

### 1. IDENTIFICATION

<b>Product Name</b>	<b>Caustic Soda</b>
<b>Other Names</b>	Soda lye; Sodium hydroxide
<b>Uses</b>	Food processing aid; Industrial/commercial use: In flotation agents; in pH regulation; as a solvent; in water treatment; as a photochemical; as a reducing agent; and in hydraulic fracturing. Domestic use: In cleaning/washing agents and additives; adhesives; and cosmetic use.
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	NaOH
<b>Chemical Name</b>	Caustic soda
<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>	Corrosive to Metals - Category 1 Skin Corrosion/Irritation - Category 1A Serious Eye Damage/Irritation - Category 1

**Pictograms**



**Signal Word** Danger

<b>Hazard Statements</b>	<b>H290</b>	May be corrosive to metals.
	<b>H314</b>	Causes severe skin burns and eye damage.
	<b>AUH071</b>	Corrosive to the respiratory tract

<b>Precautionary Statements</b>	Prevention	<b>P280</b>	Wear protective gloves/protective clothing/eye protection/face protection.
		<b>P260</b>	Do not breathe dusts or mists.
		<b>P303 + P361 + P353</b>	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
	Response	<b>P310</b>	Immediately call a POISON CENTER or doctor/physician.
		<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>P390</b>	Absorb spillage to prevent material damage.
		<b>P301 + P330 + P331</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	Storage	<b>P363</b>	Wash contaminated clothing before reuse.
		<b>P304 + P340</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
		<b>P406</b>	Store in corrosive resistant container with a resistant inner liner.
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

<b>HSNO Classifications</b>	Health Hazards	<b>6.1D</b>	Substances that are acutely toxic - Harmful
		<b>8.1A</b>	Substances that are corrosive to metals
		<b>8.2B</b>	Substances that are corrosive to dermal tissue UN PGII
	Environmental Hazards	<b>8.3A</b>	Substances that are corrosive to ocular tissue
		<b>9.1D</b>	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action
		<b>9.3C</b>	Substances that are harmful to terrestrial vertebrates

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

Chemical Entity	Formula	CAS Number	Proportion
Sodium hydroxide	NaOH	1310-73-2	>=98 %

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

<b>Swallowed</b>	IF SWALLOWED: Rinse mouth, then drink a glass of water. Do NOT induce vomiting. 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 flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes. Immediately call a Poison Centre or doctor/physician for advice.
<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. For minor skin contact, avoid spreading material on unaffected skin. 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. 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>	Treat symptomatically and supportively. 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>	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Avoid getting water inside containers.
<b>Flammability Conditions</b>	Non-combustible; Material itself does not burn.
<b>Extinguishing Media</b>	If material is involved in a fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment - Do not use water jets.
<b>Fire and Explosion Hazard</b>	Risk of violent reaction or explosion! Containers may explode when heated or contaminated with water. The heat generated by contact with water (heat of dilution) may be sufficient to ignite combustible materials. Contact with metals may evolve flammable hydrogen gas.
<b>Hazardous Products of Combustion</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including oxides of Sodium.
<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 self-contained breathing apparatus (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>	2W

**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. Avoid generating dust. Do not breathe dust and prevent contact with eyes, skin and clothing.
<b>Clean Up Procedures</b>	Collect mechanically (sweep or vacuum up) and seal in suitable, properly labelled containers for disposal (see SECTION 13). Do NOT get water inside containers.
<b>Containment</b>	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud. Cover with dry earth, sand or other non-combustible material followed by plastic sheet to minimise spreading or contact with rain.
<b>Decontamination</b>	The product can be neutralised using highly diluted hydrochloric acid, which should be added very slowly by specialised personnel wearing the proper protection. NEVER neutralise the solid product.
<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 and to higher ground. Large spill: Immediately contact Police or Fire Brigade; Consider initial downwind evacuation of areas within at least 250 m.
<b>Personal Precautionary Measures</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8). Large spill: Wear SCBA and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection.

