



SAFETY DATA SHEET SODIUM SULFIDE REVISION 4, DATE 22 JAN 20

1. IDENTIFICATION

| | |
|----------------------------|--|
| Product Name | Sodium Sulfide |
| Other Names | Disodium monosulfide; Disodium sulfide; Sodium sulfide, hydrate [CAS#27610-45-3]; Sodium sulphide, hydrated with not less than 30% water |
| Uses | Rubber manufacturing, the desulfurisation of sulfur dyes, etc. |
| Chemical Family | No Data Available |
| Chemical Formula | Na ₂ S.xH ₂ O |
| Chemical Name | Sodium sulphide |
| 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

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

Australia
Adelaide
Brisbane
Melbourne
Perth
Sydney

New Zealand
Auckland
Christchurch
Hawke's Bay
UK
London

Malaysia
Kuala Lumpur
USA
Los Angeles
Oakland
Mexico
Saltillo



Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories Acute Toxicity (Oral) - Category 4
Acute Toxicity (Dermal) - Category 3
Skin Corrosion/Irritation - Category 1B
Serious Eye Damage/Irritation - Category 1
Acute Hazard To The Aquatic Environment - Category 1

Pictograms

Signal Word Danger

Hazard Statements

| | |
|---------------|--|
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H400 | Very toxic to aquatic life. |
| AUH031 | Contact with acids liberates toxic gas |

| | | | |
|---------------------------------|-------------|---|--|
| Precautionary Statements | Prevention | P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| | | P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| | | P273 | Avoid release to the environment. |
| | | P270 | Do not eat, drink or smoke when using this product. |
| | Response | P310 | Immediately call a POISON CENTER or doctor. |
| | | P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | | P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| | | P390 | Absorb spillage to prevent material-damage. |
| | | P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| | | P363 | Wash contaminated clothing before reuse. |
| | | P391 | Collect spillage. |
| | | P304 + P340 | IF INHALED: Remove victim to fresh air and keep comfortable for breathing. |
| | Storage | P406 | Store in corrosive resistant container with a resistant inner liner. |
| | | P405 | Store locked up. |
| Disposal | P501 | Dispose of contents/container in accordance with local / regional / national / international regulations. | |

National Transport Commission (Australia)

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

Dangerous Goods Classification 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 |
|--------------------------|-------------------|------------|------------|
| Sodium sulfide | Na ₂ S | 1313-82-2 | 55 - 65 % |
| Water of crystallisation | H ₂ O | 7732-18-5 | 37 - 40 % |

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. Immediately call a Poison Centre or doctor/physician for advice. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention - Danger of perforation of the esophagus and stomach! |
| Eye | IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Protect uninjured eye. Do NOT allow victim to rub eyes or keep eyes closed. Remove contact lenses if present and easy to do. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes. Get immediate medical advice/attention/consult an ophthalmologist. |
| Skin | IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water/shower for at least 15 minutes. Immediately call a Poison Centre or doctor/physician for advice. For minor skin contact, avoid spreading material on unaffected skin. Wash contaminated clothing and shoes before reuse. Get immediate medical advice/attention. For skin burns, cover with a clean, dry dressing until medical help is available. |
| Inhaled | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor/physician for advice. Apply resuscitation if victim is not breathing - Do not use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device - Administer oxygen if breathing is difficult. |
| Advice to Doctor | Treat symptomatically and supportively. Effects may be delayed. Keep victim calm and warm - Obtain immediate medical care. Ensure that attending medical personnel are aware of the identity and nature of the product(s) involved, and take precautions to protect themselves. |
| Medical Conditions Aggravated by Exposure | No information available. |

