

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Sodium Dimethyldithiocarbamate Solution</b>
<b>Other Names</b>	SDDC, aqueous solution
<b>Uses</b>	For industrial applications. Water treatment; Sugar processing; Mining; Leather.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	C3H7NS2.Na
<b>Chemical Name</b>	Sodium dimethyldithiocarbamate, aqueous solution
<b>Product Description</b>	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

# SAFETY DATA SHEET SODIUM DIMETHYLDITHIOCARBAMATE SOLUTION REVISION 3, DATE 09 JUL 21

## 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	<b>P273</b>	Avoid release to the environment.
	<b>P280</b>	Wear protective gloves/protective clothing/eye protection/face protection.
Response	<b>P260</b>	Do not breathe mist/vapour/spray.
	<b>P305 + P351 + P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	<b>P310</b>	Immediately call a POISON CENTER or doctor.
	<b>P391</b>	Collect spillage.
	<b>P301 + P330 + P331</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	<b>P303 + P361 + P353</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	<b>P363</b>	Wash contaminated clothing before reuse.
Storage	<b>P304 + P340</b>	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
Disposal	<b>P405</b>	Store locked up.
	<b>P501</b>	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	<b>8.2C</b>	Substances that are corrosive to dermal tissue UN PGIII
	<b>8.3A</b>	Substances that are corrosive to ocular tissue
Environmental Hazards	<b>9.1A</b>	Substances that are very ecotoxic in the aquatic environment

**3. COMPOSITION/INFORMATION ON INGREDIENTS***Ingredients*

Chemical Entity	Formula	CAS Number	Proportion
Water	H <sub>2</sub> O	7732-18-5	59 - 60 %
Sodium dimethyldithiocarbamate	C <sub>3</sub> H <sub>7</sub> NS <sub>2</sub> .Na	128-04-1	40 - 41 %

**4. FIRST AID MEASURES***Description of necessary measures according to routes of exposure*

<b>Swallowed</b>	IF SWALLOWED: Rinse mouth, then give 2 - 4 glasses of water. Do NOT induce vomiting. If vomiting does occur, continue to give fluids. Immediately call a Poison Centre or doctor/physician for advice. Never give anything by mouth to an unconscious person.
<b>Eye</b>	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/Consult ophthalmologist.
<b>Skin</b>	IF ON SKIN (or hair): Remove contaminated clothing and shoes immediately. Flush skin and hair with running water for at least 15 minutes. Immediately call a Poison Centre or doctor/physician for advice. Wash contaminated clothing and shoes before reuse.
<b>Inhaled</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing until recovered. 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.
<b>Advice to Doctor</b>	First aid, decontamination, symptomatic treatment. 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.
<b>Medical Conditions Aggravated by Exposure</b>	No information available.

**5. FIRE FIGHTING MEASURES**

<b>General Measures</b>	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
<b>Flammability Conditions</b>	Non-combustible; Material does not burn nor will it support combustion.
<b>Extinguishing Media</b>	If material is involved in a fire, use dry chemical, Carbon dioxide (CO <sub>2</sub> ), foam or water spray for extinction - Do not use water jets.
<b>Fire and Explosion Hazard</b>	Containers may explode when heated.
<b>Hazardous Products of Combustion</b>	Fire or heat will produce irritating, toxic and/or corrosive gases.
<b>Special Fire Fighting Instructions</b>	Contain runoff from fire control or dilution water - Runoff may be toxic and/or corrosive and may pollute waterways.
<b>Personal Protective Equipment</b>	Wear 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.
<b>Flash Point</b>	No Data Available
<b>Lower Explosion Limit</b>	No Data Available
<b>Upper Explosion Limit</b>	No Data Available
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	2R

**6. ACCIDENTAL RELEASE MEASURES**

<b>General Response Procedure</b>	Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources. Do not touch or walk through spilled material. Do not breathe vapours and prevent contact with eyes, skin and clothing.
<b>Clean Up Procedures</b>	Recover as much of the spilled product as possible. Absorb remaining material with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13).
<b>Containment</b>	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas.
<b>Decontamination</b>	Neutralize with a very weak acid.
<b>Environmental Precautionary Measures</b>	Spillages and decontamination runoff should be prevented from entering drains and watercourses.
<b>Evacuation Criteria</b>	Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Evacuate personnel to safe areas. Keep upwind and to higher ground.
<b>Personal Precautionary Measures</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8).

