## 1. IDENTIFICATION

| | |
|---|---|
| **Product Name** | **Sodium Hydrosulphide Solution** |
| **Other Names** | Sodium Bisulfide Solution; Sodium Mercaptan; Sodium Sulfhydrate Solution; SODIUM SULFIDE (Na(SH)) |
| **Uses** | No Data Available |
| **Chemical Family** | No Data Available |
| **Chemical Formula** | HNaS |
| **Chemical Name** | Sodium Hydrosulphide Solution |
| **Product Description** | No Data Available |

### Contact Details of the Supplier of this Safety Data Sheet

| Organisation | Location | Telephone |
|---|---|---|
| Redox Pty Ltd | 2 Swettenham Road<br>Minto NSW 2566<br>Australia | +61-2-97333000 |
| Redox Pty Ltd | 11 Mayo Road<br>Wiri Auckland 2104<br>New Zealand | +64-9-2506222 |
| Redox Inc. | 3960 Paramount Boulevard<br>Suite 107<br>Lakewood CA 90712<br>USA | +1-424-675-3200 |
| Redox Chemicals Sdn Bhd | Level 2, No. 8, Jalan Sapir 33/7<br>Seksyen 33, Shah Alam Premier Industrial Park<br>40400 Shah Alam<br>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<br>131126 |
| Chemcall | Australia | 1800-127406<br>+64-4-9179888 |
| Chemcall | Malaysia | +64-4-9179888 |
| Chemcall | New Zealand | 0800-243622<br>+64-4-9179888 |
| National Poisons Centre | New Zealand | 0800-764766 |
| CHEMTREC | USA & Canada | 1-800-424-9300 CN723420<br>+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** | | Corrosive to Metals - Category 1 | |
| | | Acute Toxicity (Oral) - Category 4 | |
| | | Acute Toxicity (Dermal) - Category 3 | |
| | | Skin Corrosion/Irritation - Category 1B | |
| | | Serious Eye Damage/Irritation - Category 1 | |
| **Pictograms** | |  | |
| **Signal Word** | | Danger | |
| **Hazard Statements** | | **AUH031** | Contact with acids liberates toxic gas |
| | | **H290** | May be corrosive to metals. |
| | | **H302** | Harmful if swallowed. |
| | | **H311** | Toxic in contact with skin. |
| | | **H314** | Causes severe skin burns and eye damage. |
| **Precautionary Statements** | Prevention | **P234** | Keep only in original container. |
| | | **P260** | Do not breathe mist/vapour/spray. |
| | | **P264** | Wash hands thoroughly after handling. |
| | | **P270** | Do not eat, drink or smoke when using this product. |
| | | **P280** | Wear protective gloves/protective clothing/eye protection/face protection. |
| | Response | **P301 + P312** | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| | | **P301 + P330 + P331** | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| | | **P302 + P352** | IF ON SKIN: Wash with plenty of soap and water. |
| | | **P303 + P361 + P353** | IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. |
| | | **P304 + P340** | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| | | **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. |
| | | **P312** | Call a POISON CENTER or doctor/physician if you feel unwell. |
| | | **P321** | Specific treatment (see First Aid Measures on Safety Data Sheet). |
| | | **P361** | Remove/Take off immediately all contaminated clothing. |
| | | **P363** | Wash contaminated clothing before reuse. |
| | | **P390** | Absorb spillage to prevent material damage. |
| | Storage | **P405** | Store locked up. |
| | | **P406** | Store in corrosive resistant container with a resistant inner liner. |
| | 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 |
|---|---|---|---|
| Water | No Data Available | 7732-18-5 | 54 - 79 % |
| Sodium Hydrosulphide | No Data Available | 16721-80-5 | 18 - 45 % |
| Sodium Carbonate | No Data Available | 497-19-8 | <3 % |
| Sodium Sulphide | No Data Available | 1313-82-2 | <1 % |

## 4. FIRST AID MEASURES

***Description of necessary measures according to routes of exposure***

**Swallowed** Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

**Eye** Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance.
Transport promptly to hospital or medical centre.

**Skin** If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor.

**Inhaled** Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm.
Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

**Advice to Doctor** Treat symptomatically based on judgement of doctor and individual reactions of patient. Contact causes caustic burns. Treat ingestion as hydrogen sulfide gas poisoning in addition to caustic burns.

