

### 1. IDENTIFICATION

|                            |   |
|----------------------------|---|
| <b>Product Name</b>        | <b>Sodium metabisulphite</b>  |
| <b>Other Names</b>         | Disulfurous acid, disodium salt   |
| <b>Uses</b>                | For industrial use, food additive, reducing agent, whitening agent, for professional use. |
| <b>Chemical Family</b>     | No Data Available   |
| <b>Chemical Formula</b>    | H <sub>2</sub> O <sub>5</sub> S <sub>2</sub> .2Na   |
| <b>Chemical Name</b>       | Sodium metabisulphite   |
| <b>Product Description</b> | 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 |

### 2. HAZARD IDENTIFICATION

**Poisons Schedule (Aust)** 5

### Globally Harmonised System

|                              |  |
|------------------------------|--|
| <b>Hazard Classification</b> | Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) |
| <b>Hazard Categories</b>     | Acute Toxicity (Oral) - Category 4<br>Serious Eye Damage/Irritation - Category 1   |



Pictograms



Signal Word

Danger

Hazard Statements

**H302** Harmful if swallowed.  
**H318** Causes serious eye damage.  
**AUH031** Contact with acids liberates toxic gas

Precautionary Statements

|            |                           |  |
|------------|---------------------------|--|
| Prevention | <b>P264</b>               | Wash exposed skin thoroughly after handling.   |
|            | <b>P270</b>               | Do not eat, drink or smoke when using this product.  |
|            | <b>P280</b>               | Wear eye protection/face protection.   |
| Response   | <b>P301 + P312</b>        | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.   |
|            | <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/physician.  |
|            | <b>P330</b>               | Rinse mouth.   |
| Disposal   | <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

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredients

| Chemical Entity       | Formula           | CAS Number | Proportion |
|-----------------------|-------------------|------------|------------|
| Sodium metabisulphite | No Data Available | 7681-57-4  | >=90 %     |

**4. FIRST AID MEASURES**

Description of necessary measures according to routes of exposure

**Swallowed** If swallowed: Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Obtain immediate medical care. Never give anything by mouth to an unconscious person.

**Eye** Eye contact: Rinse cautiously with water for several minutes, holding eyelids open and protecting the uninjured eye. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a Poison Centre or doctor/physician.

**Skin** Skin contact: Remove contaminated clothing and shoes immediately. Wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.

**Inhaled** If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing until recovered. Call a Poison Centre or doctor/physician if experiencing respiratory symptoms, or if you feel unwell.

**Advice to Doctor** Treat symptomatically.

**Medical Conditions Aggravated by Exposure** No information available.



**5. FIRE FIGHTING MEASURES**

|   |  |
|---|--|
| <b>General Measures</b>                   | If safe to do so, move undamaged containers from fire area.  |
| <b>Flammability Conditions</b>            | May burn but does not ignite readily.  |
| <b>Extinguishing Media</b>                | Suitable: Water or Carbon dioxide (CO <sub>2</sub> ).  |
| <b>Fire and Explosion Hazard</b>          | Do not inhale explosion and combustion gases.  |
| <b>Hazardous Products of Combustion</b>   | Fire may produce irritating and toxic fumes.   |
| <b>Special Fire Fighting Instructions</b> | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. |
| <b>Personal Protective Equipment</b>      | Wear self contained breathing apparatus (SCBA) and suitable protective equipment.                  |
| <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>                       | No Data Available  |

**6. ACCIDENTAL RELEASE MEASURES**

|   |   |
|---|---|
| <b>General Response Procedure</b>           | Increase ventilation. Do not touch or walk through spilled material. Prevent dust cloud.                        |
| <b>Clean Up Procedures</b>                  | Sweep or vacuum. Avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. |
| <b>Containment</b>                          | Stop leak if safe to do so. Prevent entry into waterways, drains or confined areas.                             |
| <b>Decontamination</b>                      | Wash area with plenty of water. Retain contaminated washing water and dispose appropriately.                    |
| <b>Environmental Precautionary Measures</b> | Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.                    |
| <b>Evacuation Criteria</b>                  | Spill or leak area should be isolated immediately. Keep unauthorised/unprotected personnel away.                |
| <b>Personal Precautionary Measures</b>      | Wear personal protective equipment (see Section 8).   |

**7. HANDLING AND STORAGE**

|                  |   |
|------------------|---|
| <b>Handling</b>  | Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Ensure adequate ventilation. Wear personal protective equipment (see Section 8). Avoid contact with skin and eyes. Avoid breathing dust. Before making transfer operations, ensure that containers are free from any incompatible materials/residues. Do NOT reuse empty containers unless they have been thoroughly cleaned. |
| <b>Storage</b>   | Store in a cool, dry and well-ventilated place. Keep away from food, drink and feed. Keep away from acids and oxidising agents. Keep containers closed when not in use. Check regularly for spills.   |
| <b>Container</b> | Keep in original container.   |

