloudy cell suspension.
9. Using a Pasteur pipette, spot cells onto acetone-cleaned glass slides.
10. Air-dry slides completely.
11. Fix slides in acetone and allow to air-dry.
12. After fixation, slides may be held for several days at 2-8ºC before staining.

CELL CULTURE INOCULATION

1. Disrupt cellular material in the transport medium or supernatant by vortexing with sterile glass beads for 30-60 seconds, sonicating at 10 kc/second for the same length of time, or by other methods determined by the laboratory to be effective in disrupting cellular material. This will enhance the release of cell associated virus into the medium.
2. To remove bacterial, fungal and cellular debris, centrifuge the transport medium at 2000xg for 10 minutes. Supernatant is then used as the cell culture inoculum.

FOR ELISA TESTING

Follow ELISA kit manufacturer's instructions for specimen processing.

QUALITY ASSURANCE

FlexTrans™ is tested for microbiological contamination, toxicity to host cell culture, and the ability to maintain viability of desired agents. Quality assurance information is available upon request. Individuals may evaluate the ability of FlexTrans™ to support viral and/or chlamydial agents by inoculating FlexTrans™ with an individual agents of choice. After 72 hours at 2-8ºC, using appropriate isolation procedures for the selected agent, positive growth should be obtained. Verify isolation by methodology appropriate to the selected agent.

LIMITATIONS

1. **Do not** use FlexTrans™ if leakage, evaporation, pH change or signs of contamination are apparent.
2. Improper storage of FlexTrans™ may lead to decreased antibacterial and antimycotic activity.
3. Freezing of specimens should be avoided; freezing may decrease recovery of viruses.
4. When performing a direct immunofluorescent test, **do not** freeze or vortex FlexTrans™ prior to slide preparation, as this can result in cellular disruption.

EXPECTED VALUES

From December 1992 through November 1993, 4,455 clinical cultures were processed using FlexTrans™ Virus was isolated in 7.0% (325) of these cultures, and chlamydiae was isolated in 3.5% (34). The viruses are listed below.

Virus	Number of Isolates
HSV 1	114
HSV 2	57
CMV	38
Adenovirus	23
Enterovirus	76
Influenza A	13
Influenza B	3
RSV	1

Specimens were transported under a variety of conditions: cool packs, refrigerated, frozen (dry ice) and ambient temperature. The patient population and demographics were diverse: newborn to elderly of both sexes were evaluated. Specimens were not selected for a particular disease, but were those submitted to the laboratory for routine screening. This lack of selection may account for the isolation rates observed.

PERFORMANCE CHARACTERISTICS

Sterility and toxicity of FlexTrans™ were determined by inoculation of the indicated cell lines. Transports were held at both ambient temperature and 2-8ºC for 5 days prior to inoculation of cells. Cell cultures were held at 34-37ºC in a CO2 environment for 8 days.

Cell Line	# wells examined	# shell vials examined	Sterility	Toxicity
McCoy	24	10	All	None
MRC-5	24	10	All	None
HF	24	10	All	None
Vero	24	10	All	None

FlexTrans™ inhibits the following organisms for at least 10 days after a log phase inoculation*: E. coli, Ps. aeruginosa, Legionella pneumophilia, Enterococcus faecalis, Staphylococcus aureus, Mycoplasma hominis, Ureaplasma ureolyticus, Klebsiella oxytoca, Micrococcus luteus*. In comparative studies with other commercially available transports, FlexTrans™ was found to be equivalent for the recovery of viral agents and suitable for the satisfactory survival and transport of chlamydia FlexTrans™ and other commercially available transports were each inoculated with 10 TCID50 of an HSV-2 stock virus strain. After 48 hours of refrigeration at 2-8ºC, 0.2 ml of each transport was inoculated into duplicate MRC-5 shell vials. After 48 hours incubation at 35ºC, the shell vials were stained with HSV-2 typing reagent. Equal growth was seen in all transports. Negative control vials were negative for growth and toxicity. Following refrigeration at 2-8ºC, one MRC-5 shell vial was inoculated every other day for 14 days with 0.2 ml from each transport. Shell vials were then incubated for 48 hours and then stained. FlexTrans™ showed growth in all transports, indicating that FlexTrans™ can maintain the viability of viruses when stored at 2-8ºC for 14 days. Five clinical specimens containing either *CMV strain AD 169 or CMV strain Towne* were inoculated into FlexTrans™ previously stored at either room temperature or 2-8ºC and another commerically available transport, and stored for 24 hours at 2-8ºC. Transports were then subcultured into cell culture vials and incubated at 34-37ºC for 48 hours. Cell culture vials were then fixed and stained with *Bartels CMV Immediate Early Antigen Direct Fluorescent Antibody*. All vials inoculated with CMV showed growth with negative control vials from both storage conditions showing no growth. In addition, the effectiveness of FlexTrans™ for the transport of respiratory viruses was determined by comparing FlexTrans™ with another commecially available transport media. Eight of each transport were inoculated with 0.2 ml stock influenza A culture material (105/ 0.2 ml). Four (each) of the two transports were either refrigerated or maintained at room temperature. At 24, 48, 72 and 96 hours, 0.2 ml of each transport was inoculated onto A-549 shell vials and incubated for 48 hours. Detection of infection was determined following staining with the Bartels Influenza A Indirect Fluorescent Antibody. A 2+ or greater immunofluorescence was considered positive. Positive growth was seen in all FlexTrans™ transports, whereas the other commercially available transport showed negative growth in all vials held at room temperature and inoculated at 96 hours.