**Medical Conditions Aggravated by Exposure** No information available on medical conditions aggravated by exposure to this product.
Chronic acute exposures to vapours may cause neurologic deficits like those in survivors of other severe asphixiant poisonings.
Routes of Entry: Ingestion, skin absorption, and possibly inhalation.

## 5. FIRE FIGHTING MEASURES

**General Measures** Because of the possible presence of toxic gases and the corrosive nature of the product, fire fighters should wear a a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit. Clear fire area of all non-emergency personnel.
Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

**Flammability Conditions** Non Product is a non-flammable liquid. However, if exposed to heat or acids, flammable hydrogen sulphide will be released
and may form explosive mixtures with air. Dilution of NaHS with water will increase the evolution of hydrogen sulphide. FLAMMABLE LIMITS Hydrogen sulphide LFL: 4% UFL: 44%

**Extinguishing Media** In case of fire, appropriate extinguishing media include water spray or foam or as appropriate for combustibles involved in a fire. Do NOT use carbon dioxide fire estinguishers because toxic hydrogen sulfide gas will be liberated from this product. Use water in flooding quantities. A heavy fog of waterr may be effective in knocking down vapors. Keep containers/storage vessels in fire area cooled with water spray.

**Fire and Explosion Hazard** Solution is non-flammable. However if these solutions are exposed to heat or acids, hydrogen sulfide will be released and may form explosive mixtures with air.

**Hazardous Products of Combustion** Heating this product will evolve hydrogen sulfide. Fire conditions will also cause the production of sulfur dioxide. Hydrogen sulfide (4-44%) may form flammable mixtures with air. Heating to decomposition emits toxic fumes of sulfoxides and Na2O.

Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach

| | |
|---|---|
| **Special Fire Fighting Instructions** | waterways, drains or sewers. Store fire fighting water for treatment. |
| **Personal Protective Equipment** | Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit.<br>Please note: Structural fire fighters uniform will provide limited protection. |
| **Flash Point** | No Data Available |
| **Lower Explosion Limit** | 4 % |
| **Upper Explosion Limit** | 46 % |
| **Auto Ignition Temperature** | No Data Available |
| **Hazchem Code** | 2X |

## 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **General Response Procedure** | Avoid accidents, clean up immediately. May be slippery when spilt. Eliminate all sources of ignition. Increase ventilation. Isolate the danger area. Use clean, non-sparking tools and equipment. Shut off all possible sources if ignition. |
| **Clean Up Procedures** | Avoid generating mist and keep this product away from acids. Soak up spilled product using absorbent non-combustible material such as sand or soil. Avoid using sawdust or cellulose. When saturated collect material, transfer to suitable, labelled,<br>dry chemical-waste containers and dispose of promptly as hazardous waste. Oxidize residual reactive sulphides with a<br>weak (3-5%) hydrogen peroxide solution to stop the release of toxic hydrogen sulphide.<br>Remove contaminated soil and dispose of in accordance with all governmental regulations. For large releases, recover as much of the solution as possible. Mix solution with dilute excess hydrogen peroxide to oxidize sulphide and eliminate danger of hydrogen sulphide evolution. |
| **Containment** | Stop leak if safe to do so. |
| **Decontamination** | Do not allow product to reach drains, sewers or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Authority. |
| **Environmental Precautionary Measures** | Do not allow product to reach drains, sewers or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Authority. |
| **Evacuation Criteria** | Evacuate all unnecessary personnel. |
| **Personal Precautionary Measures** | Personnel involved in the clean up should wear full protective clothing as listed in section 8. |