5. FIRE FIGHTING MEASURES

| | |
|---|---|
| General Measures | If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Avoid getting water inside containers. |
| Flammability Conditions | Combustible solid; must be preheated before ignition can occur. |
| Extinguishing Media | If material is involved in a fire, use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction - Do not use water jets. |
| Fire and Explosion Hazard | Will react with water, releasing flammable, toxic and/or corrosive gases and runoff. Vapours will form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapours are heavier than air and will collect in low or confined areas. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated or contaminated with water. This material in powder form is capable of creating a dust explosion. |
| Hazardous Products of Combustion | Fire will produce irritating, toxic and/or corrosive gases, including hydrogen sulfide (H ₂ S), sulfur dioxide. |
| Special Fire Fighting Instructions | Contain runoff from fire control or dilution water - Runoff may be toxic and/or corrosive and may pollute waterways; Vapours from runoff may create explosion hazard. |
| Personal Protective Equipment | Wear self-contained breathing apparatus (SCBA) and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for this material. |
| Flash Point | No Data Available |

| | |
|---------------------------|-------------------|
| Lower Explosion Limit | No Data Available |
| Upper Explosion Limit | No Data Available |
| Auto Ignition Temperature | No Data Available |
| Hazchem Code | 2X |

6. ACCIDENTAL RELEASE MEASURES

| | |
|--------------------------------------|---|
| General Response Procedure | Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources. Do not touch or walk through spilled material. Clean up spills immediately. Avoid generating dust. Do not breathe dust and prevent contact with eyes, skin and clothing. |
| Clean Up Procedures | Use clean non-sparking tools to collect material and place it into suitable containers for later disposal (see SECTION 13). Avoid generating dusty conditions. Do NOT get water inside containers. |
| Containment | Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Cover with DRY earth, and or other non-combustible material followed by plastic sheet to minimise spreading or contact with rain. Vapour-suppressing foam may be used to control vapours - Water spray may be used to knock down or divert vapour clouds. WARNING! Reaction with water may generate heat which will increase the concentration of fumes in the air. |
| Decontamination | No information available. |
| Environmental Precautionary Measures | Spillages and decontamination runoff should be prevented from entering drains and watercourses. |
| Evacuation Criteria | Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground. Large spill: Immediately contact Police or Fire Brigade; Consider initial downwind evacuation of areas within at least 250 m. |
| Personal Precautionary Measures | Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8). Large spill: Wear SCBA and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. |

7. HANDLING AND STORAGE

| | |
|-----------|--|
| Handling | Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid generating dust. Do not breathe dusts or mists and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). FLAMMABLE VAPOURS: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Avoid release to the environment - Collect spillage (see SECTION 6). |
| Storage | Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Protect from moisture. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Keep away from incompatible materials (see SECTION 10). Store locked up. |
| Container | Keep in the original container. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|-----------------|---|
| General | No specific exposure standards are available for this product. Emergency Limits for Sodium sulfide, hydrate (CAS No. 27610-45-3): - TEEL-1: 0.62 mg/m ³ ; TEEL-2: 6.9 mg/m ³ ; TEEL-3: 41 mg/m ³ DECOMPOSITION PRODUCT: Hydrogen sulfide (CAS No. 7783-06-4): - Safe Work Australia Exposure Standard: TWA = 10 ppm (14 mg/m ³); STEL = 15 ppm (21 mg/m ³). |
| Exposure Limits | No Data Available No information available. |

Biological Limits**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: Use an approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Recommended: Supplied-air respirator or self-contained breathing apparatus with a full facepiece (refer to AS/NZS 1715 & 1716).
- Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Safety glasses with side-shields or chemical safety goggles.
- Hand protection: Wear protective gloves. Recommended: Chemical resistant protective gloves.
- Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact.

Work Hygienic Practices

Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------------|---|
| Physical State | Solid |
| Appearance | Flakes |
| Odour | Specific, rotten-egg |
| Colour | White, yellow to light tan, orange/red |
| pH | 12.9 (1% solution) (Na ₂ S, ca. 60 %) [ECHA] |
| 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 | Miscible with water |
| Specific Gravity | 1.85 - 1.90 (Water = 1) |
| Flash Point | No Data Available |
| 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 | No Data Available |
| Specific Heat | No Data Available |
| Molecular Weight | No Data Available |
| 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 | No Data Available |
| Volatile Percent | No Data Available |
| VOC Volume | No Data Available |
| Additional Characteristics | Hygroscopic (absorbs moisture from the air). |
| Potential for Dust Explosion | This material in powder form is capable of creating a dust explosion. |

| | |
|---|---|
| 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 | Will react with water releasing flammable, toxic, and/or corrosive gases and runoff. Reaction with water may generate heat which will increase the concentration of fumes in the air. |
| Properties That May Initiate or Contribute to Fire Intensity | Combustible solid; must be preheated before ignition can occur. |
| Reactions That Release Gases or Vapours | Fire/decomposition will produce irritating, toxic and/or corrosive gases, including hydrogen sulfide (H ₂ S), sulfur dioxide. |
| Release of Invisible Flammable Vapours and Gases | Vapours will form explosive mixtures with air. Contact with metals may evolve flammable hydrogen gas. |