## 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. Avoid generating dust. Do not breathe dusts or mists and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). WARNING! Water reactive - Heat of reaction may be enough to ignite combustible materials. When diluting, always add the product to water - Never add water to the product.
<b>Storage</b>	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Protect from moisture/humidity (hygroscopic). Keep away from heat and sources of ignition - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10). Store locked up.
<b>Container</b>	Keep only in the original container.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	For Sodium hydroxide (CAS No. 1310-73-2): - Safe Work Australia Exposure Standard: TWA = 2 mg/m <sup>3</sup> Peak limitation. - New Zealand Workplace Exposure Standard: TWA = 2 mg/m <sup>3</sup> Ceiling. - NIOSH REL/OSHA PEL: TWA = 2 mg/m <sup>3</sup> - Immediately dangerous to life or health (IDLH) concentration: 10 mg/m <sup>3</sup> .
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	Use local exhaust ventilation to prevent the chemical from entering the breathing zone of any worker. Air monitoring is recommended to ensure control measures in place are working effectively.
<b>Personal Protection Equipment</b>	- Respiratory protection: In the case of sodium hydroxide powder emissions, wear respiratory protection. Recommended: Particulate filter respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Chemical goggles; Full face shield may be required for supplementary protection. - Hand protection: Wear protective gloves. Recommended: Elbow length PVC gloves. - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Overalls; PVC apron; PVC protective suit may be required if exposure severe.
<b>Special Hazards Precautions</b>	No information available.
<b>Work Hygienic Practices</b>	Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Flake, pearl, prill, beads, blocks
<b>Odour</b>	Odourless
<b>Colour</b>	White, translucent
<b>pH</b>	14
<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	1,388 °C
<b>Melting Point</b>	323 °C
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Soluble in water (Water reactive)
<b>Specific Gravity</b>	2.13
<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>	2.13 g/cm <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>	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>	The heat generated by contact with water (heat of dilution) may be sufficient to ignite combustible materials.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Non-combustible; Material itself does not burn.
<b>Reactions That Release Gases or Vapours</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including oxides of Sodium.
<b>Release of Invisible Flammable Vapours and Gases</b>	Contact with metals may evolve flammable hydrogen gas.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	Reacts violently with acid and is corrosive to metals such as aluminium, tin, lead and zinc; This produces a combustible/explosive gas (hydrogen). Reacts with ammonium salts; This produces ammonia and generates fire hazard. Contact with moisture and water generates heat - Heat of reaction may be enough to ignite combustible materials.
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<b>Chemical Stability</b>	The substance is stable under normal (and foreseeable) conditions of temperature and pressure during storage and handling.
<b>Conditions to Avoid</b>	Avoid generating dust.
<b>Materials to Avoid</b>	Incompatible/reactive with aluminium, tin, zinc and their alloys, copper, lead, etc; acetic acid, allyl chloride, chlorine trifluoride, chloroform, methylic alcohol, chloronitrotoluene, chlorosulphonic acid, glyoxal, cyanohydrin, hydrochloric acid, hydrofluoric acid, hydroquinone, nitric acid, sulphuric acid and oleum, nitropropane, phosphorous, propiolactone, phosphorous pentoxide, tetrachlorobenzene, tetrahydrofuran, nitromethane and nitroparaffins.
<b>Hazardous Decomposition Products</b>	Fire or heat will produce irritating, toxic and/or corrosive gases, including oxides of Sodium. Contact with metals may evolve flammable hydrogen gas.
<b>Hazardous Polymerisation</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	<ul style="list-style-type: none"> <li>- Acute toxicity: Corrosive on ingestion; Symptoms include abdominal pain, burns in mouth and throat, burning sensation in the throat and chest, nausea, vomiting, shock or collapse. The substance is not expected to be systemically available and the effects are expected to be due to pH changes.</li> <li>- Skin corrosion/irritation: Corrosive; Causes severe skin burns. Symptoms include redness, pain, burns, blisters.</li> <li>- Eye damage/irritation: Corrosive; Causes serious eye damage. Symptoms include redness, pain, blurred vision, severe burns.</li> <li>- Respiratory/skin sensitisation: Based on data obtained in a study with human volunteers the substance has no skin sensitisation potential.</li> <li>- Germ cell mutagenicity: Both the in vitro and the in vivo genetic toxicity tests indicated no evidence of mutagenic activity.</li> <li>- Carcinogenicity: Systemic carcinogenicity is not expected to occur because the substance is not expected to be systemically available in the body.</li> <li>- Reproductive toxicity: The substance is not expected to be systemically available in the body and for this reason it can be stated that the substance will not reach the foetus nor reach male and female reproductive organs.</li> <li>- STOT (single exposure): Corrosive to the respiratory tract; Symptoms include cough, sore throat, burning sensation, shortness of breath.</li> <li>- STOT (repeated exposure): The substance is not expected to be systemically available in the body and therefore systemic effects of the substance after repeated exposure are not expected to occur.</li> <li>- Aspiration toxicity: No information available.</li> </ul>
<b>Carcinogen Category</b>	None