## 7. HANDLING AND STORAGE

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|---|---|
| **Handling** | Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Dilute product only in enclosed containers. Use only in a well ventilated area. Wear proper protective equipment as listed in section 8. Avoid breathing product vapours. Avoid contact with skin and eyes. Put a vapour trap or scrubber on tank vent. Poison hydrogen sulphide gas will be present in the vapour space above sodium hydrosulphide solution. Do not enter tanks or other vessels unless self contained breathing apparatus (SCBA) is used Dilution of Sodium Hydrosulphide with water will cause increased evolution of hydrogen sulphide gas. Hydrogen sulphide gas can accumulate in confined spaces above the liquid. It forms flammable mixtures with air from about 4% vapour up to about 45%. IMPORTANT: Sodium hydrosulphide solution is not compatible with copper, zinc, aluminium or their alloys (i.e. bronze, brass, galvanized metals, etc). Corrosive to steel above 65.5'C. These materials of construction should not be used in handling systems or storage containers for this product. |
| **Storage** | Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Protect from sources of heat or flame. Do not store combustibles in the area of storage vessels. Store tote and smaller containers out of direct sunlight at moderate temperatures (27'C). Do not store in contact with copper, zinc, or aluminium. This product has a UN classification of 2922 Dangerous Goods Class 8 (Corrosive), and Subsidiary Risk 6.1 (Toxic) according to the Australian Code for the Transport of Dangerous Goods By Road by Road and Rail. |
| **Container** | Packaging must comply with requirements of Hazardous Substances (Packaging) Regulations 2001. Store in original packaging as approved by manufacturer.Sodium hydrosulphide solution is not compatible with copper, zinc, aluminium or their alloys (i.e. bronze, brass, galvanized metals, etc.). Corrosive to steel above 65.5'C. T<br>These materials of construction should not be used in handling systems or storage containers for this product.<br>Preferred material of construction for storage tanks is stainless steel; however, carbon steel is acceptable. |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|---|---|
| **General** | No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC),<br>however the following is available for decomposition product: Hydrogen Sulphide CAS<br>7783-06-4: TWA = 10ppm (14mg/m3) STEL = 15ppm (21mg/m3)<br>NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance<br>when calculated over a normal 8 hour working day for a 5 day working week. These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is<br>workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity. |
| **Exposure Limits** | No Data Available |
| **Biological Limits** | No information available on biological limit values for this product. |
| **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.<br>Adequate ventilation should be provided so that exposure limits are not exceeded. Where feasible scrub process or storage vessel vapors with caustic solution. Maintain eyewash/safety shower in areas where chemical is handled. |
| **Personal Protection Equipment** | RESPIRATOR: If working near open container, storage vessel opening or open tank truck dome cover, wear self-contained breathing apparatus, pressure demand, if engineering controls are inadequate (AS1715/1716).<br>EYES: Chemical goggles and a full face shield to prevent splashing in the eyes (AS1336/1337).<br>HANDS: Neoprene rubber gloves (AS2161).<br>CLOTHING: Chemical suit and boots should be worn to prevent contact with the liquid (AS3765/2210).<br>NOTE: Wash contaminated clothing prior to reuse. Contaminated leather shoes cannot be cleaned and should be discarded. |
| **Work Hygienic Practices** | Wash contaminated clothing prior to reuse. Contaminated leather shoes cannot be cleaned and should be discarded. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Liquid |
| **Odour** | Hydrogen sulfide (rotten egg), hydrocarbon (mercaptan) odour. |
| **Colour** | May be yellow to red, to dark green to black liquid. |
| **pH** | 11.5 - 12.5 |
| **Vapour Pressure** | 17 torr (@ 20 °C) |
| **Relative Vapour Density** | 1.17 Air = 1 |
| **Boiling Point** | 122.8 - 131.7 °C |
| **Melting Point** | No Data Available |
| **Freezing Point** | -17.8 (20%) - 16.6 (49%) °C |
| **Solubility** | Complete Solubility 25°C |
| **Specific Gravity** | 1.152 - 1.303 |
| **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** | No Data Available |
| **Potential for Dust Explosion** | Product is a liquid |
| **Fast or Intensely Burning Characteristics** | No Data Available |
| **Flame Propagation or Burning Rate of Solid Materials** | No Data Available |
| **Non-Flammables That Could Contribute Unusual Hazards to a Fire** | No Data Available |
| **Properties That May Initiate or Contribute to Fire Intensity** | No Data Available |
| **Reactions That Release Gases or Vapours** | Reacts upon heating and in contact with acids generating flammable hydrogen sulfide gas. |
| **Release of Invisible Flammable Vapours and Gases** | No Data Available |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **General Information** | Corrosive Liquid. Reacts with acids liberating toxic gas. Corrosive to steel above 65.5°C.<br>Reacts with acids. Reacts violently with diazonium salts. |
| **Chemical Stability** | Product is stable under normal conditions of use, storage and temperature. |
| **Conditions to Avoid** | Avoid excessive heat, direct sunlight, moisture, freezing, static charges and high temperatures. |
| **Materials to Avoid** | Incompatible with strong oxidisers, acids, strong alkalis, diazonium salts, copper, zinc, aluminium or their alloys (i.e., bronze, brass, galvanised metals, etc), water, and the material is corrosive to steel above 65.5'C. |
| **Hazardous Decomposition Products** | Poison, flammable hydrogen sulphide gas will be evolved from this product on exposure to acid or excessive heat and may form explosive mixtures with air. Poisonous sulphur dioxide gas will be generated if<br>the vapours from this product burn. Dilution of this product with water will increase the evolution of hydrogen sulphide. Heating to decomposition or exposure to fire conditions may generate sulfoxides,<br>sulphur dioxide, and sodium oxide. |
| **Hazardous Polymerisation** | Hazardous polymerization will not occur. Acids will cause the release of highly toxic hydrogen sulphide.<br>Reacts violently with diazonium salts. Sodium hydrosulphide solution is not compatible with copper, zinc,aluminium or their alloys (i.e. bronze, brass, galvanized metals, etc.). Corrosive to steel above 65.5'C. These materials of construction should not<br>be used in handling systems or storage containers for this product. Dilution of NaHS with water will increase the evolution of hydrogen sulphide. Dilution should be done in an enclosed container. Mixing with strong alkalis may form solid, hydrated sodium sulphide. |

