

SAFETY DATA SHEET

Section 1: Identification of the chemical product and of the supplier


Identification of the chemical product	Proteomic Stabilizer PROT1
Other means of identification	
Product code	PROT1, PROT1-250ML, PROT1-1L, MTS1P-100/CS
Recommended use of the chemical and restrictions on use	
Recommended use	Stabilization of whole blood samples.
Recommended restrictions	Research use only.
Manufacturer/Importer/Supplier/Distributor information	
Distributor/Supplier	IQVIA RDS CHILE RUT: 59.078.540-7
Address	Av Santa Clara 085 oficina 202 ^a Huechuraba, Santiago – Chile 8581176
Contact	Florencia Fernandez / Sabrina Rosa Cardozo
Telephone	+ 54 11 41326782 / + 54 11 41326781
E-mail	florencia.fernandez@iqvia.com, sabrina.rosa@iqvia.com
Manufacturer	Smart Tube, Inc.
Address	6658 W. Sunset Road, Suite 100 Las Vegas, NV 89118 USA
Website	www.smarttubeinc.com
For product information call	+ 1 855 397 8467
For emergencies only call	CHEMTREC: +56 2 2581 4934 (Santiago)

Section 2: Hazards identification

Classification according to NCh382	Not regulated as dangerous goods.	
Label according to NCh2190	Not available.	
Classification according to GHS		
Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 5
	Acute toxicity, inhalation	Category 3
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1A
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Category 1A
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, repeated exposure (oral)	Category 2 (kidneys)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3

Label elements



Signal word	Danger
Hazard statement	May be harmful if swallowed. Toxic if inhaled. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Suspected of causing genetic defects. May cause cancer. May cause respiratory irritation. May cause damage to organs (kidneys) through prolonged or repeated exposure by ingestion. Harmful to aquatic life.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF exposed or concerned: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Safety signs according to NCh1411/4	
Specific classification	Not applicable.
Specific label	Not applicable.
Description of hazards	May be harmful if swallowed. Toxic if inhaled. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Suspected of causing genetic defects. May cause cancer. May cause respiratory irritation. May cause damage to organs (kidneys) through prolonged or repeated exposure by ingestion. Harmful to aquatic life.
Description of specific hazards	Not applicable.
Other hazards	None known.

Section 3: Composition/information on ingredients

Mixture

Systematic chemical name	Concentration range	CAS number
Diethylene glycol	3 - 7	111-46-6
Formaldehyde	3 - 7	50-00-0
Sodium chloride	1 - 3	7647-14-5

All concentrations are in percent by weight unless otherwise indicated.
Components not listed are either non-hazardous or are below reportable limits.

Section 4: First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor/physician.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Expected acute effects	Skin irritation. Causes serious eye damage. Sensitization. Respiratory tract irritation.
Expected delayed effects	Suspected of causing genetic defects. May cause cancer. Kidney injury may occur.
Most important symptoms/effects	Skin irritation. May cause redness and pain. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Protection for first-aid providers	First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.
Special notes for treating physician	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Section 5: Fire-fighting measures

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Inappropriate extinguishing media	No restrictions known.
Products formed during combustion and thermal degradation	Carbon oxides. Sodium oxides. Potassium oxides. Chlorine compounds.
Specific associated hazards	During fire, hazardous combustion products are released that may include: Carbon oxides.
Specific extinguishing methods	Use standard firefighting procedures and consider the hazards of other involved materials.
Precautions for emergency personnel and/or firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Section 6: Accidental release measures

Personal precautions	Keep unnecessary personnel away. Wear appropriate personal protective equipment.
Protective equipment	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.
Emergency procedures	Clean up in accordance with all applicable regulations.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods and material for containment, confinement, and/or abatement	<p>This product is miscible in water.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Retain and dispose of contaminated wash water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.</p>
Methods and materials for clean-up	
Recovery	Never return spills to original containers for re-use.
Neutralization	Not applicable.
Final disposal	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Additional measures for preventing disasters	Avoid release to the environment.

Section 7: Handling and storage

Handling	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not get this material in contact with eyes. Avoid contact with skin and clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Operational and technical measures	Provide adequate ventilation.
Other precautions	Avoid release to the environment.

Prevention of contact Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

Storage

Conditions for safe storage Store locked up. Keep container tightly closed. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

Technical measures No specific recommendations.

Incompatible substances and mixtures Strong oxidizing agents.

Materials for containers and/or packaging Store in original tightly closed container.