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	<p>Aquatic toxicity:</p> <ul style="list-style-type: none"> <li>- LC50, Fish: All available tests resulted in a range of toxicity values between 35 to 189 mg/l. However, in the majority of these test reports there were no data on pH variation.</li> <li>- EC50, Crustacea (Ceriodaphnia): 40.4 mg/l (48 h) [based on immobility].</li> <li>- NOEC, Fish/Crustacea: It is not required to conduct this study since the substance dissociates in water and the only possible effect would result from the pH effect. However, pH will remain within environmentally expected ranges.</li> </ul>
<b>Persistence/Degradability</b>	NaOH is a strong alkaline substance that dissociates completely in water to Na <sup>+</sup> and OH <sup>-</sup> . High water solubility and low vapour pressure indicate that NaOH will be found predominantly in aquatic environment. This implies that it will not adsorb on particulate matter or surfaces. Atmospheric emissions as aerosols are rapidly neutralised by carbon dioxide and the salts will be washed out by rain.
<b>Mobility</b>	High water solubility and mobility. If emitted to soil, sorption to soil particles will be negligible. Depending on the buffer capacity of the soil, OH <sup>-</sup> will be neutralised in the soil pore water or the pH may increase. There is no direct exposure of soil to NaOH based on the available uses. In addition, no indirect exposure via air is expected as it rapidly neutralises in air.
<b>Environmental Fate</b>	The hazard of the substance for the environment is caused by the hydroxyl ion (pH effect). For this reason the effect of the substance on the organisms depends on the buffer capacity of the aquatic or terrestrial ecosystem.
<b>Bioaccumulation Potential</b>	Considering its high water solubility, NaOH is not expected to bioconcentrate in organisms. In addition, sodium is a naturally-occurring element that is prevalent in the environment and to which organisms are exposed regularly, for which they have some capacity to regulate the concentration in the organism.
<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.
<b>Special Precautions for Land Fill</b>	Any contaminated absorbent products must be treated by an authorised waste manager, along with any used packaging and residue.

**14. TRANSPORT INFORMATION****Land Transport (Australia)**

ADG Code

<b>Proper Shipping Name</b>	SODIUM HYDROXIDE, SOLID
<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>	1823
<b>Hazchem</b>	2W
<b>Pack Group</b>	II
<b>Special Provision</b>	No Data Available

**Land Transport (Fiji)**

<b>Proper Shipping Name</b>	SODIUM HYDROXIDE, SOLID
<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>	1823
<b>Hazchem</b>	2W
<b>Pack Group</b>	II
<b>Special Provision</b>	No Data Available

**Land Transport (Malaysia)**

ADR Code

<b>Proper Shipping Name</b>	SODIUM HYDROXIDE, SOLID
<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>	1823
<b>Hazchem</b>	2W
<b>Pack Group</b>	II
<b>Special Provision</b>	No Data Available

**Land Transport (New Caledonia)**

<b>Proper Shipping Name</b>	SODIUM HYDROXIDE, SOLID
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available

