

1. IDENTIFICATION

Product Name	Sodium Dimethyldithiocarbamate Solution
Other Names	No Data Available
Uses	Used in water treatment, sugar processing, mining, leather etc.
Chemical Family	No Data Available
Chemical Formula	C ₃ H ₇ NS ₂ .Na
Chemical Name	Sodium Dimethyldithiocarbamate 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 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	Skin Corrosion/Irritation - Category 1C Acute Hazard To The Aquatic Environment - Category 1 Long-term Hazard To The Aquatic Environment - Category 1		
Pictograms			
Signal Word	Danger		
Hazard Statements	H314	Causes severe skin burns and eye damage.	
	H410	Very toxic to aquatic life with long lasting effects.	
Precautionary Statements	Prevention	P273	Avoid release to the environment.
		P280	Wear protective gloves/protective clothing/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.
		P391	Collect spillage.
	Storage	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)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Health Hazards	6.1D	Substances that are acutely toxic - Harmful
	Environmental Hazards	9.3B	Substances that are ecotoxic to terrestrial vertebrates

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Water	No Data Available	7732-18-5	59.0 - 60.0 %
Sodium Dimethyldithiocarbamate	No Data Available	128-04-1	40.0 - 41.0 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Do not induce Vomiting. If victim is conscious, give 2 to 4 glasses of water. If vomiting does occur, continue to give fluids. Obtain immediate medical attention. Consult physician, if symptoms persist.
Eye	Immediately flush with the large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the eye and lids. Obtain immediate medical attention. Consult ophthalmologist, if symptoms persist.
Skin	Immediately flush with the large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain immediate medical attention. Consult dermatologist, if symptoms persist.
Inhaled	Move person to fresh air until recovery. In case of respiratory difficulties, require emergency health care. Obtain immediate medical attention. Consult physician, if symptoms persist.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Medical Conditions Aggravated by Exposure	No information available on medical conditions aggravated by exposure to this product.

5. FIRE FIGHTING MEASURES

General Measures	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	Product is a non-flammable Liquid.
Extinguishing Media	Not flammable, use media suitable for combustion involved in fire. In case of fire, appropriate extinguishing media include carbon dioxide, sand, extinguishing powder. Do not use water at all, especially full water jet.
Hazardous Products of Combustion	Non-combustible Liquid. Material does not burn nor will it support combustion. The product is not explosive. Incompatible materials are unknown. No dangerous decomposition products known.
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). 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.
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	2R

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Personnel involved in the clean up should wear full protective clothing as listed in section 8. Avoid accidents, clean up immediately. Increase ventilation. Avoid walking through spilled product as it is slippery when spilt. Stop leak if safe to do so. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment. Shut off all possible sources if ignition.
Clean Up Procedures	Small Spill : Confine and absorb small releases on sand, earth or other inert absorbent like e.g. diatomaceous earth, vermiculite. Neutralize with a very weak acid. Place contaminated product and soil in a suitable container for disposal according to local /national regulations (see section 13) When saturated, collect the material and transfer to a suitable, labelled chemical waste container and dispose of promptly as hazardous waste. Do NOT flush with water or aqueous cleansing agents. Large spill : Confine area to qualified personnel. Wear proper protective equipment. Shut off release if safe to do so. Recover as much of the spilled product as possible with air operated diaphragm pump & hoses. Dike or divert spill area to prevent runoff into sewers, drains or surface Waterways.

	Treat remaining material as a small release (above).
Environmental Precautionary Measures	Prevent product from entering drains, other waterways or soil. Do not flush into surface water or sanitary sewer system. Report spills as required by local & federal Regulations. Toxic to fish.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Avoid contact with skin, eyes and clothing. Wear safety goggles, protective gloves and boots.

7. HANDLING AND STORAGE

Handling	Wear safety goggles, protective gloves, eye/face protection and boots. Avoid contact with skin and eyes. Ensure the eye wash stations and safety showers are close to the work station location. Handle in accordance with good industrial hygiene and safety practice as per the local / National regulations. When using do not eat drink or smoke. Do not contaminate ponds, waterways, or ditches with the chemical or used container. Do not breathe vapours or spray mist. Wash thoroughly after handling. Open and handle container with care. Handle the product with the necessary protection (safety glasses and gloves). Workrooms must have effective ventilation systems with suction at the point of emission, Should lead the industrial residual air into the atmosphere. Have emergency equipment (for fires, spills, leaks, etc) readily available. Ensure all containers are labelled. Prevent formation of aerosols. Minimize the dust generation and accumulation. Do not eat, drink or smoke while handling product. Change clothing in case of contamination. Agree that the workplace have emergency showers and eyewash fountains.
Storage	Store in original container. Store totes & small containers out of direct sunlight at moderate temperatures. Keep the containers tightly closed in a dry, cool and well – ventilated place. Keep the containers away from sources of ignition or heat. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Keep product in original sealed containers and away from incompatible materials. Keep away from freezing. Keep away from children. Protect containers from physical damage. Protect against electrostatic Charges. Do not store in fiberglass containers or Tanks. Do not store combustibles in the area of storage vessels. The minimum recommended storage temperature for this material is 20°C. The maximum recommended temperature for this material is 50°C. Do not re-use empty containers. The Product is not explosive. Moisture sensitive. Incompatible Products: Acids, Oxidizing agents.
Container	Stainless steel 316L, Stainless steel 304. HDPE (High Density Polyethylene), Neoprene rubber, Compatibility with plastic Materials can vary , we therefore recommend that compatibility is tested before use. Unsuitable : Copper , Brass, Bronze, Zinc , & their alloys