10. STABILITY AND REACTIVITY

| | |
|---|---|
| General Information | Contact with acids liberates toxic (hydrogen sulfide) gas. Solutions are corrosive to metals. Contact with metals may evolve flammable hydrogen gas. Reaction with water or moist air will release toxic, corrosive or flammable gases. |
| Chemical Stability | Material is stable under normal conditions. |
| Conditions to Avoid | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Protect from moisture. |
| Materials to Avoid | Incompatible/reactive with acids, oxidising agents, metals (copper, aluminum, zinc and their alloys), water/moisture. |
| Hazardous Decomposition Products | Fire/decomposition will produce irritating, toxic and/or corrosive gases, including hydrogen sulfide (H ₂ S), sulfur dioxide. |
| Hazardous Polymerisation | Hazardous polymerisation will not occur. |

11. TOXICOLOGICAL INFORMATION

| | |
|----------------------------|--|
| General Information | <ul style="list-style-type: none"> - Acute toxicity: Harmful if swallowed. Corrosive on ingestion; May cause severe digestive tract irritation with possible burns. May cause perforation of the digestive tract. Toxic in contact with skin. Contact with stomach acids can liberate toxic hydrogen sulfide gas. May cause dizziness, drowsiness, confusion, weakness, irregular breathing and unconsciousness. Aspiration may lead to pulmonary edema. May be fatal by ingestion, inhalation, or by skin absorption. - Skin corrosion/irritation: Corrosive; Causes severe skin burns. Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. - Eye damage/irritation: Corrosive; Causes serious eye damage. May cause irreversible eye injury. May cause blindness. May cause chemical conjunctivitis and corneal damage. - Respiratory/skin sensitisation: No information available. - Germ cell mutagenicity: No information available. - Carcinogenicity: No information available. - Reproductive toxicity: No information available. - STOT (single exposure): Corrosive; May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract. May cause cardiovascular system injury and central nervous system depression. - STOT (repeated exposure): Prolonged exposure may cause pulmonary edema. May cause cardiac disturbances. - Aspiration toxicity: No information available. |
| Acute | |
| Ingestion | Acute toxicity (Oral): - LD50, Rat: 1,122 mg/kg [Literature data; Supplier's SDS]. |
| Other | Acute toxicity (Dermal): - LD50, Rabbit: <340 mg/kg [Literature data; Supplier's SDS]. |
| Carcinogen Category | None |

12. ECOLOGICAL INFORMATION

| | |
|----------------------------------|--|
| Ecotoxicity | No information available. |
| Persistence/Degradability | No information available. |
| Mobility | No information available. |
| Environmental Fate | Very toxic to aquatic life - Avoid release to the environment. |
| Bioaccumulation Potential | No information available. |
| Environmental Impact | No Data Available |

13. DISPOSAL CONSIDERATIONS

| | |
|--|---|
| General Information | Dispose of contents/container in accordance with local/regional/national regulations. |
| Special Precautions for Land Fill | No information available. |

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

| | |
|-----------------------------|---|
| Proper Shipping Name | SODIUM SULPHIDE, HYDRATED with not less than 30% water |
| Class | 8 Corrosive Substances |
| Subsidiary Risk(s) | No Data Available |
| EPG | 38 Highly Flammable/Flammable, Toxic And/Or Corrosive Substances (Water Reactive) |
| UN Number | 1849 |
| Hazchem | 2X |
| Pack Group | II |
| Special Provision | No Data Available |