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

|                        |  |
|------------------------|--|
| <b>General</b>         | Safe Work Australia (SWA) Exposure Standard for Sodium metabisulphite (CAS No. 7681-57-4):<br>- Time Weighted Average (TWA): 5 mg/m <sup>3</sup><br>DNEL Values:<br>- Inhalation (worker): 225 mg/m <sup>3</sup> (long-term, systemic effects)<br>- Inhalation (consumer): 66 mg/m <sup>3</sup> (long-term, local effects)<br>- Ingestion (consumer): 8.6 mg/kg (long-term, local effects) |
| <b>Exposure Limits</b> | No Data Available  |



|                                      |  |
|--------------------------------------|--|
| <b>Biological Limits</b>             | PNEC Values for Sodium metabisulphite (CAS No. 7681-57-4):<br>- Freshwater: 1 mg/l<br>- Marine water: 0.1 mg/l<br>- Sewage treatment (microorganisms): 75.4 mg/l   |
| <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. Adequate ventilation should be provided so that exposure limits are not exceeded.         |
| <b>Personal Protection Equipment</b> | Respiratory protection: Wear a particle filter device (DIN EN 143).<br>Eye protection: Eye glasses with side protection.<br>Hand protection: Use protective gloves that provide comprehensive protection. Suitable material: UNI EN 420/UNI EN 374.<br>Skin/body protection: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or Viton. |
| <b>Special Hazards Precautions</b>   | No information available.  |
| <b>Work Hygienic Practices</b>       | Do not eat, drink or smoke while working. Always wash hands before smoking, eating, drinking or using the toilet. Contaminated clothing should be changed before entering eating areas. Wash contaminated clothing before reuse.   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                       |                              |
|---------------------------------------|------------------------------|
| <b>Physical State</b>                 | Solid                        |
| <b>Appearance</b>                     | Crystals or powder           |
| <b>Odour</b>                          | Pungent                      |
| <b>Colour</b>                         | White                        |
| <b>pH</b>                             | 3.5 - 5.0 (5%)               |
| <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>                  | >150 °C                      |
| <b>Freezing Point</b>                 | >150 °C                      |
| <b>Solubility</b>                     | 470 g/L 20°C                 |
| <b>Specific Gravity</b>               | 1.2 - 1.3 kg/dm <sup>3</sup> |
| <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>      | -3.7                         |
| <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 Data Available            |
| <b>Potential for Dust Explosion</b>   | No information available.    |



|   |   |
|---|---|
| <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>   | May burn but does not ignite readily.   |
| <b>Reactions That Release Gases or Vapours</b>                        | Fire may produce irritating and toxic fumes.<br>Contact with acids liberates toxic gas. |
| <b>Release of Invisible Flammable Vapours and Gases</b>               | No information available.   |

## 10. STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Chemical Stability</b>               | Stable under normal conditions.  |
| <b>Conditions to Avoid</b>              | Avoid exposure to heat. Avoid dust formation.  |
| <b>Materials to Avoid</b>               | Avoid acids and oxidising agents.  |
| <b>Hazardous Decomposition Products</b> | Fire may produce irritating and toxic fumes. Contact with acids liberates toxic gas. |
| <b>Hazardous Polymerisation</b>         | No information available.  |

## 11. TOXICOLOGICAL INFORMATION

|                            |  |
|----------------------------|--|
| <b>General Information</b> | <p>Skin corrosion/irritation: Not classified. Based on available data, the classification criteria are not met.</p> <p>Serious eye damage/irritation: Causes serious eye damage.</p> <p>Respiratory/skin sensitisation: Not classified. Based on available data, the classification criteria are not met.</p> <p>Germ cell mutagenicity: Not classified. Based on available data, the classification criteria are not met.</p> <p>Carcinogenicity: Not classified. Based on available data, the classification criteria are not met.</p> <p>Reproductive toxicity: Not classified. Based on available data, the classification criteria are not met.</p> <p>STOT - single exposure: Not classified. Based on available data, the classification criteria are not met.</p> <p>STOT - repeated exposure: Not classified. Based on available data, the classification criteria are not met.</p> <p>Aspiration hazard: Not classified. Based on available data, the classification criteria are not met.</p> |
| <b>Acute</b>               |  |
| <b>Ingestion</b>           | <p>Acute Oral Toxicity:</p> <ul style="list-style-type: none"> <li>- Rat LD50 &gt;1,540 mg/kg</li> </ul>   |
| <b>Carcinogen Category</b> | None   |