Transport	24 Hours	48 Hours	72 Hours	96 Hours
FlexTrans™ RT	4/4	4/4	4/4	4/4
FlexTrans™ 2-8°C	4/4	4/4	4/4	4/4

FlexTrans™ is also effective for the transport of chlamydiae. *Chlamydia trachomatis* was inoculated into both FlexTrans™ and another commercially available transport and left at ambient temperature for three days. Each day, 0.2 ml was removed from each transport and inoculated into shell vials containing McCoy cells. All shell vials were treated similarly according to standard shell vial isolation procedures. After 48 hour incubation, the cells were fixed and stained with the Bartels Chlamydia Culture Confirmation Reagent. Equivalent growth was seen in shell vials inoculated on day one and day three.

FlexTrans™ can also be used for the transport of virus and chlamydiae for direct fluorescent antibody (DFA) and enzyme immunoassay (EIA) testing. When performing DFA or EIA, follow package insert instructions, paying particular attention to instructions for sample preparation, such as sample dilution prior to beginning testing. When performing a DFA test, **do not** vortex FlexTrans™ prior to slide preparation. Clinical specimens containing RSV, influenza A or chlamydiae, and stock cultures of *Chlamydia pneumoniae* and *Chlamydia psittaci* were inoculated into FlexTrans™ and stored at 2-8ºC or room temperature for 24 hours.

Transports were then tested in the appropriate Bartels ELISA, i.e., the Bartels RSV ELISA, the Bartels influenza A ELISA or the Bartels Chlamydiae ELISA. Transports were also inoculated into cell culture and confirmed via fluorescent antibody testing. All transports that tested positive in ELISA also tested positive in fluorescent antibody testing.

Clinical Samples	Replicates	ELISA Result	Culture Result
RSV-10 samples	90	All positive	All positive
Chlamydiae-10 samples	90	All positive	6/10 positive*
Influenza A-6 samples**	54	45 positive	All positive

*Four out of ten clinicals showed elementary bodies when stained with DFA, with no inclusions.
**Influenza A samples were tested 7 days after inoculation with FlexTrans™ Titer levels in some clinical samples were below the detection limit of the Bartels Influenza A ELISA.

Stock Cultures	Replicates	ELISA Result	Culture Result
Chlamydia pneumoniae	15	All positive	All positive
Chlamydia psittaci	15	All positive	All positive
Chlamydia trachomatis	15	All positive	All positive
Chlamydia trachomatis, LGV strain	15	All positive	All positive

REFERENCES

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4. Fields, B.N., Knipe D.M. 1990, *Fields Virology*, Raven, N.Y.
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8. Rose, N.R., DeMacario E.C., Fahey J.L., Friedman H., and Penn G.M. 1992, Manual of Clinical Laboratory Immunology, *Am. Soc. Microbiology*, Washington, D.C.
9. Specter, S., and Lancz G.J. 1986, *Clinical Virology Manual*, Elsevier, N.Y.

TECHNICAL INFORMATION

For further information or assistance, contact Technical Services.

ORDERING INFORMATION		
KIT		Bartels FlexTrans™ Medium
Catalog No.	Item	Quantity
B1029-90C	Bartels FlexTrans™ Medium	25 Vials
B1029-90D	Bartels FlexTrans™ Medium	50 vials


Manufactured

EC REP
Authorized Representative


Consult accompanying documents

REF
Product Number

LOT
Lot


Use by


Caution, consult accompanying documents

Store at 2-8ºC

Store at 2-30ºC

CONTROL + +
High Pos or Positive Control

CONTROL +
Low Pos or Cut-Off Control

CONTROL -
Negative Control

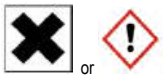
CAL
Calibrator

C.F.
Coefficient Factor

RNG
Range

STD
Standard

IVD
For *In Vitro* Diagnostic use


or
Hazard


Trinity Biotech USA
Jamestown, NY
14701
Tel. 1 800-325-3424
Fax: 716-488-1990

EC REP
Trinity Biotech plc
Bray Co. Wicklow, Ireland
Tel. 353 1 2769800
Fax 353 1 2769888
www.trinitybiotech.com

B1029-90-29 Rev B
10/2009

SAFETY DATA SHEET

Revision Date 23-May-2017 **Revision Number** 7

1. Identification

Product Name **Saline**

Cat No. : **R064430, R064432, R064434, R064436, R064438, R064442, R064444, R064446, R064448, R064450, R064462, R064464, R064466, R064468, R07140, R07141, R07142, R07143, R08756, R112560, R112572, R112576, R112584, R116602, R117672, R118520, R119750, R119751, R20123, R92023, R92024**

Synonyms No information available

Recommended Use Laboratory chemicals.
Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company
Remel
12076 Santa Fe Drive
Lenexa, KS 66215 United States
Telephone: 1-800-255-6730
Fax:1-800-621-8251
Emergency Telephone Number
INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. Hazard(s) identification

Classification
Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements
None required

