1. IDENTIFICATION

Product Name	**Decyl glucoside, 50% aqueous solution**
Other Names	Decyl glucoside 50%; Green APG 0810 50%
Uses	Raw material for the chemical and pharmaceutical industry. For industrial and professional use.
Chemical Family	No Data Available
Chemical Formula	No Data Available
Chemical Name	D-Glucopyranose, oligomeric, decyl octyl glycosides, 50% aqueous solution
Product Description	Alkyl polyglycosides (APGs) (C8-10).

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty 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	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, 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	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
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	
Pictograms			
Signal Word		Danger	
Hazard Statements		**H318**	Causes serious eye damage.
Precautionary Statements	Prevention	**P280**	Wear eye protection/face protection.
	Response	**P305 + P351 + P338**	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P310	Immediately call a POISON CENTER or doctor/physician.

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)

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

HSNO Classifications	Health Hazards	**6.4A**	Substances that are irritating to the eye
	Environmental Hazards	**9.1D**	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action

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 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	If swallowed: Rinse mouth and drink plenty of water. Call a Poison Centre or doctor/physician if you feel unwell.
Eye	Eye contact: Immediately flush eyes with running water for at least 15 minutes, holding eyelids apart. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a Poison Centre or doctor/physician; consult an ophthalmologist.
Skin	Skin contact: Wash with plenty of soap and water. Take off contaminated clothing and shoes, and wash before reuse. If skin irritation occurs, get medical advice/attention.
Inhaled	If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor physician if experiencing respiratory symptoms, or if you feel unwell.
Advice to Doctor	Treat symptomatically. No information available.

Medical Conditions Aggravated by Exposure	

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, remove containers from the path of fire.
Flammability Conditions	May burn, but does not ignite readily.
Extinguishing Media	Suitable: Water fog, foam, extinguishing powder, Carbon dioxide.
Fire and Explosion Hazard	If safe to do so, move undamaged containers from fire area. Cool containers with flooding quantities of water until well after fire is out.
Hazardous Products of Combustion	In case of fire: Carbon monoxide and Carbon dioxide may be liberated.
Special Fire Fighting Instructions	Collect contaminated fire extinguishing water separately. Do not allow to enter drains or surface water.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and suitable protective clothing.
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	Ventilate enclosed spaces before entering. ELIMINATE all ignition sources. Do not touch or walk through spilled material. SLIPPING HAZARD. Avoid contact with eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Clean Up Procedures	Absorb with earth, sand or other non-combustible material and transfer to container for disposal.
Containment	Stop leak if safe to do so. Prevent entry into waterways, drains or confined areas.
Decontamination	No information available.
Environmental Precautionary Measures	Do not allow to enter into ground-water, surface water or drains.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Wear personal protective equipment (see Section 8).

7. HANDLING AND STORAGE

Handling	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Provide adequate ventilation, and local exhaust as needed. Avoid contact with eyes. Wear suitable protective clothing/eye protection/face protection.
Storage	Keep in a cool, dry and well-ventilated place. Keep container tightly closed.
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	Contains no substances with occupational exposure limit values. DNELs:

	COMPONENT: Alkyl polyglycoside (C8-10) (CAS No. 68515-73-1): - Workers: Long-term, systemic (Dermal) DNEL = 595,000 mg/kg bw/d - Workers: Long-term, systemic (Inhalative) DNEL = 420 mg/m3 - Consumers: Long-term, systemic (Oral) DNEL = 35.7 mg/kg bw/d - Consumers, Long-term, systemic (Dermal) DNEL = 357,000 mg/kg bw/d - Consumers, Long-term, systemic (Inhalative) DNEL = 124 mg/m3
Exposure Limits	No Data Available
Biological Limits	PNECs: COMPONENT: Alkyl polyglycoside (C8-10) (CAS No. 68515-73-1): - Fresh water, PNEC = 0.176 mg/l - Marine water, PNEC = 0.0176 mg/l - Intermittent release, PNEC = 0.27 mg/l - Freshwater sediment, PNEC = 1.516 mg/kg dwt. - Marine sediment, PNEC = 0.152 mg/kg dwt. - Soil, PNEC = 0.654 mg/kg soil dw. - Sewage treatment plant, PNEC = 560 mg/l - Secondary poisoning (Predators, Oral), PNEC = 11,111 mg/kg feed.
Engineering Measures	Provide adequate ventilation, and local exhaust as needed. When vapours form: Withdraw by suction.
Personal Protection Equipment	Respiratory protection: In case of aerosol or vapours: Filter type A (organic). Eye protection: Tightly sealed goggles. Hand protection: Protective gloves (Nitrile rubber, breakthrough time: >480 min). Skin/body protection: Suitable protective clothing.
Special Hazards Precaustions	No information available.
Work Hygienic Practices	Avoid contact with skin and eyes. Take off contaminated clothing and shoes, and wash before reuse. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.