Land Transport (China)

| | |
|-----------------------------|---|
| Proper Shipping Name | SODIUM SULPHIDE, HYDRATED with not less than 30% water |
| Class | 8 Corrosive Substances |
| Subsidiary Risk(s) | No Data Available |
| EPG | 38 Highly Flammable/Flammable, Toxic And/Or Corrosive Substances (Water Reactive) |
| UN Number | 1849 |
| Hazchem | 2X |
| Pack Group | II |
| Special Provision | No Data Available |

Land Transport (Malaysia)

ADR Code

| | |
|-----------------------------|--|
| Proper Shipping Name | SODIUM SULPHIDE, HYDRATED with not less than 30% water |
|-----------------------------|--|

SAFETY DATA SHEET SODIUM SULFIDE REVISION 4, DATE 22 JAN 20

| | |
|---------------------------|---|
| Class | 8 Corrosive Substances |
| Subsidiary Risk(s) | No Data Available |
| EPG | 38 Highly Flammable/Flammable, Toxic And/Or Corrosive Substances (Water Reactive) |
| UN Number | 1849 |
| Hazchem | 2X |
| Pack Group | II |
| Special Provision | No Data Available |

Land Transport (New Zealand)

NZS5433

| | |
|-----------------------------|---|
| Proper Shipping Name | SODIUM SULPHIDE, HYDRATED with not less than 30% water |
| Class | 8 Corrosive Substances |
| Subsidiary Risk(s) | No Data Available |
| EPG | 38 Highly Flammable/Flammable, Toxic And/Or Corrosive Substances (Water Reactive) |
| UN Number | 1849 |
| Hazchem | 2X |
| Pack Group | II |
| Special Provision | No Data Available |

Land Transport (United States of America)

US DOT

| | |
|-----------------------------|--|
| Proper Shipping Name | SODIUM SULPHIDE, HYDRATED with not less than 30% water |
| Class | 8 Corrosive Substances |
| Subsidiary Risk(s) | No Data Available |
| ERG | 153 Substances - Toxic and/or Corrosive (Combustible) |
| UN Number | 1849 |
| Hazchem | 2X |
| Pack Group | II |
| Special Provision | No Data Available |

Sea Transport

IMDG Code

| | |
|-----------------------------|--|
| Proper Shipping Name | SODIUM SULPHIDE, HYDRATED with not less than 30% water |
| Class | 8 Corrosive Substances |
| Subsidiary Risk(s) | No Data Available |
| UN Number | 1849 |
| Hazchem | 2X |
| Pack Group | II |
| Special Provision | No Data Available |
| EMS | F-A, S-B |
| Marine Pollutant | Yes |

Air Transport

IATA DGR

| | |
|-----------------------------|--|
| Proper Shipping Name | SODIUM SULPHIDE, HYDRATED with not less than 30% water |
| Class | 8 Corrosive Substances |
| Subsidiary Risk(s) | No Data Available |
| UN Number | 1849 |

| | |
|-------------------|-------------------|
| Hazchem | 2X |
| Pack Group | II |
| 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 | 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 | Additives Process Chemicals and Raw Materials Acutely Toxic Corrosive Group Standard 2020 HSR002510 *HSR006980 (Revoked) |
|---------------|---|

National/Regional Inventories

| | |
|--|----------------|
| Australia (AIC) | Listed |
| Canada (DSL) | Not Determined |
| Canada (NDSL) | Not Determined |
| China (IECSC) | Not Determined |
| Europe (EINECS) | Listed |
| Europe (REACH) | Not Determined |
| Japan (ENCS/METI) | Not Determined |
| Korea (KECI) | Not Determined |
| Malaysia (EHS Register) | Not Determined |
| New Zealand (NZIoC) | Listed |
| Philippines (PICCS) | Not Determined |
| Switzerland (Giftliste 1) | Not Determined |
| Switzerland (Inventory of Notified Substances) | Not Determined |
| Taiwan (NCSR) | Not Determined |
| USA (TSCA) | Not Determined |