Hazards not otherwise classified (HNOC)
None identified

3. Composition / information on ingredients

Component	CAS-No	Weight %
NONHAZARDOUS	NA	100

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

	Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
Most important symptoms/effects	None reasonably foreseeable. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available
Autoignition Temperature	No information available
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical
Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
None known
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

6. Accidental release measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment.
Environmental Precautions	Should not be released into the environment. See Section 12 for additional ecological information.
Methods for Containment and Clean Up	Provide adequate ventilation. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. Handling and storage

Handling	Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	No information available
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No data available
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Vapor LC50 Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.
Component Information
Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
NONHAZARDOUS	NA	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known
STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity
Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated
TDG Not regulated
IATA Not regulated

IMDG/IMO Not regulated

15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

International Inventories

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration
Not applicable

CERCLA
Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade	No information available

16. Other information

Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Revision Date	23-May-2017
Print Date	23-May-2017
Revision Summary	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Urine Monovette® 10 ml with stabiliser/Set

Further trade names

10.253 - Urine Monovette® 10 ml with stabiliser
10.253.001 - Urine Monovette® 10 ml with stabiliser
10.253.020 - Urine Monovette® 10 ml with stabiliser
51.253.041 - Urine Monovette® 10 ml with stabiliser - Set

CAS No:	10043-35-3
Index No:	005-007-00-2
EC No:	233-139-2

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Microbiological urine analysis

1.3. Details of the supplier of the safety data sheet

Company name:	SARSTEDT AG & Co.		
Street:	Sarstedtstraße 1		
Place:	D-51588 Nümbrecht		
Post-office box:	1220 D-51582 Nümbrecht		
Telephone:	+49 (0)2293 / 305 - 0	Telefax:	+49 (0)2293 / 305 - 2470
e-mail:	info@sarstedt.com		
Contact person:	Dr. Dagmar Flach Jochen Hoffmann	Telephone:	+49 (0)2293 / 305 - 4500
e-mail:	sicherheitsdatenblatt@sarstedt.com		
Internet:	www.sarstedt.com		
Responsible Department:	R & D Center		

1.4. Emergency telephone number:

Poison Center in Bonn (Germany): +49 (0)228 / 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: R2 - Repr. Cat. 2
R phrases:
May impair fertility.
May cause harm to the unborn child.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:
Reproductive toxicity: Repr. 1B
Hazard Statements:
May damage fertility. May damage the unborn child.

2.2. Label elements

Hazardous components which must be listed on the label

Boric acid

Signal word:	Danger
Pictograms:	GHS08

Hazard statements

H360FD May damage fertility. May damage the unborn child.

Precautionary statements

P201 Obtain special instructions before use.

P308+P313 IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

The L-Monovette® with stabiliser contains boric acid (< 210 mg).

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
233-139-2	Boric acid	100 %
10043-35-3	Repr. Cat. 2 R60-61	
005-007-00-2	Repr. 1B; H360FD	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

Wash with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink water (max. 2 glasses). Consult physician.

4.2. Most important symptoms and effects, both acute and delayed

Drop in temperature, excitation, spasm, diarrhea, sickness, vomiting, tiredness, ataxia (disturbed coordination of movements).

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

none

5.2. Special hazards arising from the substance or mixture

Non-flammable.
Surrounding fire may cause hazardous vapour.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Do not breathe dust. Avoid contact with substance. Call an expert. Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Avoid generation of dust. Take up carefully when dry. Dispose of waste according to applicable legislation. Re-clean.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
See also section 10.
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid generation of dust. Do not breathe dust.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Avoid contact with substance. Store at room temperature. Store in a dry place. Store in a place accessible by authorized persons only.

Advice on storage compatibility

No special measures are necessary.

7.3. Specific end use(s)

Microbiological urine analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary . When using do not eat or drink.

Eye/face protection

Wear eye protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Required in case of formation of dust. Recommended filter type: filter P 2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	white
Odour:	odourless

		Test method
pH-Value:	not determined	
Changes in the physical state		
Melting point:	>1000 °C	OECD 102
Initial boiling point and boiling range:	not determined	
Flash point:	not applicable	
Flammability		
Solid:	not determined	
Gas:	not applicable	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Ignition temperature:	Non-flammable.	
Auto-ignition temperature		
Solid:	not determined	
Gas:	not applicable	

Decomposition temperature:	184,9 °C	

Oxidizing properties

Not oxidizing.

Vapour pressure:	<0,0000001 hPa	OECD 104
Density (at 23 °C):	1,489 g/cm³	OECD 109
Bulk density:	ca. 400 - 600 kg/m³	
Water solubility: (at 20 °C)	49,2 g/L	OECD 105

Solubility in other solvents

not determined

Partition coefficient:	-1,09	
Vapour density:	not determined	
Evaporation rate:	not determined	

9.2. Other information

Solid content:	not determined	

SECTION 10: Stability and reactivity

10.1. Reactivity

See section 10.3.

10.2. Chemical stability

Hygroscopic.

10.3. Possibility of hazardous reactions

Exothermic reactions with:
Acetic anhydride

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
10043-35-3	Boric acid				
	oral	LD50	>2660 mg/kg	Rat	OECD 401
	dermal	LD50	>2000 mg/kg	Rat	(ECHA)

STOT-single exposure

No information available.