## 11. TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **General Information** | N Oral LDLo Human : Reported to be 50mg/Kg (Na2S) Equivalent to 163mg/Kg for this product (based on sulphur content)<br>Inhalation LCLo Human : 600ppm for 30 minutes for Hydrogen sulphide; Equivalent to 4500ppm of respirable mist from this product.<br>Inhalation LC50 Rat : 444ppm (Hydrogen Sulphide)<br>Inhalation LC50 Mouse : 1500mg/m3/18mins (1.5mg/L/18mins)<br>Inhalation LC50 Rat : 500mg/m3/14mins (1.5mg/L/14mins) |

| | |
|---|---|
| **EyeIrritant** | A severe eye irritant.. Eye contact will cause marked eye irritation and possibly severe corneal damage. Alkali burns to conjunctiva and cornea with possible irreversible destruction of tissue. Chronic Eye Contact will result in Extreme irritation to the eyes caused by vapour or mist; corneal opacity. Corrosive due to the product's alkalinity. Contamination of eyes can result in permanent injury. |
| **Ingestion** | Causes severe burns. Ingestion will result in severe burning and corrosion of mouth, throat and the gastrointestinal tract. Destruction of the lining of the esophagus and stomach. Rapid breathing, confusion, unconsciousness, paralysis of respiratory muscles leading to death. Chronic Ingestion may result in head- ache, nausea, dizziness, confusion, and painful alkali burns to the esophagus.<br>If the ingested material contacts stomach acid, highly toxic hydrogen sulfide gas will be evolved. |
| **Inhalation** | Harmful by inhalation. Acute Inhalation causes severe respiratory distress because of corrosivity. Hydrogen sulfide gas, produced if this product contacts acid, causes eye irritation, headache, dizziness, confusion, weakness of the extremities, unconsciousness, pulmonary edema, asphyxiation, and central respiratory paralysis leading to death. Chronic inhalation will result in Extreme irritation to respiratory passages. |
| **SkinIrritant** | Causes severe burns. Chemical burns result from contact with liquid or mist.<br>Acute Skin Contact will result in Painful chemical burns. Systemic poisoning by sulphide causes headache, nausea, dizziness, confusion, weakness of the extremities, and possible unconsciousness.<br>Chronic Skin Contact will result in Extreme irritation to skin. Prolonged contact will result in corrosion of the skin. Corrosive to skin due to the product's alkalinity. May be toxic when absorbed through the skin. |
| **Carcinogen Category** | No Data Available |