**EPG** 37 Toxic And/Or Corrosive Substances Non-Combustible  
**UN Number** 1823  
**Hazchem** 2W  
**Pack Group** II  
**Special Provision** No Data Available

**Land Transport (New Zealand)**

NZS5433

**Proper Shipping Name** SODIUM HYDROXIDE, SOLID  
**Class** 8 Corrosive Substances  
**Subsidiary Risk(s)** No Data Available  
**EPG** 37 Toxic And/Or Corrosive Substances Non-Combustible  
**UN Number** 1823  
**Hazchem** 2W  
**Pack Group** II  
**Special Provision** No Data Available

**Land Transport (Papua New Guinea)**

**Proper Shipping Name** SODIUM HYDROXIDE, SOLID  
**Class** 8 Corrosive Substances  
**Subsidiary Risk(s)** No Data Available  
**EPG** 37 Toxic And/Or Corrosive Substances Non-Combustible  
**UN Number** 1823  
**Hazchem** 2W  
**Pack Group** II  
**Special Provision** No Data Available

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

US DOT

**Proper Shipping Name** SODIUM HYDROXIDE, SOLID  
**Class** 8 Corrosive Substances  
**Subsidiary Risk(s)** No Data Available  
**ERG** 154 Substances - Toxic and/or Corrosive (Non-Combustible)  
**UN Number** 1823  
**Hazchem** 2W  
**Pack Group** II  
**Special Provision** No Data Available

**Land Transport (Vanuatu)**

**Proper Shipping Name** SODIUM HYDROXIDE, SOLID  
**Class** 8 Corrosive Substances  
**Subsidiary Risk(s)** No Data Available  
**EPG** 37 Toxic And/Or Corrosive Substances Non-Combustible  
**UN Number** 1823  
**Hazchem** 2W  
**Pack Group** II  
**Special Provision** No Data Available



**Sea Transport**

IMDG Code

<b>Proper Shipping Name</b>	SODIUM HYDROXIDE, SOLID
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	1823
<b>Hazchem</b>	2W
<b>Pack Group</b>	II
<b>Special Provision</b>	No Data Available
<b>EMS</b>	F-A, S-B
<b>Marine Pollutant</b>	No

**Air Transport**

IATA DGR

<b>Proper Shipping Name</b>	SODIUM HYDROXIDE, SOLID
<b>Class</b>	8 Corrosive Substances
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	1823
<b>Hazchem</b>	2W
<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 &amp; 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>	Schedule 6

**Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

<b>Approval Code</b>	HSR001547
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**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>	215-185-5

<b>Europe (REACH)</b>	01-2119457892-27-
<b>Japan (ENCS/METI)</b>	Listed
<b>Korea (KECI)</b>	Listed
<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**