Section 8: Exposure controls/personal protection

Maximum permissible concentration

Chile. OELs. Decree No. 594, arts. 61 & 66: Regulating Basic Health and Environmental Conditions in the Workplace and Setting Permissible Levels of Exposure to Chemical and Physical Agents

Components	Type	Value
Formaldehyde (CAS 50-00-0)	LPA	0.37 mg/m3
		0.3 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Formaldehyde (CAS 50-00-0)	STEL	0.3 ppm
	TWA	0.1 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Individual protection measures, such as personal protective equipment

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Chemical respirator with organic vapor cartridge and full facepiece. Check with respiratory protective equipment suppliers.

Hand protection Wear appropriate chemical resistant gloves. Nitrile or neoprene gloves are recommended.
 - material thickness: 3.9 mm
 - break through time: 120 min
 Other suitable gloves can be recommended by the glove supplier.

Eye protection When working with liquids wear splash-proof chemical goggles and face shield unless full facepiece respiratory protection is worn.

Skin and body protection Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Engineering measures Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Eye wash facilities and emergency shower must be available when handling this product.

Section 9: Physical and chemical properties

Appearance

Physical state Liquid.

Form Liquid.

Color Colorless.

Odor Formaldehyde.

pH 7.8

Melting point/freezing point Property has not been measured.

Initial boiling point and boiling range 212 °F (100 °C)

Flash point Does not flash.

Explosivity limits Not available.

Vapor pressure Property has not been measured.

Relative density Property has not been measured.

Density	Not available.
Solubility(ies)	
Solubility (water)	Miscible in water.
Partition coefficient (n-octanol/water)	Not applicable, product is a mixture.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Property has not been measured.
Odor threshold	Not determined.
Evaporation rate	Property has not been measured.
Flammability (solid, gas)	Not applicable.
Viscosity	1 cP (77 °F (25 °C))

Section 10: Stability and reactivity

Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

Section 11: Toxicological information

Information on toxicological effects

Acute toxicity May be harmful if swallowed. Toxic if inhaled.

Components	Species	Test Results
Diethylene glycol (CAS 111-46-6)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	11890 mg/kg
Formaldehyde (CAS 50-00-0)		
<u>Acute</u>		
Inhalation		
Vapor		
LC50	Rat	< 0.58 mg/l, 4 Hours
Oral		
LD50	Rat	460 mg/kg
Other		
LD50	Rabbit	270 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
ACGIH sensitization		
Formaldehyde (CAS 50-00-0)	Dermal sensitization Respiratory sensitization	
Respiratory sensitization	Does not meet classification criteria.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	Suspected of causing genetic defects.	
Carcinogenicity	May cause cancer.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	May cause respiratory irritation.	
Specific target organ toxicity - repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure by ingestion.	

Aspiration hazard	Not an aspiration hazard.
Related symptoms	Skin irritation. May cause redness and pain. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Section 12: Ecological information

Ecotoxicity Harmful to aquatic life.

Components	Species	Test Results
Formaldehyde (CAS 50-00-0)		
Aquatic		
Algae	EC50	Desmodesmus subspicatus 3.48 mg/l, 72 hours
Crustacea	LC50	Daphnia pulex 5.8 mg/l, 48 hours
Fish	LC50	Morone saxatilis 6.7 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available on bioaccumulation.

Mobility in soil This product is miscible in water. Expected to be mobile in soil.

Section 13: Disposal considerations

Remains/residues Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated container, packaging and contaminated materials Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Contaminated materials Dispose in accordance with all applicable regulations.

Section 14: Transport information

Classification according to NCh382

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

Section 15: Regulatory information

National regulations

NCh.382/2013 - Hazardous materials - Classification
 NCh.2190/2003 - Transportation of hazardous substances - Signs for risk identification
 NCh.1411/4/1978 - Safety signs for risk identification
 NCh.2245/2015 - Safety Data Sheet for chemicals
 D.S. 594/1999 - Decree Regulating Basic Health and Environmental Conditions in the Workplace
 D.S. 298/1994 - Regulates the road transportation of hazardous substances
 D.S. 148/2003 - Health Regulations on Hazardous Waste Management
 D.S. 43/2015 - Storage of hazardous substances

Controlled chemical substances susceptible to manufacturing of narcotics and psychotropic drugs, Lists I, II, III (Decree 1358, published April 17, 2007)

Not listed.

Prohibited Substances (Reg. 594/1999, art. 65, as of Nov. 8, 2012)

Not listed.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

Section 16: Other information

List of abbreviations

EC50: Effective Concentration, 50%.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG Code: International Maritime Dangerous Goods Code.
LC50: Lethal Concentration 50%.
LD50: Lethal Dose, 50%.
MARPOL: International Convention for the Prevention of Pollution from Ships.
STEL: Short-Term Exposure Limit.
TWA: Time Weighted Average Value.

References

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
EPA: AQUIRE database
HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
NLM: Hazardous Substances Data Base
National Toxicology Program (NTP) Report on Carcinogens

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