Severe effects after repeated or prolonged exposure

No information available.

Carcinogenic/mutagenic/toxic effects for reproduction

May damage the unborn child. May damage fertility.

Aspiration hazard

No information available.

Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

Further information

After resorbing big quantities:
Drop in temperature, excitation, spasm, diarrhea, sickness, vomiting, tiredness, ataxia (disturbed coordination of movements).
The usual precautions are to be adhered to when handling chemicals.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity: The classification criteria for this hazard class are not met by definition.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] | [d]	Species	Source
10043-35-3	Boric acid					
	Acute fish toxicity	LC50	50 - 100 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	(ECOTOX Database)
	Acute crustacea toxicity	EC50	133 mg/l	48 h	Daphnia magna (Big water flea)	(ECOTOX Database)

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

Bioaccumulation is not to be expected.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
10043-35-3	Boric acid	-1,09

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No information available.

Further information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.2. UN proper shipping name: Not a hazardous material with respect to transportation regulations.

Inland waterways transport (ADN)

14.2. UN proper shipping name: Not a hazardous material with respect to transportation regulations.

Marine transport (IMDG)

14.2. UN proper shipping name: Not a hazardous material with respect to transportation regulations.

Air transport (ICAO)

14.2. UN proper shipping name: Not a hazardous material with respect to transportation regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 1 - slightly water contaminating

Additional information

Substances of Very High Concern (SVHC): This product contains substances of very high concern according to REACH guideline EC No. 1907/2006 Art. 57 above the legal concentration limit of >= 0.1 % (w/w).

Instructions of BG RCI (Germany):
M039 Damage to the unborn child - protection at the workplace -
M050 handling of hazardous materials

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Changes

General revision. The telephone and fax numbers of the company have been updated.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
SVHC: Substances of Very High Concern

Relevant R-phrases (Number and full text)

60 May impair fertility.
61 May cause harm to the unborn child.

Relevant H- and EUH-phrases (Number and full text)

H360FD May damage fertility. May damage the unborn child.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

SAFETY DATA SHEET

Creation Date 01-Apr-2021 **Revision Date** 01-Apr-2021 **Revision Number** 7

1. Identification

Product Name **M4RT Transport Medium**

Cat No. : **R12505, R12506, R12552, R12565, R12566, R12567, R12575, R12576, R12578, R12587, R12588, R12591, R12592, R12611, R12617, R12618, R12619, R12620, R12621, R12625, R12626, R12629, R12630,R12631, R12632, R12687, R12688, R12699, R12708, R12593, R12596, R12700, R12701, R12705, R12720, R12900, R12901, 444079**

Synonyms No information available

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company
Remel
12076 Santa Fe Drive
Lenexa, KS 66215 United States
Telephone: 1-800-255-6730
Fax:1-800-621-8251

Oxoid Ltd.
Wade Road
Basingstoke, Hants, UK
RG24 8PW
Telephone: +44 (0) 1256 841144

Emergency Telephone Number
INFOTRAC - 24 Hour Number: 1-800-535-5053
Outside of the United States, call 24 Hour Number: 001-352-323-3500 (Call Collect)

2. Hazard(s) identification

Classification
Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements
None required

Hazards not otherwise classified (HNOC)
None identified

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Sucrose	57-50-1	6.32
Gentamicin, sulfate (salt)	1405-41-0	Trace

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes.

Inhalation Remove to fresh air.

Ingestion Do NOT induce vomiting.

Most important symptoms and effects No information available.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point No information available
Method - No information available

Autoignition Temperature No information available

Explosion Limits
Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical
Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
None known.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required.
Environmental Precautions See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling Ensure adequate ventilation.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Sucrose	TWA: 10 mg/m³	(Vacated) TWA: 15 mg/m³ (Vacated) TWA: 5 mg/m³ TWA: 15 mg/m³ TWA: 5 mg/m³	TWA: 10 mg/m³ TWA: 5 mg/m³	TWA: 10 mg/m³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection No protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	No information available
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No data available
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information
Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
Vapor LC50 Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sucrose	LD50 = 29700 mg/kg (Rat)	Not listed	Not listed
Gentamicin, sulfate (salt)	>5 g/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sucrose	57-50-1	Not listed	Not listed	Not listed	Not listed	Not listed
Gentamicin, sulfate (salt)	1405-41-0	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known
STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity
Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility .

Component	log Pow
Sucrose	-3.67

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated
TDG Not regulated
IATA Not regulated
IMDG/IMO Not regulated

15. Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Sucrose	57-50-1	X	ACTIVE	-
Gentamicin, sulfate (salt)	1405-41-0	-	-	-

Legend:
TSCA - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)

TSCA 12(b) - Notices of Export Not applicable

International Inventories
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Sucrose	57-50-1	X	-	200-334-9	X	-	X	X	KE-17258
Gentamicin, sulfate (salt)	1405-41-0	-	-	215-778-9	X	X	-	X	KE-17593

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA Not applicable

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Gentamicin, sulfate (salt)	1405-41-0	Developmental	-	Developmental

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sucrose	X	-	X	-	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 01-Apr-2021
Revision Date 01-Apr-2021
Print Date 01-Apr-2021
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

PURITAN MEDICAL PRODUCTS COMPANY LLC

Safety Data Sheet

Rev. 03 March 23, 2015

1. Product and company identification

Product name: PurFlock® Ultra swab with Polystyrene handle

Product numbers: 3306-U SERIES (Sterile and Non-sterile items)

Company identification:
Puritan Medical Products Company LLC
P.O. Box 149, 31 School Street
Guilford, Maine 04443-0149 U.S.A.