**Related Product Codes**

CASODA0300, CASODA1000, CASODA1001, CASODA1002, CASODA1003, CASODA1004, CASODA1005, CASODA1006, CASODA1007, CASODA1008, CASODA1009, CASODA1010, CASODA1011, CASODA1012, CASODA1013, CASODA1014, CASODA1015, CASODA1016, CASODA1017, CASODA1018, CASODA1019, CASODA1020, CASODA1021, CASODA1022, CASODA1023, CASODA1024, CASODA1025, CASODA1026, CASODA1027, CASODA1028, CASODA1029, CASODA1030, CASODA1031, CASODA1032, CASODA1033, CASODA1034, CASODA1035, CASODA1036, CASODA1037, CASODA1038, CASODA1039, CASODA1040, CASODA1041, CASODA1042, CASODA1043, CASODA1044, CASODA1045, CASODA1050, CASODA1100, CASODA1101, CASODA1150, CASODA1200, CASODA1201, CASODA1202, CASODA1203, CASODA1300, CASODA1301, CASODA1302, CASODA1303, CASODA1304, CASODA1305, CASODA1306, CASODA1307, CASODA1308, CASODA1309, CASODA1310, CASODA1311, CASODA1312, CASODA1313, CASODA1314, CASODA1315, CASODA1316, CASODA1317, CASODA1318, CASODA1319, CASODA1320, CASODA1321, CASODA1322, CASODA1323, CASODA1324, CASODA1325, CASODA1326, CASODA1327, CASODA1328, CASODA1329, CASODA1330, CASODA1331, CASODA1332, CASODA1400, CASODA1401, CASODA1402, CASODA1403, CASODA1500, CASODA1600, CASODA1700, CASODA1701, CASODA1750, CASODA1755, CASODA1760, CASODA1765, CASODA1770, CASODA1780, CASODA1785, CASODA1800, CASODA1801, CASODA1802, CASODA1803, CASODA1804, CASODA1805, CASODA1806, CASODA1807, CASODA1808, CASODA1809, CASODA1810, CASODA1811, CASODA1812, CASODA1813, CASODA1814, CASODA1815, CASODA1816, CASODA1817, CASODA1818, CASODA1819, CASODA1820, CASODA1821, CASODA1822, CASODA1823, CASODA1824, CASODA1825, CASODA1826, CASODA1827, CASODA1900, CASODA2000, CASODA2001, CASODA2002, CASODA2003, CASODA2004, CASODA2005, CASODA2100, CASODA2101, CASODA2102, CASODA2103, CASODA2200, CASODA2201, CASODA2202, CASODA2300, CASODA2301, CASODA2302, CASODA2400, CASODA2500, CASODA2501, CASODA2502, CASODA2503, CASODA2504, CASODA2505, CASODA2506, CASODA2600, CASODA2601, CASODA2602, CASODA2603, CASODA2604, CASODA2605, CASODA2606, CASODA2607, CASODA2608, CASODA2609, CASODA2700, CASODA2701, CASODA2702, CASODA2703, CASODA2704, CASODA2800, CASODA2900, CASODA3000, CASODA3001, CASODA3002, CASODA3003, CASODA3004, CASODA3005, CASODA3006, CASODA3007, CASODA3008, CASODA3010, CASODA3011, CASODA3020, CASODA3021, CASODA3030, CASODA3040, CASODA3100, CASODA3101, CASODA3200, CASODA3201, CASODA3300, CASODA3400, CASODA3500, CASODA3501, CASODA3502, CASODA3503, CASODA3504, CASODA3505, CASODA3506, CASODA3600, CASODA3601, CASODA3700, CASODA3800, CASODA3900, CASODA4000, CASODA4001, CASODA4002, CASODA4003, CASODA4004, CASODA4005, CASODA4006, CASODA4200, CASODA4201, CASODA4500, CASODA4501, CASODA4502, CASODA4503, CASODA4504, CASODA4505, CASODA4506, CASODA4507, CASODA4508, CASODA4600, CASODA4601, CASODA5000, CASODA5001, CASODA5002, CASODA5003, CASODA5004, CASODA5005, CASODA5006, CASODA5007, CASODA5008, CASODA5009, CASODA5010, CASODA5015, CASODA5050, CASODA5200, CASODA5300, CASODA5301, CASODA5305, CASODA5306, CASODA5307, CASODA5308, CASODA5310, CASODA5500, CASODA5501, CASODA5502, CASODA5503, CASODA5504, CASODA5505, CASODA5506, CASODA5600, CASODA6000, CASODA6001, CASODA6002, CASODA6003, CASODA6010, CASODA6050, CASODA6051, CASODA6500, CASODA6501, CASODA7000, CASODA7100, CASODA7101, CASODA7200, CASODA7300, CASODA7500, CASODA7700, CASODA7701, CASODA7702, CASODA8000, CASODA8100, CASODA8101, CASODA8200, CASODA8201, CASODA8202, CASODA8205, CASODA8210, CASODA8250, CASODA8255, CASODA8300, CASODA8400, CASODA9000, CASODA9100, CASODA9600, CASODI3800

**Revision** 5

## Revision Date

05 Feb 2018

## 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  
**LC<sub>50</sub>** LC stands for lethal concentration. LC<sub>50</sub> 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.  
**LD<sub>50</sub>** LD stands for Lethal Dose. LD<sub>50</sub> 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 Heath 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