**7. HANDLING AND STORAGE**

<b>Handling</b>	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. Open and handle container with care. Prevent formation of aerosols. Do not breathe mist/vapours/aerosols and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). Avoid excessive heat and sources of ignition - No smoking. Take action to prevent static discharges. Avoid release to the environment - Collect spillage (see SECTION 6).
<b>Storage</b>	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers tightly closed when not in use. Protect from freezing. Protect containers from physical damage. Inspect regularly for deficiencies such as damage or leaks. Keep away from heat and sources of ignition - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10). Store locked up. *Recommended storage temperature: 20 - 50 °C
<b>Container</b>	Keep in the original container or suitable construction material, i.e. Stainless steel, HDPE. Compatibility with plastic materials can vary. Unsuitable construction materials: Copper, Brass, Bronze, Zinc & their alloys. Do not store in fiberglass containers or tanks. Ensure all containers are labelled. Do not re-use empty containers.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>General</b>	No specific exposure standards are available for this produc.
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	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.
<b>Personal Protection Equipment</b>	- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Depending on their particular operation, handlers may be required to wear self-contained breathing apparatus (SCBA), Positive pressure air-supplied respirator with full-face mask or full-face respirator with organic cartridges. In case of aerosol formation, use respirator with an approved filter (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Safety glasses with side shields/Full face shield. - Hand protection: Wear protective gloves. Recommended: PVC or Neoprene rubber gloves. - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Apron or chemical suit; Waterproof safety footwear.
<b>Special Hazards Precautions</b>	No information available.

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**Work Hygienic Practices** Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove contaminated clothing and shoes immediately. Wash contaminated clothing and shoes before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>Appearance</b>	Clear liquid
<b>Odour</b>	Ammoniacal
<b>Colour</b>	Light greenish yellow to light brown
<b>pH</b>	10.5 - 12.5 (10% solution)
<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	No Data Available
<b>Melting Point</b>	No Data Available
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	No Data Available
<b>Specific Gravity</b>	1.15 - 1.18
<b>Flash Point</b>	No Data Available
<b>Auto Ignition Temp</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	No Data Available
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	No Data Available
<b>Density</b>	No Data Available
<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	No Data Available
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available
<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	No information available.
<b>Potential for Dust Explosion</b>	Not applicable.
<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No information available.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Non-combustible; Material does not burn nor will it support combustion.
<b>Reactions That Release Gases or Vapours</b>	Fire or heat will produce irritating, toxic and/or corrosive gases.

**Release of Invisible Flammable Vapours and Gases** No information available.

## 10. STABILITY AND REACTIVITY

**General Information** No information available.

**Chemical Stability** Product is stable under normal conditions of use, storage and temperature.

**Conditions to Avoid** Avoid excessive heat and keep from freezing, material stability may be affected. Take action to prevent static discharges. \*DO NOT store below 20 °C and avoid high temperatures >50 °C

**Materials to Avoid** Incompatible/reactive with strong acids and oxidizing agents, metals.

**Hazardous Decomposition Products** No hazardous decomposition if used according to specifications. Fire or heat will produce irritating, toxic and/or corrosive gases. Contact with acids will cause carbon disulfide and dimethylamine to be evolved.

**Hazardous Polymerisation** Hazardous polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

**General Information**

- Acute toxicity: Ingestion will result in corrosion of tissues of the gastrointestinal tract.
- Skin corrosion/irritation: Causes severe skin burns. Product solution is very alkaline and corrosive to the skin.
- Eye damage/irritation: Causes serious eye damage. Eye contact will cause severe eye irritation and possible corneal damage.
- Respiratory/skin sensitisation: No information available.
- Germ cell mutagenicity: No information available.
- Carcinogenicity: Not listed in NTP, IARC, ACGIH or by OSHA.
- Reproductive toxicity: No information available.
- STOT (single exposure): Inhalation of product vapours, liquid or mist may produce burns of the respiratory tract. Danger of serious damage to health by prolonged exposure through inhalation.
- STOT (repeated exposure): No information available.
- Aspiration toxicity: No information available.