Contact numbers:
Tel: +1 207-876-3311
Fax: + 1 207-876-3130

2. Hazards identification

Skin contact:	None
Hazardous ingredients:	None

3. Composition/information on ingredients

Product consists of a PurFlock® Ultra tip with a polystyrene handle. Non hazardous materials.

4. First-aid measures

Skin contact:	N/A
Eye contact:	N/A
Inhalation:	N/A
Swallowing:	Immediately call a doctor.

5. Fire-fighting measures

Extinguishing media:	CO2, extinguishing powder or water spray. Fight larger fires with water or alcohol resistant foam
Protective Equipement:	No protective equipment required

6. Accidental release measures

Personal precautions:	No personal protective equipment required.
Environmental precautions:	N/A
Methods for cleaning up:	N/A

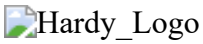
7. Handling and storage

Handling:	No special handling procedures required
Storage:	Store away from oxidizing agents Store in dry conditions.

8. Exposure controls/personal protection

Respiratory protection:	N/A
Hand protection:	N/A
Eye protection:	N/A
Skin and body protection:	N/A

9. Physical and chemical properties	
Odor:	Odorless
pH:	Not applicable
Density:	Not determined
Boiling point, ^{o}C:	Not determined
Melting point, ^{o}C	Not determined
Flash point, ^{o}C:	Not applicable
Solubility:	Insoluble
10. Stability and reactivity	
Materials and conditions to avoid:	No decomposition if used according to specifications
Hazardous decomposition products:	No dangerous decomposition products known
11. Toxicology information	
Acute effects:	None
Chronic effects:	None
Exposure limits:	None
Carcinogenicity (to humans):	None
12. Ecological Information	
Ecology:	The ecological effects have not been thoroughly investigated, but currently none have been identified. Not known to be hazardous to water.
13. Disposal considerations	
Recommendation:	Dispose used devices that have been processed with human samples as if biohazardous. Wastes containing these products should be disposed of in a manner consistant with state, federal, and local regulations.
14. Transport information	
No special transportation needed. Non-hazardous material.	
15. Regulatory information	
Not classified as a hazardous material.	
16. Other information	
Puritan Medical Products Company LLC provides the information in this document in good faith and believes the information to be accurate. The chemical, physical and toxicological properties of this product have not been thoroughly investigated. It is the responsibility of the buyer to research and understand safe methods of handling, storing, and disposal of this product. Puritan Medical makes no warranty with respect to such information and assumes no liability for any loss or injury, which may result from the use of this information. It is the buyers responsibility to comply with local, state and federal regulations concerning use and disposal of this product.	



Product Name:	Viral Transport Medium, 3mL
Catalog Number:	R99

Dear Customer:

This product does not require a Safety Data Sheet under the Occupational Health and Safety Administration standard entitled "Hazardous Communication" 29 CFR 1910.1200 for the United States, and Regulation (EC) No 1272/2008 for Europe.

Additionally, the product does not meet the criteria for W.H.M.I.S. classification as a controlled product. As a result, a W.H.M.I.S. Safety Data Sheet is not required (in Canada) for this product.

If you have any questions, please contact us at (800) 266-2222 option 2 or via email at TechService@HardyDiagnostics.com.

Sincerely,

Quality Assurance Department
Hardy Diagnostics

SDS-002457[A]

Hardy Diagnostics ~ 1430 West McCoy Lane ~ Santa Maria, CA 93455 ~ USA ~ (805)346-2766
Sales@HardyDiagnostics.com ~ www.HardyDiagnostics.com
Distribution Centers: California · Washington · Utah · Arizona · Texas · Ohio · New York · Florida · North Carolina

SOP-4277A [B]

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

- **Product Name:** VACUETTE® FE Sodium Fluoride / K3EDTA Blood Collection Tube
- **Manufacturer/Supplier:**

AUSTRIA
Greiner Bio-One GmbH
Bad Haller Strasse 32
4550 Kremsmünster
Austria
Tel: (+43) 7583 6791-0
Fax: (+43) 7583 114
Email: office@at.gbo.com
Emergency phone number: (+43) 7583 6791-0

USA
Greiner Bio-One North America Inc.
4238 Capital Drive
Monroe, NC 28110
USA
Tel: (+1) 888-286-3883
FAX: (+1) 800-726-0052
Email: info@us.gbo.com
Emergency phone number: (+1) 888-286-3883

BRASIL
Greiner Bio-One Brasil
Produtos Médicos Hospitalares Ltda.
Av. Affonso Pansan no. 1.967
13473-620 Vila Bertini
Americana, São Paulo - Brasil
Tel: +55 (19) 3468-9600
Fax: +55 (19) 3468-9601
Email: info@br.gbo.com
Emergency phone number+55 (19) 3468-9600

- **Recommended use / restrictions of use :**
  To collect, transport and process blood for testing serum, plasma or whole blood in the clinical laboratory. To be used only by trained healthcare professionals according to instructions of use.