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Ecotoxicity** | Static acute 96 hour-LC50 for mosquito fish is 206 mg/L. (Tlm - fresh water)<br>LC50 fly inhalation 1,500 mg/m3, 7 minutes<br>TLm Gammarus 0.84 mg/L, 96 hours (hydrogen sulfide)<br>TLm Ephemera 0.316 mg/L, 96 hours (hydrogen sulfide)<br>TLm Flathead minnow 0.071 – 0.55 mg/L @ 6-24ºC, 96 hour flow through bioassay (hydrogen sulfide)<br>TLm Bluegill 0.0090 – 0.0140 mg/L @ 20-22ºC, 96 hour flow through bioassay (hydrogen sulfide)<br>TLm Brook trout 0.0216 – 0.0308 mg/L @ 8-12.5ºC, 96 hour flow through bioassay (hydrogen sulfide) |
| **Persistence/Degradability** | No information available on persistence/degradability for this product. |
| **Mobility** | DISTRIBUTION: All components of this product are found naturally in all ecosystems. |
| **Environmental Fate** | Do NOT let product reach waterways, drains and sewers.<br>CHEMICAL FATE: With dilution, the sulfide will be readily incorporated into the preexisting natural sulfur cycle. |
| **Bioaccumulation Potential** | No information available on bioaccumulation potential for this product. |
| **Environmental Impact** | No Data Available |

## 13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **General Information** | Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility. |
| **Special Precautions for Land Fill** | Contact a specialist disposal company or the local waste regulator for advice.<br>Waste containing sulfide may be hazardous and may require disposal in an approved hazardous waste landfill. Sulfide can be oxidized with dilute hydrogen peroxide or any other oxidizing agent to non-hazardous sulfate; care should be taken as the reaction may be violent. |

## 14. TRANSPORT INFORMATION

### Land Transport (Australia)
ADG Code

| | |
|---|---|
| **Proper Shipping Name** | CORROSIVE LIQUID, TOXIC, N.O.S.(Sodium Hydrosulphide Solution) |
| **Class** | 8 Corrosive Substances |

| | |
|---|---|
| **Subsidiary Risk(s)** | 6.1 Toxic and Infectious Substances - Toxic Substances |
| **EPG** | 37 Toxic And/Or Corrosive Substances  Non-Combustible |
| **UN Number** | 2922 |
| **Hazchem** | 2X |
| **Pack Group** | II |
| **Special Provision** | No Data Available |

### Land Transport (Malaysia)
ADR

| | |
|---|---|
| **Proper Shipping Name** | CORROSIVE LIQUID, TOXIC, N.O.S.(Sodium Hydrosulphide Solution) |
| **Class** | 8 Corrosive Substances |
| **Subsidiary Risk(s)** | 6.1 Toxic and Infectious Substances - Toxic Substances |
| **EPG** | 37 Toxic And/Or Corrosive Substances  Non-Combustible |
| **UN Number** | 2922 |
| **Hazchem** | 2X |
| **Pack Group** | II |
| **Special Provision** | No Data Available |

### Land Transport (New Zealand)
NZS5433

| | |
|---|---|
| **Proper Shipping Name** | CORROSIVE LIQUID, TOXIC, N.O.S.(Sodium Hydrosulphide Solution) |
| **Class** | 8 Corrosive Substances |
| **Subsidiary Risk(s)** | 6.1 Toxic and Infectious Substances - Toxic Substances |
| **EPG** | 37 Toxic And/Or Corrosive Substances  Non-Combustible |
| **UN Number** | 2922 |
| **Hazchem** | 2X |
| **Pack Group** | II |
| **Special Provision** | No Data Available |

### Land Transport (United States of America)
US DOT

| | |
|---|---|
| **Proper Shipping Name** | CORROSIVE LIQUID, TOXIC, N.O.S.(Sodium Hydrosulphide Solution) |
| **Class** | 8 Corrosive Substances |
| **Subsidiary Risk(s)** | 6.1 Toxic and Infectious Substances - Toxic Substances |
| **ERG** | 154 Substances - Toxic and/or Corrosive (Non-Combustible) |
| **UN Number** | 2922 |
| **Hazchem** | No Data Available |
| **Pack Group** | II |
| **Special Provision** | No Data Available |