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC).
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.
Personal Protection Equipment	RESPIRATOR: Wear an effective dust mask where dusts/vapours are generated and engineering controls are inadequate (AS1715/1716). EYES: Safety glasses with side shields (AS1336/1337). HANDS: Wear rubber or PVC gloves (AS2161). CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).
Special Hazards Precautions	Prevent the product from entering drains. Do not contaminate surface water Avoid subsoil penetration
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Liquid
Odour	Ammoniacal Odour
Colour	Light greenish yellow to Light brown.
pH	10.5 - 12.5
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	>100 °C
Melting Point	<0 °C
Freezing Point	0 °C
Solubility	Completely miscible with water 25°C
Specific Gravity	1.15-1.18 (25°C)
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	No Data Available
Release of Invisible Flammable Vapours and Gases	No Data Available

10. STABILITY AND REACTIVITY

Chemical Stability

This material is stable under normal conditions. The contact with acids will cause carbon disulfide and dimethylamine to be evolved. Keep from freezing, material stability may be affected.

Conditions to Avoid	Avoid excessive heat, generating dust, direct sunlight, moisture, freezing, and high temperatures (50°C). Do NOT store below 20°C, material stability may be affected. Also protect from electrostatic charge.
Materials to Avoid	Strong acids and oxidizing agents, Metals.
Hazardous Decomposition Products	No hazardous decomposition if used according to specifications.
Hazardous Polymerisation	The Hazardous Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	Oral LD50 Rat : >5000mg/Kg Dermal LD50 Rabbit : 660mg/Kg Inhalative LC50/4hrs Mouse : 0.33mg/L
Eyelrritant	Irritating to eyes.
Ingestion	No information available on the symptoms of ingestion for this product.
Inhalation	Harmful : danger of serious damage to health by prolonged exposure through inhalation.
SkinIrritant	Irritating to skin. May cause sensitisation by skin contact.
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment. Photobacterium phosphoreum: 0,51 mg/l (test 15 min) EC50 on Chlorella pyrenoidosa: 0,8 mg/l (test 96 h) EC50 on Daphnia magna: 0,67 mg/l (test 48 h) LC0 on Leuciscus idus : approx. 1 mg/l (test 48h) LC50 on Leuciscus idus : approx. 2,2 mg/l (test 48h) LC50 on Poecilia reticulata : 2,6 mg/l (test 96h)
Persistence/Degradability	No information available on persistence/degradability for this product.
Mobility	No information available on mobility for this product.
Environmental Fate	Do NOT let product reach waterways, drains and sewers. Toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.
Bioaccumulation Potential	No information available on bioaccumulation for this product.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of in accordance with federal, state and local regulations. Chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classifications. Observe all federal, state and local regulations, When disposing of the substance.
Special Precautions for Land Fill	Contact a specialist disposal company or the local waste regulator for advice. This should be done in accordance with 'The Hazardous Waste Act'. Must NOT be disposed of together with household garbage.

14. TRANSPORT INFORMATION

Land Transport (Australia)
ADG Code

Proper Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate)
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
EPG	37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number	1719
Hazchem	2R
Pack Group	II
Special Provision	No Data Available

Land Transport (Malaysia)

ADR

Proper Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate)
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
EPG	37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number	1719
Hazchem	2R
Pack Group	II
Special Provision	274

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate)
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
EPG	37 Toxic And/Or Corrosive Substances Non-Combustible
UN Number	1719
Hazchem	2R
Pack Group	II
Special Provision	No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate)
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
ERG	154 Substances - Toxic and/or Corrosive (Non-Combustible)
UN Number	1719
Hazchem	No Data Available
Pack Group	II
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate)
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
UN Number	1719
Hazchem	No Data Available
Pack Group	II

Special Provision	No Data Available
EMS	FA,SB
Marine Pollutant	Yes

Air Transport
IATA DGR

Proper Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate)
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
UN Number	1719
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)
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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	HSR007115
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National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	Listed
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	Listed
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Listed

Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Listed

16. OTHER INFORMATION

Related Product Codes	SODIME2000
Revision	2
Revision Date	04 Jun 2015
Reason for Issue	Updated sds
Key/Legend	<p>< 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 insoluble 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 Health 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</p>

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