SECTION 2: HAZARDS IDENTIFICATION

- **Classification according to NFPA 704 (Possible Rating 0-4):**

K3EDTA:
Health Rating: 1
Flammability Rating: 1
Reactivity Rating: 0

Sodium Fluoride:
Health Rating: 3
Flammability Rating: 0
Reactivity Rating: 0

- **Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]:**

K3EDTA:
Skin irritation: Category 2
Eye irritation: Category 2A
Acute toxicity: Category 4 (Oral)
Specific target organ toxicity: Category 3 (Respiratory tract irritation)

Sodium Fluoride:
Acute Toxicity: Category 3 (Oral)
Eye Irritation: Category 2
Skin irritation: Category 2

- **Classification according to EU Directives 67/548/EEC or 1999/45/EC:**
  K3EDTA: Irritating to eyes, respiratory system and skin
  Sodium Fluoride: Toxic if swallowed, contact with acids liberates very toxic gas**,** irritating to eyes and skin

- **Signal Word:**
  K3EDTA: **Warning**
  Sodium Fluoride: **Danger**

- **Hazard Statements:**
  K3EDTA:
  H315 Causes Skin irritation
  H319 Causes serious eye irritation
  H335 May cause respiratory irritation
  Sodium Fluoride:
  H301 Toxic if swallowed
  H315 Causes Skin irritation
  H319 Causes serious eye irritation

- **Precautionary Statements:**
  K3EDTA:
  P261 Avoid breathing dust/fume/gas/mist/vapors/spray
  P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Sodium Fluoride:
  P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor
  P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- **Chemical name:** Ethylendiaminetetraacetic Acid Tripotassium Dihydrate K3EDTA
  Sodium Fluoride
- **CAS No.** Ethylendiaminetetraacetic Acid Tripotassium Dihydrate K3EDTA 65501-24-8
  Sodium Fluoride 7691-49-4
- **Quantity of substances:** < 1%
  Because of trade secrets, not all components and their percentages are listed.

SECTION 4: FIRST AID MEASURES

- **Hazard description:** Contact causes eye and skin irritation and may cause burns. May cause severe irritation of the respiratory tract with possible burns. Aspiration may lead to pulmonary edema. Prolonged exposure to dusts or vapors may result in perforation of the nasal septum. Ingestion is harmful and may be fatal. Symptoms may include salivation, nausea, vomiting, abdominal pain, fever and labored breathing. May cause respiratory paralysis and cardiac arrest. May cause systemic effects on heart, liver and kidneys.
  Repeated exposure can also lead to fluoride poisoning (fluorosis) characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. Skeletal effects may include increased bone density, calcium deposits in ligaments, and mottled tooth enamel. May cause developmental and fetal effects, which may be delayed. Animal studies have reported development of tumors. Avoid contact with skin and eyes. Do not inhale or swallow.
  Primary route of entry: Dermal, eyes, inhalation, and ingestion.

- **Health effects:**
  Acute exposure effect:
  Skin: Causes severe irritation. May cause rash and cold, clammy skin with bluish or pale color (milder cases). May cause burns, especially if skin is wet or moist.
  Eyes: Causes severe irritation and may cause burns. May cause chemical conjunctivitis and eye damage.
  Inhalation: May cause severe irritation of the respiratory tract and may cause burns.
  Ingestion: Harmful if swallowed and may be fatal. Symptoms may include salivation, nausea, vomiting, abdominal pain, fever and labored breathing. May cause respiratory paralysis and cardiac arrest.
  Repeated Exposure Effects:
  Repeated ingestion may cause systemic effects on heart, liver and kidneys. Repeated ingestion may also result in depleted calcium levels in the body leading to hypocalcemia and death. Chronic inhalation and ingestion can also lead to fluoride poisoning (fluorosis) characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. Skeletal effects may include increased bone density, calcium deposits in ligaments, and mottled tooth enamel. May cause developmental and fetal effects, which may be delayed. Animal studies have reported development of tumors.
  Medical conditions which might be aggravated:
  Pre-existing diabetes insipidus or renal impairment.

- **Skin:** Wash with soap and copious amounts of water. Remove contaminated clothing. Wash clothing and thoroughly clean shoes before reuse. Get medical attention.
- **Eyes:** Flush eyes with copious amounts of water for at least 15 minutes. Get medical attention.
- **Inhalation:** Remove to fresh air. If breathing is difficult, give oxygen.
- **Ingestion:** Victim should drink copious amounts of water to dilute. Get medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

- **Personal precautions:** Avoid overexposure. Wear suitable protective clothing.
- **Methods for cleaning up:** Carefully sweep up and remove.
- **Methods of containment:** Dispose as of hazardous waste. Keep in suitable, closed containers for disposal
- **Emergency procedures:** Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **Personal precautions:** Avoid overexposure. Wear suitable protective clothing.
- **Methods for cleaning up:** Carefully sweep up and remove.
- **Methods of containment:** Dispose as of hazardous waste. Keep in suitable, closed containers for disposal
- **Emergency procedures:** Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