16. OTHER INFORMATION

Related Product Codes

SOSULF0300, SOSULF0400, SOSULF0500, SOSULF0600, SOSULF0700, SOSULF0701, SOSULF0800, SOSULF0900, SOSULF1000, SOSULF1001, SOSULF1002, SOSULF1003, SOSULF1004, SOSULF1005, SOSULF1006, SOSULF1007, SOSULF1008, SOSULF1009, SOSULF1010, SOSULF1011, SOSULF1012, SOSULF1013, SOSULF1014, SOSULF1015, SOSULF1016, SOSULF1017, SOSULF1018, SOSULF1019, SOSULF1020, SOSULF1021, SOSULF1022, SOSULF1023, SOSULF1024, SOSULF1025, SOSULF1026, SOSULF1027, SOSULF1028, SOSULF1029, SOSULF1030, SOSULF1031, SOSULF1032, SOSULF1033, SOSULF1034, SOSULF1035, SOSULF1036, SOSULF1037, SOSULF1038, SOSULF1039, SOSULF1040, SOSULF1043, SOSULF1044, SOSULF1045, SOSULF1046, SOSULF1048, SOSULF1049, SOSULF1050, SOSULF1052, SOSULF1053, SOSULF1054, SOSULF1055, SOSULF1056, SOSULF1057, SOSULF1058, SOSULF1059, SOSULF1060, SOSULF1100, SOSULF1101, SOSULF1111, SOSULF1141, SOSULF1142, SOSULF1143, SOSULF1144, SOSULF1145, SOSULF1146, SOSULF1147, SOSULF1148, SOSULF1149, SOSULF1150, SOSULF1151, SOSULF1152, SOSULF1153, SOSULF1154, SOSULF1200, SOSULF1300, SOSULF1314, SOSULF1317, SOSULF1320, SOSULF1350, SOSULF1400, SOSULF1401, SOSULF1500, SOSULF1501, SOSULF1600, SOSULF1601, SOSULF1700, SOSULF1701, SOSULF1710, SOSULF1750, SOSULF1770, SOSULF1800, SOSULF1801, SOSULF1802, SOSULF1804, SOSULF1808, SOSULF1850, SOSULF1900, SOSULF1901, SOSULF1902, SOSULF1950, SOSULF2000, SOSULF2001, SOSULF2002, SOSULF2003, SOSULF2004, SOSULF2005, SOSULF2006, SOSULF2007, SOSULF2008, SOSULF2009, SOSULF2050, SOSULF2100, SOSULF2101, SOSULF2102, SOSULF2103, SOSULF2200, SOSULF2201, SOSULF2300, SOSULF2301, SOSULF2302, SOSULF2400, SOSULF2401, SOSULF2500, SOSULF2501, SOSULF2600, SOSULF2601, SOSULF2700, SOSULF2701, SOSULF2800, SOSULF2801, SOSULF2900, SOSULF2910, SOSULF2915, SOSULF2990, SOSULF3000, SOSULF3001, SOSULF3002, SOSULF3003, SOSULF3004, SOSULF3005, SOSULF3006, SOSULF3007, SOSULF3008, SOSULF3009, SOSULF3010, SOSULF3011, SOSULF3012, SOSULF3013, SOSULF3014, SOSULF3015, SOSULF3016, SOSULF3017, SOSULF3018, SOSULF3019, SOSULF3100, SOSULF3101, SOSULF3200, SOSULF3300, SOSULF3400, SOSULF3401, SOSULF3402, SOSULF3415, SOSULF3416, SOSULF3417, SOSULF3418, SOSULF3419, SOSULF3460, SOSULF3461, SOSULF3500, SOSULF3501, SOSULF3600, SOSULF3601, SOSULF3700, SOSULF3800, SOSULF3900, SOSULF4000, SOSULF4001, SOSULF4002, SOSULF4003, SOSULF4004, SOSULF4005, SOSULF4100, SOSULF4200, SOSULF4300, SOSULF4400, SOSULF4500, SOSULF4501, SOSULF4502, SOSULF4600, SOSULF4700, SOSULF4800, SOSULF4900, SOSULF5000, SOSULF5001, SOSULF5002, SOSULF5003, SOSULF5100, SOSULF5110, SOSULF5150, SOSULF5200, SOSULF5210, SOSULF5250, SOSULF5300, SOSULF5400, SOSULF5500, SOSULF5501, SOSULF5600, SOSULF5700, SOSULF5750, SOSULF5755, SOSULF5800, SOSULF5900, SOSULF6000, SOSULF6001, SOSULF6002, SOSULF6003, SOSULF6100, SOSULF6200, SOSULF6201, SOSULF6202, SOSULF6300, SOSULF6301, SOSULF6400, SOSULF6500, SOSULF6501, SOSULF6502, SOSULF6503, SOSULF6504, SOSULF6505, SOSULF6506, SOSULF6507, SOSULF6600, SOSULF6700, SOSULF6800, SOSULF6900, SOSULF7000, SOSULF7001, SOSULF7002, SOSULF7003, SOSULF7004, SOSULF7060, SOSULF7061, SOSULF7100, SOSULF7200, SOSULF7300, SOSULF7400, SOSULF7500, SOSULF7501, SOSULF7502, SOSULF7503, SOSULF7550, SOSULF7555, SOSULF7600, SOSULF7601, SOSULF7700, SOSULF7800, SOSULF7900, SOSULF8000, SOSULF8001, SOSULF8002, SOSULF8003, SOSULF8004, SOSULF8005, SOSULF8006, SOSULF8007, SOSULF8008, SOSULF8009, SOSULF8010, SOSULF8011, SOSULF8012, SOSULF8013, SOSULF8014, SOSULF8015, SOSULF8016, SOSULF8017, SOSULF8018, SOSULF8019, SOSULF8020, SOSULF8080, SOSULF8100, SOSULF8200, SOSULF8201, SOSULF8202, SOSULF8203, SOSULF8204, SOSULF8205, SOSULF8206, SOSULF8207, SOSULF8208, SOSULF8209, SOSULF8210, SOSULF8211, SOSULF8212, SOSULF8213, SOSULF8214, SOSULF8215, SOSULF8216, SOSULF8217, SOSULF8218, SOSULF8219, SOSULF8220, SOSULF8221, SOSULF8222, SOSULF8223, SOSULF8224, SOSULF8225, SOSULF8226, SOSULF8227, SOSULF8228, SOSULF8229, SOSULF8230, SOSULF8231, SOSULF8232, SOSULF8233, SOSULF8234, SOSULF8235, SOSULF8236, SOSULF8237, SOSULF8238, SOSULF8300, SOSULF8301, SOSULF8302, SOSULF8303, SOSULF8304, SOSULF8305, SOSULF8306, SOSULF8307, SOSULF8308, SOSULF8309, SOSULF8310, SOSULF8311, SOSULF8312, SOSULF8313, SOSULF8314, SOSULF8315, SOSULF8316, SOSULF8317, SOSULF8318, SOSULF8319, SOSULF8320, SOSULF8321, SOSULF8322, SOSULF8323, SOSULF8324, SOSULF8325, SOSULF8326, SOSULF8327, SOSULF8328, SOSULF8329, SOSULF8330, SOSULF8331, SOSULF8332, SOSULF8333, SOSULF8334, SOSULF8400, SOSULF8500, SOSULF8501, SOSULF8502, SOSULF8503, SOSULF8600, SOSULF8700, SOSULF8800, SOSULF8900, SOSULF8950, SOSULF8951, SOSULF9000, SOSULF9001, SOSULF9002, SOSULF9003, SOSULF9004, SOSULF9005, SOSULF9006, SOSULF9007, SOSULF9100, SOSULF9200, SOSULF9201, SOSULF9205, SOSULF9300, SOSULF9301, SOSULF9302, SOSULF9400, SOSULF9450, SOSULF9455, SOSULF9456, SOSULF9460, SOSULF9461, SOSULF9463, SOSULF9464, SOSULF9465, SOSULF9466, SOSULF9500, SOSULF9501, SOSULF9502, SOSULF9503, SOSULF9504, SOSULF9505, SOSULF9506, SOSULF9507, SOSULF9508, SOSULF9509, SOSULF9510, SOSULF9511, SOSULF9560, SOSULF9600, SOSULF9601, SOSULF9700, SOSULF9701, SOSULF9800, SOSULF9801, SOSULF9850, SOSULF9861, SOSULF9862, SOSULF9863, SOSULF9900, SOSULF9910

Revision

4

Revision Date

22 Jan 2020

Reason for Issue

Updated SDS

< Less Than

Key/Legend

> 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