### Sea Transport
IMDG Code

| | |
|---|---|
| **Proper Shipping Name** | CORROSIVE LIQUID, TOXIC, N.O.S.(Sodium Hydrosulphide Solution) |
| **Class** | 8 Corrosive Substances |
| **Subsidiary Risk(s)** | 6.1 Toxic and Infectious Substances - Toxic Substances |
| **UN Number** | 2922 |
| **Hazchem** | No Data Available |
| **Pack Group** | II |
| **Special Provision** | No Data Available |
| **EMS** | FA,SB |

| | |
|---|---|
| **Marine Pollutant** | No |

### Air Transport
IATA DGR

| | |
|---|---|
| **Proper Shipping Name** | CORROSIVE LIQUID, TOXIC, N.O.S.(Sodium Hydrosulphide Solution) |
| **Class** | 8 Corrosive Substances |
| **Subsidiary Risk(s)** | 6.1 Toxic and Infectious Substances - Toxic Substances |
| **UN Number** | 2922 |
| **Hazchem** | No Data Available |
| **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** | Not Assessed |

### National/Regional Inventories

| | |
|---|---|
| **Australia (AICS)** | Listed |
| **Canada (DSL)** | Not Determined |
| **Canada (NDSL)** | Not Determined |
| **China (IECSC)** | Not Determined |
| **Europe (EINECS)** | Not Determined |
| **Europe (REACh)** | Not Determined |
| **Japan (ENCS/METI)** | Not Determined |
| **Korea (KECI)** | Not Determined |
| **Malaysia (EHS Register)** | Not Determined |
| **New Zealand (NZIoC)** | Not Determined |
| **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** | SOHYDL1000, SOHYDL2000, SOHYDL2001, SOHYDL2500, SOHYDL3000, SOHYDL3001, SOHYDL3500, SOHYDL3550, SOHYDL4200, SOHYDL5000, SOHYDL5001, SOHYDL5002, SOHYDL5010, SOHYDL5020, SOHYDL5021, SOHYDL5030, SOHYDL6000, SOHYDL7000, SOHYDL7001, SOHYDL7500, SOHYDL8000, SOHYDL8001, SOHYDL8500, SOHYDL9000 |
| **Revision** | 4 |
| **Revision Date** | 03 Jun 2016 |
| **Reason for Issue** | update sds |
| **Key/Legend** | **<** Less Than<br>**>** Greater Than<br>**AICS** Australian Inventory of Chemical Substances<br>**atm** Atmosphere<br>**CAS** Chemical Abstracts Service (Registry Number)<br>**cm²** Square Centimetres<br>**CO2** Carbon Dioxide<br>**COD** Chemical Oxygen Demand<br>**deg C (°C)** Degrees Celcius<br>**EPA (New Zealand)** Environmental Protection Authority of New Zealand<br>**deg F (°F)** Degrees Farenheit<br>**g** Grams<br>**g/cm³** Grams per Cubic Centimetre<br>**g/l** Grams per Litre<br>**HSNO** Hazardous Substance and New Organism<br>**IDLH** Immediately Dangerous to Life and Health<br>**immiscible** Liquids are insoluable in each other.<br>**inHg** Inch of Mercury<br>**inH2O** Inch of Water<br>**K** Kelvin<br>**kg** Kilogram<br>**kg/m³** Kilograms per Cubic Metre<br>**lb** Pound<br>**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.<br>**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.<br>**ltr** or **L** Litre<br>**m³** Cubic Metre<br>**mbar** Millibar<br>**mg** Milligram<br>**mg/24H** Milligrams per 24 Hours<br>**mg/kg** Milligrams per Kilogram<br>**mg/m³** Milligrams per Cubic Metre<br>**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.<br>**mm** Millimetre<br>**mmH2O** Millimetres of Water<br>**mPa.s** Millipascals per Second<br>**N/A** Not Applicable<br>**NIOSH** National Institute for Occupational Safety and Health<br>**NOHSC** National Occupational Heath and Safety Commission<br>**OECD** Organisation for Economic Co-operation and Development<br>**Oz** Ounce<br>**PEL** Permissible Exposure Limit<br>**Pa** Pascal<br>**ppb** Parts per Billion<br>**ppm** Parts per Million<br>**ppm/2h** Parts per Million per 2 Hours<br>**ppm/6h** Parts per Million per 6 Hours<br>**psi** Pounds per Square Inch<br>**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