

### 1. IDENTIFICATION

<b>Product Name</b>	<b>Tetramethylthiuram disulphide (TMTD)</b>
<b>Other Names</b>	Disulfide, bis(dimethylthiocarbamoyl); Rubber Accelerator TMTD(TT); Thiram
<b>Uses</b>	Rubber (vulcanisation) accelerator.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	C <sub>6</sub> H <sub>12</sub> N <sub>2</sub> S <sub>4</sub>
<b>Chemical Name</b>	Thioperoxydicarbonic diamide (((H <sub>2</sub> N)C(S)) <sub>2</sub> S <sub>2</sub> ), tetramethyl-
<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 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)** Schedule 6

#### 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 Acute Toxicity (Inhalation) - Category 4 Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Irritation - Category 2A Sensitisation (Skin) - Category 1 Specific Target Organ Toxicity (Repeated Exposure) - Category 2 Acute Hazard To The Aquatic Environment - Category 1 Long-term Hazard To The Aquatic Environment - Category 1

**Pictograms**



**Signal Word** Warning

<b>Hazard Statements</b>	<b>H302 + H332</b>	Harmful if swallowed or if inhaled.
	<b>H315</b>	Causes skin irritation.
	<b>H317</b>	May cause an allergic skin reaction.
	<b>H319</b>	Causes serious eye irritation.
	<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
	<b>H410</b>	Very toxic to aquatic life with long lasting effects.

<b>Precautionary Statements</b>	Prevention	<b>P280</b>	Wear protective gloves/eye protection/face protection.
		<b>P260</b>	Do not breathe dust.
		<b>P273</b>	Avoid release to the environment.
		<b>P270</b>	Do not eat, drink or smoke when using this product.
		<b>P271</b>	Use only outdoors or in a well-ventilated area.
		<b>P272</b>	Contaminated work clothing should not be allowed out of the workplace.
		Response	<b>P312</b>
	<b>P302 + P352</b>		IF ON SKIN: Wash with plenty of soap and water.
	<b>P337 + P313</b>		If eye irritation persists: Get medical advice/attention.
	<b>P333 + P313</b>		If skin irritation or rash occurs: Get medical advice/attention.
	<b>P391</b>		Collect spillage.
	<b>P330</b>		Rinse mouth.
	Disposal	<b>P304 + P340</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
		<b>P362</b>	Take off contaminated clothing and wash before reuse.
<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>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)

**Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

<b>HSNO Classifications</b>	Health Hazards	<b>6.1D</b>	Substances that are acutely toxic - Harmful
		<b>6.3A</b>	Substances that are irritating to the skin
		<b>6.4A</b>	Substances that are irritating to the eye
		<b>6.5B</b>	Substances that are contact sensitisers
		<b>6.9B</b>	Substances that are harmful to human target organs or systems
	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
Tetramethylthiuram disulfide	C6H12N2S4	137-26-8	<=100 %

### 4. FIRST AID MEASURES

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

<b>Swallowed</b>	IF SWALLOWED: Rinse mouth, then drink plenty of water. Call a Poison Centre or doctor/physician if you feel unwell. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
<b>Eye</b>	IF IN EYES: Rinse cautiously with 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. If eye irritation persists, get medical advice/attention.
<b>Skin</b>	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs, get medical advice/attention.
<b>Inhaled</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor/physician if you feel unwell. Apply resuscitation if victim is not breathing. Administer oxygen if breathing is difficult; Keep victim calm and warm - Obtain immediate medical care.
<b>Advice to Doctor</b>	Treat symptomatically.
<b>Medical Conditions Aggravated by Exposure</b>	May cause an allergic skin reaction.

### 5. FIRE FIGHTING MEASURES

<b>General Measures</b>	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>	Not defined as flammable or combustible; However, product will support combustion under fire conditions.
<b>Extinguishing Media</b>	Use dry chemical, Carbon dioxide, foam or water spray for extinction.
<b>Fire and Explosion Hazard</b>	Very high concentrations of this product suspended in air may present an explosion hazard.
<b>Hazardous Products of Combustion</b>	Heating to decomposition will produce irritating and/or toxic gases, including Carbon disulfide, oxides of Carbon, Nitrogen and Sulfur.
<b>Special Fire Fighting Instructions</b>	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
<b>Personal Protective Equipment</b>	Full fire kit and self-contained breathing apparatus (SCBA). Decontaminate all protective equipment after use.
<b>Flash Point</b>	~150 °C [COC]
<b>Lower Explosion Limit</b>	10 g/m <sup>3</sup>
<b>Upper Explosion Limit</b>	No Data Available

