SAFETY DATA SHEET
ALKYL POLYGLUCOSIDE, 50% SOLUTION
REVISION 4, DATE 25 JUN 2024

1. IDENTIFICATION

Product Name	**Alkyl Polyglucoside, 50% Solution**
Other Names	Green APG 0810 50%; TRITON CG-50 Surfactant
Uses	Raw material for the chemical and pharmaceutical industry. For industrial and professional use. Restrictions on Use: No information available.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	D-Glucopyranose, oligomeric, decyl octyl glycosides, 50% aqueous solution
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Suite 13A.03, Menara Summit Persiaran Kewajipan USJ1 47600 UEP Subang Jaya Selangor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Australia – Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
National Poison Centre	Malaysia	+60-4-6536-999
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)	Not Scheduled

Globally Harmonised System

Hazard Classification		Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)	
Hazard Categories		Serious Eye Damage/Irritation - Category 1 Skin Corrosion/Irritation - Category 2 Acute Hazard To The Aquatic Environment - Category 3	
Pictograms			
Signal Word		Danger	
Hazard Statements		**H318**	Causes serious eye damage.
		H315	Causes skin irritation.
		H402	Harmful to aquatic life.
Precautionary Statements	Prevention	**P280**	Wear eye protection/face protection.
	Response	**P305 + P351 + P338 + P310**	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 CENTRE/doctor.
		P302 + P352	IF ON SKIN: Wash with plenty of water/...
		P362 + P364	Take off contaminated clothing and wash it before reuse.
	Disposal	**P501**	If they cannot be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification	Hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
D-Glucopyranose, oligomeric, decyl octyl glycosides	No Data Available	68515-73-1	50 %
Water	H2O	7732-18-5	Balance %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Centre or doctor/physician for advice. Subsequently consult an ophthalmologist! *Suitable eye wash facilities should be available for immediate use
Skin	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention. *Suitable safety shower should be available for immediate use.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
Advice to Doctor	Treat symptomatically. Most important symptoms and effects, both acute and delayed: Causes skin irritation. Causes serious eye damage. Indication of any immediate medical attention and special treatment needed: Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	Move containers from fire area if you can do it without risk. Cool containers with water spray until well after fire is out.
Flammability Conditions	This product is non-flammable. However, following evaporation of aqueous component under fire conditions, the non-aqueous component may decompose and/or burn.
Extinguishing Media	If material is involved in a fire, use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction.
Fire and Explosion Hazard	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Hazardous Products of Combustion	Fire may produce irritating and/or toxic gases, including Carbon oxides.
Special Fire Fighting Instructions	Collect contaminated fire extinguishing water separately. Do not allow to enter drains or surface water.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.
Flash Point	>100 °C
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	No action shall be taken involving any personal risk or without suitable training. Ensure adequate ventilation. ELIMINATE all ignition sources. Do not touch or walk through spilled material - Danger of slipping! Avoid breathing mist/vapours and contact with eyes, skin and clothing.
Clean Up Procedures	Pick up with sand or other non-combustible absorbent material and place into containers for later disposal (see SECTION 13).
Containment	Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike far ahead of large spill for later disposal. No information available.

Decontamination	
Environmental Precautionary Measures	Do not allow to enter into ground-water, surface water or drains. Local authorities should be advised if significant spillages cannot be contained.
Evacuation Criteria	Spill or leak area should be isolated immediately. Evacuate surrounding areas. Keep unnecessary and unprotected personnel away.
Personal Precautionary Measures	Use personal protective equipment as required (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Keep away from heat and sources of ignition - No smoking. Take precautionary measures against static discharges.
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Keep away from heat and sources of ignition - No smoking. Keep away from food/feedstuffs and incompatible materials (see SECTION 10).
Container	Keep in the original, properly labelled container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product.
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	- Respiratory protection: Wear respiratory protection in case of inadequate ventilation or in case of aerosol or vapour formation. Recommended: Organic vapour/particulate filter respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Tightly sealed goggles. - Hand protection: Handle with gloves. Recommended: Protective gloves, e.g. Nitrile rubber (Breakthrough time: >480 min). - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Wear suitable protective clothing.
Special Hazards Precaustions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling, before breaks and after work. Take off contaminated clothing and wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Cloudy liquid
Odour	Weak, characteristic
Colour	Yellowish
pH	11.5 - 12.5 (at 20% in 15% IPA aq.)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available

Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Dispersible in water
Specific Gravity	No Data Available
Flash Point	>100 °C
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	1.07 - 1.11 g/ml
Specific Heat	No Data Available
Molecular Weight	320.22 g/mol (CAS No. 68515-73-1)
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	200 - 600 mPa.s (@ 20 °C)
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	This product is non-flammable. However, following evaporation of aqueous component under fire conditions, the non-aqueous component may decompose and/or burn.
Reactions That Release Gases or Vapours	Fire/decomposition may produce irritating and/or toxic gases, including Carbon oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	No dangerous reactions are known.
Chemical Stability	Product is stable under normal conditions.
Conditions to Avoid	Keep away from heat and sources of ignition.
Materials to Avoid	None known.
Hazardous Decomposition Products	Fire/decomposition may produce irritating and/or toxic gases, including Carbon oxides.
Hazardous Polymerisation	No information available.