## 12. ECOLOGICAL INFORMATION

|                                  |  |
|----------------------------------|--|
| <b>Ecotoxicity</b>               | <p>Acute aquatic toxicity:</p> <ul style="list-style-type: none"> <li>- Fish: LC50 = 150 - 220 mg/l (96 h)</li> <li>- Daphnia: EC50 = 89 mg/l (48 h)</li> <li>- Algae: EC50 = 48 mg/l (72 h)</li> <li>- Bacteria: EC50 = 56 mg/l (17 h)</li> </ul> |
| <b>Persistence/Degradability</b> | No information available.  |
| <b>Mobility</b>                  | No information available.  |
| <b>Environmental Fate</b>        | Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.   |
| <b>Bioaccumulation Potential</b> | No information available.  |
| <b>Environmental Impact</b>      | No Data Available  |



**13. DISPOSAL CONSIDERATIONS**

**General Information** Dispose of waste in accordance with current local/regional/national regulations. Recover if possible.  
**Special Precautions for Land Fill** Send waste to an authorised disposal facility for incineration under controlled conditions.

**14. TRANSPORT INFORMATION**

**Land Transport (Australia)**

ADG Code

**Proper Shipping Name** SODIUM METABISULPHITE  
**Class** No Data Available  
**Subsidiary Risk(s)** No Data Available  
 No Data Available  
**UN Number** No Data Available  
**Hazchem** No Data Available  
**Pack Group** No Data Available  
**Special Provision** No Data Available

**Sea Transport**

IMDG Code

**Proper Shipping Name** SODIUM METABISULPHITE  
**Class** No Data Available  
**Subsidiary Risk(s)** No Data Available  
**UN Number** No Data Available  
**Hazchem** No Data Available  
**Pack Group** No Data Available  
**Special Provision** No Data Available  
**EMS** No Data Available  
**Marine Pollutant** No

**Air Transport**

IATA DGR

**Proper Shipping Name** SODIUM METABISULPHITE  
**Class** No Data Available  
**Subsidiary Risk(s)** No Data Available  
**UN Number** No Data Available  
**Hazchem** No Data Available  
**Pack Group** No Data Available  
**Special Provision** No Data Available

**National Transport Commission (Australia)**

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

**Dangerous Goods Classification** NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)



**15. REGULATORY INFORMATION**

|                                |                   |
|--------------------------------|-------------------|
| <b>General Information</b>     | No Data Available |
| <b>Poisons Schedule (Aust)</b> | 5                 |

**National/Regional Inventories**

|   |                   |
|---|-------------------|
| <b>Australia (AICS)</b>                               | Listed            |
| <b>Canada (DSL)</b>                                   | Listed            |
| <b>Canada (NDSL)</b>                                  | Not Listed        |
| <b>China (IECSC)</b>                                  | Listed            |
| <b>Europe (EINECS)</b>                                | 231-673-0         |
| <b>Europe (REACH)</b>                                 | 01-2119531326-45- |
| <b>Japan (ENCS/METI)</b>                              | 1-502             |
| <b>Korea (KECI)</b>                                   | KE-12701          |
| <b>Malaysia (EHS Register)</b>                        | Listed            |
| <b>New Zealand (NZIoC)</b>                            | Listed            |
| <b>Philippines (PICCS)</b>                            | Listed            |
| <b>Switzerland (Giftliste 1)</b>                      | Not Determined    |
| <b>Switzerland (Inventory of Notified Substances)</b> | Not Determined    |
| <b>Taiwan (NCSR)</b>                                  | Listed            |
| <b>USA (TSCA)</b>                                     | Listed            |