**Carcinogen Category** None

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Aquatic toxicity:

- LC50, Fish (*Poecilia reticulata*): 2.6 mg/l (96 h).
- EC50, Crustacea (*Daphnia magna*): 0.67 mg/l (48 h).
- EC50, Algae/aquatic plants (*Chlorella pyrenoidosa*): 0.8 mg/l (96 h).

\*Bacteria in activated sludge treatment plant are not affected by a concentration of 50 mg/L.

**Persistence/Degradability** No information available.

**Mobility** No information available.

**Environmental Fate** Very toxic to aquatic life with long-lasting effects - Avoid release to the environment.

**Bioaccumulation Potential** No information available.

**Environmental Impact** No Data Available

## 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with local/regional/national regulations.

# SAFETY DATA SHEET SODIUM DIMETHYLDITHIOCARBAMATE SOLUTION REVISION 3, DATE 09 JUL 21

## General Information

**Special Precautions for Land Fill** Empty containers should be taken for local recycling, recovery or waste disposal. Do not reuse empty containers.  
\*Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration.

## 14. TRANSPORT INFORMATION

### Land Transport (Australia)

ADG Code

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

### Land Transport (Malaysia)

ADR Code

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

### Land Transport (New Zealand)

NZS5433

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

### Land Transport (United States of America)

US DOT

<b>Proper Shipping Name</b>	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate solution)
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available

# SAFETY DATA SHEET SODIUM DIMETHYLDITHIOCARBAMATE SOLUTION REVISION 3, DATE 09 JUL 21

<b>ERG</b>	154 Substances - Toxic and/or Corrosive (Non-Combustible)
<b>UN Number</b>	1719
<b>Hazchem</b>	2R
<b>Pack Group</b>	II
<b>Special Provision</b>	No Data Available

## Sea Transport

IMDG Code

<b>Proper Shipping Name</b>	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate solution)
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	1719
<b>Hazchem</b>	2R
<b>Pack Group</b>	II
<b>Special Provision</b>	No Data Available
<b>EMS</b>	F-A, S-B
<b>Marine Pollutant</b>	Yes

## Air Transport

IATA DGR

<b>Proper Shipping Name</b>	CAUSTIC ALKALI LIQUID, N.O.S. (Sodium dimethyldithiocarbamate solution)
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	1719
<b>Hazchem</b>	2R
<b>Pack Group</b>	II
<b>Special Provision</b>	No Data Available

## National Transport Commission (Australia)

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

<b>Dangerous Goods Classification</b>	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

<b>General Information</b>	No Data Available
<b>Poisons Schedule (Aust)</b>	Not Scheduled

## Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

<b>Approval Code</b>	HSR002491 HSR007115 (Revoked)
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## National/Regional Inventories

Australia (AIC)	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, SODIME5100
Revision	3
Revision Date	09 Jul 2021
Reason for Issue	Updated sds
Key/Legend	<p>&lt; Less Than &gt; Greater Than</p> <p><b>AICS</b> Australian Inventory of Chemical Substances  <b>atm</b> Atmosphere  <b>CAS</b> Chemical Abstracts Service (Registry Number)  <b>cm<sup>2</sup></b> Square Centimetres  <b>CO<sub>2</sub></b> Carbon Dioxide  <b>COD</b> Chemical Oxygen Demand  <b>deg C (°C)</b> Degrees Celcius  <b>EPA (New Zealand)</b> Environmental Protection Authority of New Zealand  <b>deg F (°F)</b> Degrees Farenheit  <b>g</b> Grams  <b>g/cm<sup>3</sup></b> Grams per Cubic Centimetre  <b>g/l</b> Grams per Litre  <b>HSNO</b> Hazardous Substance and New Organism  <b>IDLH</b> Immediately Dangerous to Life and Health  <b>immiscible</b> Liquids are insoluable in each other.  <b>inHg</b> Inch of Mercury  <b>inH<sub>2</sub>O</b> Inch of Water  <b>K</b> Kelvin  <b>kg</b> Kilogram</p>

**kg/m<sup>3</sup>** 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

**m<sup>3</sup>** Cubic Metre

**mbar** Millibar

**mg** Milligram

**mg/24H** Milligrams per 24 Hours

**mg/kg** Milligrams per Kilogram

**mg/m<sup>3</sup>** Milligrams per Cubic Metre

**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

**mm** Millimetre

**mmH<sub>2</sub>O** 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

**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