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
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 Data 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	May burn, but does not ignite readily.
Reactions That Release Gases or Vapours	In case of fire: Carbon monoxide and Carbon dioxide may be liberated.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

Chemical Stability	Product is stable under normal conditions.
Conditions to Avoid	Keep away from ignition sources (no smoking, flares, sparks or flames).
Materials to Avoid	No information available.
Hazardous Decomposition Products	In case of fire: Carbon monoxide and Carbon dioxide may be liberated.
Hazardous Polymerisation	No information available.

11. TOXICOLOGICAL INFORMATION

General Information	Eye damage/irritation: Causes serious eye damage.
Acute	
Ingestion	Acute Toxicity: - Oral, Rat (Male/Female) LD50: >2,000 mg/kg - Based on available data, the classification criteria are not met.
Other	Acute toxicity: - Dermal (Male/Female) LD50: >2,000 mg/kg - Based on available data, the classification criteria are not met.
Mutagenicity	Germ cell mutagenicity/genotoxicity: - Genotoxicity: Dermal, Rat (Male/Female): Negative - Chromosomal aberrations: Mammalian cells: Negative (OECD 474). - Based on available data, the classification criteria are not met.
Reproduction	Reproductive toxicity: - Oral, Rat (Male/Female): NOAEL: 1,000 mg/kg bw/d (OECD 421) - Based on available data, the classification criteria are not met.
Chronic	
Ingestion	Specific target organ toxicity (repeated exposure): - Oral, Rat NOAEL: 100 mg/kg bw/d (EU B.26) - Based on available data, the classification criteria are not met.
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: D-Glucopyranose, oligomers, decyl octyl glycosides: - Toxicity to fish: Acute (96 h) LC50: 126 mg/l - Toxicity to fish: Zebra fish, Long-term (28 d) NOEC: 1.8 mg/l - Toxicity to Daphnia: Daphnia magna, Acute (48 h) EC50: >100 mg/l - Toxicity to Daphnia: Daphnia magna, Chronic (21 d) EC10: 1.76 mg/l - Toxicity to Algae: Scenedesmus subspicatus (72 h) EC50: 27.22 mg/l - Toxicity to Crustacea: Corophium volutator, Chronic (10 d) NOEC: 262.16 mg/kg sediment dw
Persistence/Degradability	This product is completely biodegradable. - Biodegradability in Water (28 d): >99.4 % (aerobic). - Photochemical elimination (Air): DT50 = 2.6 h (D-Glucopyranose, dimers, C10-alkyl glycosides) DT50 = 4.81 h (Octyl D-glucoside) - Hydrolysis (at pH: 4, 7, 9): None
Mobility	Log KOC = 1.7 at 25 degC. Henry's Law Constant: 0.000000012 Pa m3/mol (25 degC).
Environmental Fate	Do not allow to enter into ground-water, surface water or drains.
Bioaccumulation Potential	Log P(o/w) = -0.07 at 40 degC. - 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	Handle contaminated packaging in the same way as the product itself.

14. TRANSPORT INFORMATION

Land Transport (Australia)
ADG

Proper Shipping Name	Decyl glucoside, 50% aqueous 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

Land Transport (Malaysia)
ADR

Proper Shipping Name	Decyl glucoside, 50% aqueous 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

Land Transport (New Zealand)
NZS5433

Proper Shipping Name	Decyl glucoside, 50% aqueous 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

Land Transport (United States of America)
US DOT

Proper Shipping Name	Decyl glucoside, 50% aqueous 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

Sea Transport
IMDG

Proper Shipping Name	Decyl glucoside, 50% aqueous 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

Air Transport
IATA

Proper Shipping Name	Decyl glucoside, 50% aqueous 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

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	HSR003148

National/Regional Inventories

Australia (AICS)	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 (EHS Register)	Not Listed
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Listed
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Listed
USA (TSCA)	Listed

16. OTHER INFORMATION

Related Product Codes	SUFAKL0820, SUFAKL0821, SUFAKL1010, SUFAKL1011
Revision	2
Revision Date	20 Jul 2017
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)
cm² 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/cm³ 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/m³ 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
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ 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