SAFETY DATA SHEET (SDS)

Simulated urine, protein

Issue date: 15-09-2023

Section 1: Product Identifier and Chemical Identity

Product Identifier	
Product Name:	Simulated urine, protein
Product Codes:	LK3.05
Other means of identification:	
Chemical formula, alternative names:	
Recommended use of the chemical and restrictions on use	
Recommended Use:	For laboratory use only.
Suppliers name, address and phone number	
Suppliers Name:	Southern Biological
Suppliers ABN:	94 630 703 810
Suppliers Address:	168 Fulham Road Alphington Victoria 3078 Australia
Suppliers Phone No.:	1300 138 561
Emergency Phone number (BH)	1300 138 561

Section 2: Hazard Identification

Classification of the Hazardous Chemical		
Hazard Category	Not classified as a dangerous substance	
Label elements		
Hazard Pictograms:	None	
Signal Word:	None	
Hazard Statements:	Low toxicity	
Precautionary Statements:	Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not ingest.	
Other Hazards		
Results of PBT and vPvB assessment:	PBT: Not applicable VPvB: Not applicable	

Section 3: Composition/information on ingredients



Ingredients		
Name	CAS	Proportion
Water	7732-18-5	83%
Urea	57-13-6	12%
Protease	9001-92-7	5%
Sodium hydroxide	1310-73-10	0.02%
Yellow food dye		Trace

Section 4: First Aid Measures

General Information	
After Inhalation:	Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, call a doctor.
After skin contact:	Wash with water and soap and rinse thoroughly. If skin irritation occurs, seek medical advice.
After eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
After swallowing:	Do not induce vomiting. Wash out mouth with water. Obtain emergency medical attention. Call a POISON CENTRE or doctor if you feel unwell.
Information for doctor:	
Most important symptoms and effects both acute and delayed:	Treat symptomatically.
Indications of any immediate medical attention and special treatment needed	No further relevant information available.

Section 5: Firefighting measures

Extinguishing media	
Suitable extinguishing agents:	Use media suitable to extinguish surrounding fire.
Special hazards arising for the substance or mixture:	No further relevant information available.
Advice for firefighters	
Protective equipment:	Do not enter the fire area without proper protective equipment including respiratory equipment.

Section 6: Accidental release measures

General Information	
Personal precautions, protective equipment and emergency procedures:	No health effects expected from the clean up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this SDS. Prevent the spread of any spill to minimise harm to human health and the environment if safe to do so. Wear complete and proper personal protective



	equipment following the recommendation of Section 8 at a minimum.
Environmental precautions:	Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if spill to sewers or public waters.
Methods and material for containment and cleaning up:	Dispose of contaminating material as waste according to item 13. Ensure adequate ventilation. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.
Reference to other sections:	See Section 7 for information on safe handling. See Section 8 for information on protective equipment. See Section 13 for disposal information.

Section 7: Handling and Storage

General Information	
Precautions for safe handling:	Ensure good ventilation/exhaustion at the workplace. Do not eat drink or smoke when using this product. Wash contaminated clothing before reuse.
Information about fire – and explosion protection:	No special measures required.
Conditions for safe storage, including any incompatibilities.	
Storage:	Store in cool dry area out of direct sunlight and incompatible materials. Keep containers closed when not in use. Store in suitably labelled containers.
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:	Keep container tightly sealed. Keep out of direct sunlight.
Specific end use(s):	No further relevant information available.

Section 8: Exposure controls/personal protection.

General information			
Additional information about design of tec	hnical facilities:	No further data: see sect	tion 7
Control parameters:			
Ingredients with limit values that require monitoring at the workplace:			
Name	STEL	TWA	Footnote
	mg/m³ ppm	mg/m ³	
Sodium hydroxide	n/a	2	Peak limitation
Additional information		The lists valid during the	making were used as basis.
Exposure Controls:			
General protective and hygienic measures:		ventilation has been pro Keep away from foodstu	



	Wash hands before breaks and at the end of work. Avoid contact with eyes.
Respiratory protection:	In case of significant exposure use respiratory filter device. Not normally required.
Clothing / Foot-wear and equipment	No special requirements.
Protection of hands:	PVC or rubber gloves
Eye protection:	Tightly sealed goggles
Skin protection:	Laboratory Coat

Section 9: Physical and chemical properties

Appearance:	
Form:	Liquid
Colour:	Pale yellow to amber
Odour:	Not determined
Odour Threshold:	Not determined
pH value:	> 8.0
Change in Condition:	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	100°C
Flash point:	Not determined
Flammability (solid / gaseous)	Not determined
Ignition Temperature	
Decomposition temperature:	Not determined
Self-igniting:	Not determined
Danger of explosion:	Not determined
Explosion limits	
Lower:	Not determined
Upper:	Not determined
Vapour pressure:	Not determined
Density:	> 1.025
General Info	
Relative density:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined
Solubility in/ Miscibility with water:	miscible
Partition coefficient (n-octanol/water):	Not determined



Viscosity:	Not determined
Other information:	Not determined

Section 10: Stability and reactivity

Reactivity	
General	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:	None known
Incompatible materials:	Water-reactive materials, strong oxidising agents
Hazardous decomposition products:	Carbon oxides, nitrogen oxides

Section 11: Toxicological information

Information on toxicological effects	
Acute toxicity – oral (urea) LD50 (rat): 8471 mg/kg	Acute toxicity – dermal (urea) LD50 (rat): 8200 mg/kg
Primary irritant effect:	
Inhalation:	Not classified
Skin contact:	Not classified
Eye exposure:	Not classified
Ingestion:	Not classified
Chronic Toxicity:	
Mutagenicity	No evidence of a mutagenic effect
Teratogenicity	No evidence of a teratogenic effect (birth defect)
Sensitisation	No evidence of a sensitisation effect
Reproductive	No evidence of negative reproductive effects



Section 12. Ecological information

Toxicity	
Aquatic toxicity urea:	96hr LC50 Poecilia reticulate 16200-18300 mg/L 48hr EC50 Daphnia magna 3910 mg/L [static] 24hr EC50 Daphnia magna straus > 10000 mg/L
Aquatic toxicity sodium hydroxide:	Aquatic LC50 (96h) Rainbow trout 45.4 mg/L
Persistence and degradability:	Biodegradation (urea): 96 %/16 d Zahn-Wellens test. Easily eliminable.
Behaviour in environmental systems	
Bio-accumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Additional ecological information	
Results of PBT and vPvB assessment	PBT: Not applicable vPvB: Not applicable
Other adverse effects:	No further relevant information available.

Section 13. Ecological information

Waste treatment methods	
Recommendation	Prevent this material from entering waterways, drains and sewers. Comply with official regulations.
Uncleaned packaging:	
Recommendation:	Disposal must be made according to official regulations.
Recommended cleansing agents:	Water, if necessary, together with cleansing agents.

Section 14. Transport information

General	Not listed as a hazardous material.
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Section 15. Regulatory Information

Safety health and environmental regulations/legislation specific for the substance or mixture		
Australian Inventory of Chemical Substances:	Substances are listed.	
Standard for the Uniform Scheduling of Medicines and Poisons	S6	
GHS label elements	None	
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

IARC: International Agency for Research on Cancer

CAS: Chemical Abstracts Service

PBT: Persistent Bio-accumulative and Toxic vPvT: very Persistent and very Toxic