SECTION 7: HANDLING AND STORAGE

- **Handling: Advice for safe handling:** Keep container tightly closed. Suitable for any general chemical storage area.
- **Information about protection against explosions and fires:** Avoid contact with incompatible material, minimize dust generation and accumulation. Material must be handled with adequate ventilation.
- **Storage: Requirements to be met by storerooms and receptacles**: Keep container closed when not in use. Store in a cool, dry, well-ventilated area. Store away from incompatible substances.
  Information about storage in one common storage facility: Keep container closed when not in use. Do not store in glass. Store in a cool, dry, well-ventilated area. Store protected from moisture. Store away from incompatible substances, such as strong acids and alkalies.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- **Exposure limits:**
  OSHA PEL: Sodium Fluoride: TWA 2.5 mg/m^3
  ACGIH TLV: Sodium Fluoride : 2.5 mg/m^{3}TWA
  Other recommended limits: N/A
- **Additional information about design of technical systems:** Use general or local exhaust ventilation to reduce exposure.
- **Personal protective equipment:**
  General protective and hygienic measures: Wash thoroughly after handling. Remove contaminated and wash before reuse. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Use with adequate ventilation. Provide eye bath and safety shower.
  Breathing equipment: None required, where adequate ventilation conditions exist. For conditions where dust is apparent and engineering controls are not feasible, a NIOSH/MSHA approved respirator is recommended. If concentration exceeds capacity of respirator, a self-contained breathing apparatus is recommended.
  Hand protection: Wear appropriate protective gloves to prevent skin exposure.
  Eye protection: Use chemical safety goggles
  Body protection: Wear appropriate protective clothing to prevent skin exposure.
- **Special requirements for PPE:** N/A
- **Hygiene measures:** N/A
- **Appropriate engineering controls:** Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- **General information**
  Form: Crystalline powder
  Color: White
  Odor: Odorless
- **Odor Threshold:** N/A
- **PH-value:** Ethylendiaminetetraacetic Acid Tripotassium Dihydrate K3EDTA: N/A
  Sodium Fluoride: 10,2 (4%, 20 °C)
- **Change in condition**
  Melting point/Melting range: Ethylendiaminetetraacetic Acid Tripotassium Dihydrate K3EDTA: N/A
  Sodium Fluoride: 993 °C
  Boiling point/Boiling range: not determined
- **Flash point:** N/A
- **Flammability (solid, gaseous):** N/A
- **Danger of explosion:** Product does not present an explosion hazard
- **Vapor pressure:** Not determined
- **Density:** Ethylendiaminetetraacetic Acid Tripotassium Dihydrate EDTA K_3: N/A
  Sodium Fluoride: 2,8 g/cm^3
- **Solubility in/Miscibility w/H_2O:** Soluble
- **Organic solvents:** N/A
- **Solids content:** N/A
- **Partition coefficient: n-octanol/water:** N/A
- **Auto-ignition temperature:** N/A
- **Decomposition temperature:** N/A
- **Viscosity:** N/A
- **Oxidizing properties:** N/A

SECTION 10: STABILITY AND REACTIVITY

- **Reactivity:** No data available
- **Chemical Stability:** No data available
- **Possibility of hazardous reactions:** No data available
- **Conditions to avoid:** Avoid generation and accumulation of dusts.
- **Incompatible materials:** Moisture, acids, alkalies, oxidizing agents, and glass.
- **Hazardous decomposition products:** Hydrogen fluoride, sodium oxide. May form under fire conditions: nitrogen oxides (NOx), carbon oxides, potassium oxides

SECTION 11: TOXICOLOGICAL INFORMATION

- **Acute toxicity** (LD 50 oral rat > 200 mg/kg)
  Eye: Severely irritating to the eyes.
  Skin: Severely irritating to the skin.
  Inhalation: Harmful if inhaled and may be fatal.
  Ingestion: Toxic if swallowed. May be fatal.
- **Primary irritant effect:**
  On the skin: Severely irritating to the skin.
  On the eye: Severely irritating to the eyes.
- **Sensitization:** Not established
- **Additional toxicological information:**
  Chronic: Repeated ingestion may cause systemic effects on heart, liver and kidneys. Repeated ingestion may also result in depleted calcium levels in the body leading to hypocalcemia and death. Chronic inhalation and ingestion can also lead to fluoride poisoning (fluorosis) characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. Skeletal effects may include increased bone density, calcium deposits in ligaments, and mottled tooth enamel. May cause developmental and fetal effects, which may be delayed. Animal studies have reported development of tumors.

SECTION 12: ECOLOGICAL INFORMATION

- **Ecotoxilogical effects:** Unspecified. No data is available on the adverse effects of this material on the environment.
- **Other information:** The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Dangerous to aquatic life in high concentrations. Soil can bind fluorides tightly if pH is greater than 6.5. Fluorides can be damaging to plants when present in acid soils.