<b>Auto Ignition Temperature</b>	>400 °C
<b>Hazchem Code</b>	No Data Available

## 6. ACCIDENTAL RELEASE MEASURES

<b>General Response Procedure</b>	Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames). Do not touch or walk through spilled material. Avoid dust formation. Do not breathe dust; Avoid contact with eyes, skin and clothing.
<b>Clean Up Procedures</b>	Carefully sweep up spilled material and collect into labelled containers for proper 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>	No information available.
<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; Keep upwind.
<b>Personal Precautionary Measures</b>	Use personal protective equipment as required (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. Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust and aerosols. Do not breathe dust/aerosols; Avoid contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8). Keep away from excessive heat and sources of ignition - No smoking.
<b>Storage</b>	Store in a cool, dry and well-ventilated area. Keep container tightly closed. Protect from physical damage. Keep away from excessive heat and sources of ignition - No smoking. Keep away from incompatible materials (acids, oxidisers) food and feed.
<b>Container</b>	Keep only in the original container. Empty containers retain product residues and may be hazardous; follow all SDS precautions in handling empty containers.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	COMPONENT: Thiram (CAS No. 137-26-8): - Safe Work Australia Exposure Standard: TWA = 1 mg/m <sup>3</sup> (Sen). - New Zealand WES: TWA = 1 mg/m <sup>3</sup> .
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	Use with appropriate local or general exhaust to maintain exposures below exposure limits.
<b>Personal Protection Equipment</b>	Respiratory protection: For nuisance dust exposures, use type P95 (US) or type P1 (EU) particle respirator. For higher level protection, use type OV/AG/P99 (US) or type ABEK-P2 (EU) respirator cartridges. Use respirators and components tested and approved under appropriate government standards. Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Face-shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards. Hand protection: Wear protective gloves. Recommended (full/splash contact): Nitrile rubber (Min. layer thickness: 0.11 mm; Break through time: 480 min). Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Impervious apron, boots; Complete suit protecting against chemicals.
<b>Special Hazards Precautions</b>	No information available.
<b>Work Hygienic Practices</b>	Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Powder or granule
<b>Odour</b>	Slightly amine-like
<b>Colour</b>	White or light greyish
<b>pH</b>	No Data Available
<b>Vapour Pressure</b>	Negligible (@ 20 °C)
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	No Data Available
<b>Melting Point</b>	>=140 °C
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Insoluble in water (30 ppm) - Soluble in acetone, ether, chloroform
<b>Specific Gravity</b>	0.3 (Water = 1)
<b>Flash Point</b>	~150 °C [COC]
<b>Auto Ignition Temp</b>	>400 °C
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	410 - 450 kg/m <sup>3</sup> (20 °C)
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	No Data Available
<b>Density</b>	1,425 kg/m <sup>3</sup>
<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>	Very high concentrations of this product suspended in air may present an explosion hazard.
<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>	Not defined as flammable or combustible; However, product will support combustion under fire conditions.
<b>Reactions That Release Gases or Vapours</b>	Heating to decomposition will produce irritating and/or toxic gases, including Carbon disulfide, oxides of Carbon, Nitrogen and Sulfur. Acid decomposition may evolve Carbon disulfide and Hydrogen sulfide.
<b>Release of Invisible Flammable Vapours and Gases</b>	No information available.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	No information available.
<b>Chemical Stability</b>	Stable under recommended storage conditions.

<b>Conditions to Avoid</b>	Keep away from excessive heat and ignition sources.
<b>Materials to Avoid</b>	Incompatible/reactive with acids, oxidisers, Copper.
<b>Hazardous Decomposition Products</b>	Heating to decomposition will produce irritating and/or toxic gases, including Carbon disulfide, oxides of Carbon, Nitrogen and Sulfur. Acid decomposition may evolve Carbon disulfide and Hydrogen sulfide.
<b>Hazardous Polymerisation</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	<p>Acute toxicity: Harmful if swallowed; Harmful if inhaled. Low acute toxicity following dermal exposure. Exposure to and/or consumption of alcohol may increase toxic effects.</p> <p>Skin corrosion/irritation: Causes skin irritation.</p> <p>Eye damage/irritation: Causes eye irritation.</p> <p>Respiratory/skin sensitisation: May cause an allergic skin reaction.</p> <p>Germ cell mutagenicity: May have some genotoxic potential.</p> <p>Carcinogenicity: Not considered to be carcinogenic.</p> <p>Reproductive toxicity: Not considered to cause reproductive or developmental effects.</p> <p>STOT - single exposure: May cause harmful effects following acute inhalation exposure, and harmful effects including neurotoxicity, following acute oral exposure.</p> <p>STOT - repeated exposure: May cause damage to organs through prolonged or repeated oral exposure. The chemical is also reported to cause neurotoxicity.</p> <p>Aspiration toxicity: No information available.</p>
<b>Carcinogen Category</b>	None

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	<p>Aquatic toxicity:</p> <ul style="list-style-type: none"> <li>- Toxicity to fish: LC50, Oncorhynchus mykiss (Rainbow trout): 0.046 mg/L (96 h) [static test, OECD Test Guideline 203].</li> <li>- Toxicity to daphnia: EC50, Daphnia magna (Water flea): 0.38 mg/L (48 h) [static test, OECD Test Guideline 202].</li> <li>- Toxicity to algae: EC50, Pseudokirchneriella subcapitata (algae): 0.065 mg/L ( 72 h) [static test, OECD Test Guideline 201].</li> </ul>
<b>Persistence/Degradability</b>	Not readily biodegradable (aerobic, 40%, 28 d) [OECD Test Guideline 301D].
<b>Mobility</b>	No information available.
<b>Environmental Fate</b>	Very toxic to aquatic life with long lasting effects - Avoid release to the environment; Prevent entry into drains and waterways.
<b>Bioaccumulation Potential</b>	No information available.
<b>Environmental Impact</b>	No Data Available