**16. OTHER INFORMATION**

|                              |   |
|------------------------------|---|
| <b>Related Product Codes</b> | SOMETA0200, SOMETA0300, SOMETA0400, SOMETA0500, SOMETA0600, SOMETA0700, SOMETA0800, SOMETA0900, SOMETA1000, SOMETA1001, SOMETA1002, SOMETA1003, SOMETA1004, SOMETA1005, SOMETA1006, SOMETA1007, SOMETA1008, SOMETA1009, SOMETA1010, SOMETA1011, SOMETA1012, SOMETA1013, SOMETA1014, SOMETA1015, SOMETA1016, SOMETA1017, SOMETA1018, SOMETA1019, SOMETA1020, SOMETA1021, SOMETA1022, SOMETA1023, SOMETA1024, SOMETA1100, SOMETA1101, SOMETA1102, SOMETA1103, SOMETA1200, SOMETA1300, SOMETA1301, SOMETA1400, SOMETA1500, SOMETA1600, SOMETA1800, SOMETA1900, SOMETA2000, SOMETA2100, SOMETA2200, SOMETA2300, SOMETA2400, SOMETA2401, SOMETA2402, SOMETA2403, SOMETA2404, SOMETA2405, SOMETA2406, SOMETA2407, SOMETA2408, SOMETA2409, SOMETA2410, SOMETA2411, SOMETA2412, SOMETA2413, SOMETA2414, SOMETA2415, SOMETA2416, SOMETA2417, SOMETA2418, SOMETA2419, SOMETA2420, SOMETA2421, SOMETA2422, SOMETA2423, SOMETA2424, SOMETA2425, SOMETA2426, SOMETA2427, SOMETA2428, SOMETA2500, SOMETA2501, SOMETA2502, SOMETA2503, SOMETA2504, SOMETA2505, SOMETA2506, SOMETA2600, SOMETA2601, SOMETA2700, SOMETA2701, SOMETA2800, SOMETA2900, SOMETA3000, SOMETA3100, SOMETA3200, SOMETA3201, SOMETA3202, SOMETA3300, SOMETA3400, SOMETA3500, SOMETA3501, SOMETA3502, SOMETA3600, SOMETA3700, SOMETA3800, SOMETA3900, SOMETA3901, SOMETA3902, SOMETA3903, SOMETA3904, SOMETA3905, SOMETA4000, SOMETA4001, SOMETA4002, SOMETA4003, SOMETA4100, SOMETA4101, SOMETA4102, SOMETA4103, SOMETA4104, SOMETA4105, SOMETA4106, SOMETA4107, SOMETA4108, SOMETA4200, SOMETA4201, SOMETA4202, SOMETA4203, SOMETA4204, SOMETA4205, SOMETA4206, SOMETA4207, SOMETA4208, SOMETA4209, |
|------------------------------|---|



SOMETA4210, SOMETA4211, SOMETA4212, SOMETA4213, SOMETA4214, SOMETA4215, SOMETA4300, SOMETA4301, SOMETA4302, SOMETA4303, SOMETA4304, SOMETA4400, SOMETA4500, SOMETA4501, SOMETA4502, SOMETA4600, SOMETA4700, SOMETA4701, SOMETA4800, SOMETA4900, SOMETA5000, SOMETA5001, SOMETA5002, SOMETA5100, SOMETA5101, SOMETA5102, SOMETA5200, SOMETA5201, SOMETA5300, SOMETA5301, SOMETA5400, SOMETA5401, SOMETA5500, SOMETA5501, SOMETA5502, SOMETA5600, SOMETA5601, SOMETA5700, SOMETA5701, SOMETA5800, SOMETA5801, SOMETA5802, SOMETA5900, SOMETA5901, SOMETA6000, SOMETA6001, SOMETA6002, SOMETA6100, SOMETA6200, SOMETA6201, SOMETA6300, SOMETA6400, SOMETA6500, SOMETA6600, SOMETA6700, SOMETA7000, SOMETA7200, SOMETA7400, SOMETA7500, SOMETA7600, SOMETA7700, SOMETA7701, SOMETA7702, SOMETA7800, SOMETA7801, SOMETA7900, SOMETA8000, SOMETA8100, SOMETA8500, SOMETA8600, SOMETA8700, SOMETA8800, SOMETA8900, SOMETA9000, SOMETA9100, SOMETA9200, SOMETA9300, SOMETA9500, SOMETA9600, SOMETA9800, SOMETA9900, SOMETB1000, SOMETB1001, SOMETB2000, SOMETA1801, SOMETA1802, SOMETA1803, SOMETA1804, SOMETA1805, SOMETA1806, SOMETA1808, SOMETA1809, SOMETA1810, SOMETA1811, SOMETA1812, SOMETA1813, SOMETA1814, SOMETA1815, SOMETA1816, SOMETA1817, SOMETA1818, SOMETA1827, SOMETA1828, SOMETA1829, SOMETA1830, SOMETA1831, SOMETA1832, SOMETA1833, SOMETA1834, SOMETA1835, SOMETA1836, SOMETA1807, SOMETA1837, SOMETA7430, SOMETA7901, SOMETA3906, SOMETA1205, SOMETA1025, SOMETA1026, SOMETA7910, SOMETA2150, SOMETA1250, SOMETA8200, SOMETA8210, SOMETA0710, SOMETA0715, SOMETA8220, SOMETA7710, SOMETA0705, SOMETA0720, SOMETA0725, SOMETA8215, SOMETA7920, SOMETA3909, SOMETA0707, SOMETA7850, SOMETA3910, SOMETA7820, SOMETA3101, SOMETA0910, SOMETA3106, SOMETA0905, SOMETA7860

**Revision**

3

**Revision Date**

29 Jun 2017

**Key/Legend**

< Less Than  
 > Greater Than  
**AICS** Australian Inventory of Chemical Substances  
**atm** Atmosphere  
**CAS** Chemical Abstracts Service (Registry Number)  
**cm<sup>2</sup>** Square Centimetres  
**CO<sub>2</sub>** 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/cm<sup>3</sup>** 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  
**inH<sub>2</sub>O** Inch of Water  
**K** Kelvin  
**kg** Kilogram  
**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