SECTION 13: DISPOSAL CONSIDERATION

- **Product: Recommendation**
  Disposal should be done in accordance with all federal, state and local environmental regulations. Disposal must be made according to the regulations found in 40 CFR 261. This product is not a hazardous waste according to local regulations.
- **Packaging: Recommendation**
  Disposal should be done in accordance with all federal, state and local environmental regulations. Disposal must be made according to the regulations found in 40 CFR 261.This product is not a hazardous waste according to local regulations.
  Recommended cleansing agent
  Water, if necessary with cleansing agents

SECTION 14: TRANSPORT INFORMATION

- **DOT regulations:** Not regulated
- **Land transport ADR/RID:** Not regulated
- **Maritime transport IMDG:** Not regulated
- **Air transport ICAO-TI and IATA-DGR:** Not regulated

SECTION 15: REGULATORY INFORMATION

- **OSHA, 29 CFR 1910.1200(g) and Appendix D. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009**
- **EC directives: 91/155/EEC, 93/112/EC, 88/379/EEC**
- **Water hazard class:** N/A
- **Note:** Please note that there may be additional legal provisions to be observed. We recommend that you keep yourself informed about all applicable international, national and local regulations.

SECTION 16: OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate. However, neither Greiner Bio-One nor any of its subcontractors or suppliers assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Safety Data Sheet
acc. to OSHA HCS

Date Prepared: 05/10/2016 Reviewed On: 04/22/2016

1 Identification

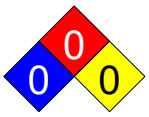
· **Product Identifier:**
· **Product Name: BD Universal Viral Transport Combo Swab Kit**
· **Catalog Number:** 220222
· **Application of the substance / the mixture** Laboratory Chemicals

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
BD Diagnostic Systems
7 Loveton Circle
Sparks, MD 21152
Telephone: (410) 771 - 0100 or (800) 638 – 8663
Email Address: Technical_Services@bd.com
· **Information Department:** Technical Service
· **Emergency telephone number:**
In case of a chemical emergency, spill, fire, exposure, or accident, contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Hazard(s) identification

· **Classification of the substance or mixture**
The product is not classified according to the Globally Harmonized System (GHS).

· **Label elements**
· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **NFPA ratings (scale 0-4)**



Health = 0
Flammability = 0
Reactivity = 0

· **HMIS ratings (scale 0-4)**

Health = 0
Flammability = 0
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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Product Name: BD Universal Viral Transport Combo Swab Kit

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3 Composition/information on ingredients

· **Chemical characterization: Mixture**
· **Description:** Mixture consisting of the following components.

· **Dangerous Components:** Void
· **Additional information** Risk phrases refer to section 15.

4 First-aid measures

· **Description of first aid measures**
· **General information** No special measures required.
· **After inhalation** Seek medical treatment in case of complaints.
· **After skin contact** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing** If symptoms persist consult doctor.
· **Information for doctor** Show this product label or this SDS.
· **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents**
CO2, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture**
No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.
· **Environmental precautions:** Wipe up with damp sponge or mop.
· **Methods and material for containment and cleaning up:** No special measures required.

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· **Reference to other sections** No dangerous substances are released.

7 Handling and storage

· **Handling**
· **Precautions for safe handling** No special measures required.
· **Information about protection against explosions and fires:**
No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:**
Store away from oxidizing agents.
· **Further information about storage conditions:**
Store in cool, dry conditions in well sealed containers.
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:**
No further data; see Section 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal Protective Equipment**
· **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
· **Breathing equipment:** Not required.
· **Protection of hands:**

Chemical resistant gloves (i.e. nitrile, or equivalent).

· **Eye protection:** Safety glasses
· **Body protection:** Protective work clothing (lab coat).

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Liquid
Color:	Light orange
· **Odor:**	Characteristic
· **pH-value:**	7.3 +/- 0.2
· **Change in condition**	Undetermined
· **Melting point/Melting range:**	Not determined
· **Boiling point/Boiling range:**	Not determined
· **Flash point:**	Not applicable
· **Auto igniting:**	Product is not self igniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Density:**	Not determined
· **Solubility in / Miscibility with**	
Water:	Soluble
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** Incompatible material: strong oxidizers.
· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**
· **Primary irritant effect:**
· **on the skin:** No irritating effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.

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· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
The product is not subject to OSHA classification according to internally approved calculation methods for preparations.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation**
This product is not considered a RCRA hazardous waste.
Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.
Smaller quantities can be disposed of with solid waste.

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· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to state and federal regulations.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**	
· **DOT, ADN, IMDG, IATA**	Void
· **UN proper shipping name**	
· **DOT, ADN, IMDG, IATA**	Void
· **Transport hazard class(es)**	
· **DOT, ADN, IMDG, IATA**	
· **Class**	Void
· **Packing group**	
· **DOT, IMDG, IATA**	Void
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	If "void" appears in the Hazard Class section for the type of transportation, this indicates the product is not regulated for transportation.
· **UN "Model Regulation":**	Void

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

· **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

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· **TSCA (Toxic Substances Control Act)**
All ingredients are listed.

· **California Proposition 65 - Chemicals known to cause cancer**
None of the ingredients is listed.

· **California Proposition 65 - Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **California Proposition 65 - Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **California Proposition 65 - Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.

· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we can not guarantee that these are the only hazards that exist.

· **Department issuing SDS:**
Environmental, Health & Safety
Created by Michael J. Spinazzola
· **Contact:** Technical Service Representative
· **Date of preparation / last revision** 05/10/2016 / -
· **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

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LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
LC50: Lethal concentration, 50 percent
BEI: Biological Exposure Limit