

1. IDENTIFICATION

| Product Name | Alkyl Polyglucoside, 50% Solution |
|---------------------|---|
| Other Names | 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 | 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 | 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

Redox Ltd

Corporate Office Sydney Locked Bag 15 Minto NSW 2566 Australia 2 Swettenham Road Minto NSW 2566 Australia All Deliveries: 4 Holmes Road Minto NSW 2566 Australia

Form 21047, Revision 3, Page 1 of 10, 01-Feb-2024 02:05:21

Phone +61 2 9733 3000 +61 2 9733 3111 Fax E-mail sydney@redox.com Web www.redox.com ABN 92 000 762 345

Australia Adelaide Brisbane Melbourne Perth UK London Sydney

New Zealand Malaysia Auckland Christchurch Kuala Lumpur USA Los Angeles Hawke's Bay Oakland Mexico Saltillo



| Globally Harmonised Syste | m | | |
|---------------------------|------------|--|---|
| 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 + 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. |

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)

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. | |
| Еуе | 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! | |
| 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. | |
| 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. *Symptoms/effects: Cause serious damage to eyes! | |

Medical Conditions Aggravated by No information available. Exposure

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. |
| Decontamination | No information available. |
| 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 |
| рН | 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. |
| 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

| 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 | Νο |
| | |

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 CodeHSR002503 - 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 (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 | SUFAKL0100, SUFAKL0820, SUFAKL0821, SUFAKL0825, SUFAKL0826, SUFAKL1011, SUFAKL1012, SUFAKL1020 |
|-----------------------|---|
| Revision | 3 |
| Revision Date | 03 Jul 2020 |
| Reason for Issue | New SDS |
| Key/Legend | Less Than Greater Than AICS Australian Inventory of Chemical Substances atm Amosphere CAS Chemical Abstracts Service (Registry Number) cm⁵ Square Centimetres CO2 Carbon Dioxide COD Chemical Oxygen Demand deg C(TC) Degrees Celcius EPA (New Zealand) Environmental Protection Authority of New Zealand deg F(TF) Degrees Farenheit g Grams g/cm³ Grams per Cubic Centimetre gl Grams per Litre HSNO Hazardous Substance and New Organism IDLH Immediately Dangerous to Life and Health immiscible Liquids are insoluable in each other. inHg linch of Mercury inH20 Inch of Water K Kevin kg Kilogram kg/m⁴ Kilograms per Cubic Metre b Pound LCS0 LC stands for lethal Concentration. LCS0 is the concentration of a material in air which causes the death of 50% (one haft) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. LDS0 LD stands for Lethal Dose. LDS0 is the amount of a material in air which causes the death of 50% (one haft) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. LDS0 LC Matre m⁶ Cubic Metre m⁶ Arouk Milligrams per 24 Hours mg/kg Milligrams per Scood WA Not Applicable WOSH National Institute for Occupational Safety and Health MOHSC National Institute for Occupational Safety and Health NOHSC National Neature for Occupational Safety and Health NOHSC National Institute for Occupational Safety and Health NOHSC National Institute for Occupational Safety and Health NOHSC National Neature for Occupational Safe |

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