## 13. DISPOSAL CONSIDERATIONS

<b>General Information</b>	Dispose of contents/container in accordance with local/regional/national regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
<b>Special Precautions for Land Fill</b>	Contaminated packaging: Do not reuse empty container. Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**Land Transport (Australia)**

ADG Code

<b>Proper Shipping Name</b>	Tetramethylthiuram disulphide (TMTD)
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>EPG</b>	47 Low To Moderate Hazard Substances
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	AU01
<b>Comments</b>	UN#3077

**Land Transport (Malaysia)**

ADR Code

<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tetramethylthiuram disulphide)
<b>Class</b>	9 Miscellaneous Dangerous Goods and Articles
<b>Subsidiary Risk(s)</b>	No Data Available
<b>EPG</b>	47 Low To Moderate Hazard Substances
<b>UN Number</b>	3077
<b>Hazchem</b>	2Z
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**Land Transport (New Zealand)**

NZS5433

<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tetramethylthiuram disulphide)
<b>Class</b>	9 Miscellaneous Dangerous Goods and Articles
<b>Subsidiary Risk(s)</b>	No Data Available
<b>EPG</b>	47 Low To Moderate Hazard Substances
<b>UN Number</b>	3077
<b>Hazchem</b>	2Z
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**Land Transport (United States of America)**

US DOT

<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tetramethylthiuram disulfide)
<b>Class</b>	9 Miscellaneous Dangerous Goods and Articles
<b>Subsidiary Risk(s)</b>	No Data Available
<b>ERG</b>	171 Substances (Low to Moderate Hazard)
<b>UN Number</b>	3077
<b>Hazchem</b>	2Z
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available

**Sea Transport**

IMDG Code

<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tetramethylthiuram disulfide)
<b>Class</b>	9 Miscellaneous Dangerous Goods and Articles

<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	3077
<b>Hazchem</b>	2Z
<b>Pack Group</b>	III
<b>Special Provision</b>	No Data Available
<b>EMS</b>	F-A, S-F
<b>Marine Pollutant</b>	Yes

#### Air Transport

IATA DGR

<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tetramethylthiuram disulfide)
<b>Class</b>	9 Miscellaneous Dangerous Goods and Articles
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	3077
<b>Hazchem</b>	2Z
<b>Pack Group</b>	III
<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>	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>	Schedule 6

#### Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

<b>Approval Code</b>	HSR002503
----------------------	-----------

#### National/Regional Inventories

<b>Australia (AICS)</b>	Listed
<b>Canada (DSL)</b>	Not Determined
<b>Canada (NDSL)</b>	Not Determined
<b>China (IECSC)</b>	Not Determined
<b>Europe (EINECS)</b>	Not Determined
<b>Europe (REACH)</b>	Not Determined
<b>Japan (ENCS/METI)</b>	Not Determined
<b>Korea (KECI)</b>	Not Determined



Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

## 16. OTHER INFORMATION

Related Product Codes	THIRAM1000, THIRAM1001, THIRAM1002, THIRAM1003, THIRAM2000, THIRAM4900, THIURA1000, THIURA1001, THIURA1002, THIURA1003, THIURA2000, THIURA2500, THIURA3050, THIURA3500, THIURA3600, THIURA3610, THIURA4200, THIURA4500, THIURA4600, THIURA4700, THIURA4900, THIURA5000, THIURA5001, THIURA5100, THIURA5500
Revision	3
Revision Date	22 Dec 2014
Key/Legend	<p>&lt; Less Than &gt; Greater Than  <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  <b>kg/m<sup>3</sup></b> Kilograms per Cubic Metre  <b>lb</b> Pound  <b>LC50</b> 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.  <b>LD50</b> 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.  <b>ltr</b> or <b>L</b> Litre  <b>m<sup>3</sup></b> Cubic Metre  <b>mbar</b> Millibar  <b>mg</b> Milligram  <b>mg/24H</b> Milligrams per 24 Hours  <b>mg/kg</b> Milligrams per Kilogram  <b>mg/m<sup>3</sup></b> Milligrams per Cubic Metre  <b>Misc</b> or <b>Miscible</b> Liquids form one homogeneous liquid phase regardless of the amount of either component present.  <b>mm</b> Millimetre  <b>mmH<sub>2</sub>O</b> Millimetres of Water  <b>mPa.s</b> Millipascals per Second  <b>N/A</b> Not Applicable  <b>NIOSH</b> National Institute for Occupational Safety and Health  <b>NOHSC</b> National Occupational Health and Safety Commission  <b>OECD</b> Organisation for Economic Co-operation and Development  <b>Oz</b> Ounce</p>

**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