11. TOXICOLOGICAL INFORMATION

General Information

- Acute toxicity: Based on available data, the classification criteria are not met.
- Skin corrosion/irritation: No adverse effect observed (not irritating) [ECHA].
- Eye damage/irritation: Causes serious eye damage.
- Respiratory/skin sensitisation: No adverse effect observed (not sensitising) [ECHA].
- Germ cell mutagenicity: No adverse effect observed (negative) [ECHA].
- Carcinogenicity: No information available.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT (single exposure): No information available.
- STOT (repeated exposure): Based on available data, the classification criteria are not met.
- Aspiration toxicity: No information available.

Information on likely routes of exposure:

- Ingestion: May cause GI discomfort.
- Eye contact: Causes serious eye damage.
- Skin contact: Causes skin irritation
- Inhalation: No information available.

Chronic effects: No information available.

Acute

Ingestion

Acute toxicity (Oral):
COMPONENT: D-Glucopyranose, oligomeric, decyl octyl glycosides (CAS No. 68515-73-1):
- LD50, Rat (male & female): >2,000 mg/kg [Supplier's SDS].

Other

Acute toxicity (Dermal):
COMPONENT: D-Glucopyranose, oligomeric, decyl octyl glycosides (CAS No. 68515-73-1):
- LD50, Rabbit (male & female): >2,000 mg/kg [Supplier's SDS].

Chronic

Reproduction

Reproductive toxicity (Oral):
COMPONENT: D-Glucopyranose, oligomeric, decyl octyl glycosides (CAS No. 68515-73-1):
- NOAEL, Rat (male & female): 1,000 mg/kg bw/d [OECD 421; Supplier's SDS].

Carcinogen Category

None

12. ECOLOGICAL INFORMATION

Ecotoxicity

COMPONENT: D-Glucopyranose, oligomeric, decyl octyl glycosides (CAS No. 68515-73-1):
- LC50, Fish: 126 mg/L (96 h) [Supplier's SDS].
- NOEC, Fish (Brachydanio rerio): 1.8 mg/l (28 d) [Supplier's SDS].
- EC50, Crustacea (Daphnia magna): >100 mg/l (48 h) [OECD 202; Supplier's SDS].
- Chronic EC10, Crustacea (Daphnia magna): 1.76 mg/l (21 d) [Supplier's SDS].
- EC50, Algae (Scenedesmus subspicatus): 27.22 mg/l (72 h) [Supplier's SDS].

Persistence/Degradability

The product is completely biodegradable.
*Biodegradability in water (aerobic): >99.4 % (28 d).

Mobility

No information available.

Environmental Fate

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Bioaccumulation Potential

Bio-accumulation is not to be expected (log P(o/w) <1).

Environmental Impact

No Data Available

13. DISPOSAL CONSIDERATIONS

General Information

Dispose of waste/contaminated packaging according to applicable regulations.

Special Precautions for Land Fill

Empty containers should be taken for local recycling, recovery or waste disposal. Handle contaminated packaging in the

same way as the product itself.

14. TRANSPORT INFORMATION

Land Transport (Australia)
ADG Code

Proper Shipping Name	Alkyl Polyglucoside, 50% Solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)
ADR Code

Proper Shipping Name	Alkyl Polyglucoside, 50% Solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)
NZS5433

Proper Shipping Name	Alkyl Polyglucoside, 50% Solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)
US DOT

Proper Shipping Name	Alkyl Polyglucoside, 50% Solution
Class	No Data Available

Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport
IMDG Code

Proper Shipping Name	Alkyl Polyglucoside, 50% Solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport
IATA DGR

Proper Shipping Name	Alkyl Polyglucoside, 50% Solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	Not Scheduled

Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR002503 - Additives Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020

National/Regional Inventories

Australia (AIIC)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Listed
China (IECSC)	Listed
Europe (EINECS)	500-220-1
Europe (REACh)	01-2119488530-36-
Japan (ENCS/METI)	Not Listed
Korea (KECI)	KE-17731
Malaysia (List of Classified Substances)	Not Listed
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Listed
Taiwan (TCSI)	Listed
USA (TSCA)	Listed
Mexico (INSQ)	Not Determined

16. OTHER INFORMATION

Related Product Codes	SUFAKL0100, SUFAKL0820, SUFAKL0821, SUFAKL0822, SUFAKL0825, SUFAKL0826, SUFAKL1011, SUFAKL1012, SUFAKL1013, SUFAKL1020, SUFAKL4377, SUFAKL4378, TRITON4311
Revision	4
Revision Date	25 Jun 2024
Reason for Issue	New SDS
Key/Legend	< Less Than > Greater Than **AICS** Australian Inventory of Chemical Substances **atm** Atmosphere **CAS** Chemical Abstracts Service (Registry Number) **cm^2** Square Centimetres **CO2** Carbon Dioxide **COD** Chemical Oxygen Demand **deg C (°C)** Degrees Celcius **EPA (New Zealand)** Environmental Protection Authority of New Zealand **deg F (°F)** Degrees Farenheit **g** Grams **g/cm^3** Grams per Cubic Centimetre **g/l** Grams per Litre **HSNO** Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health **immiscible** Liquids are insoluable in each other. **inHg** Inch of Mercury

inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m^3 Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or **L** Litre
m^3 Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m^3 Milligrams per Cubic Metre
Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight