SAFETY DATA SHEET
PHENOL (88-90%) HYDRATE
REVISION 5, DATE 31 MAR 20

1. IDENTIFICATION

Product Name	**Phenol (88-90%) Hydrate**
Other Names	Phenol 88% Hydrate; PHENOL 90%
Uses	Manufacture, processing and distribution of substances and mixtures; Use in laboratories; Uses in coatings; Use as binders and release agents; Rubber production and processing; Polymer manufacturing; Polymer processing; Phenolic resin processing; Use as an intermediate; Use as a monomer; Use as a solvent; Manufacturing of resins.
Chemical Family	No Data Available
Chemical Formula	C6H6O
Chemical Name	Phenol (88-90%) Hydrate
Product Description	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) Schedule 6

Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories

Flammable Liquids - Category 4
Acute Toxicity (Oral) - Category 3
Acute Toxicity (Dermal) - Category 3
Acute Toxicity (Inhalation) - Category 3
Skin Corrosion/Irritation - Category 1B
Germ Cell Mutagenicity - Category 2
Specific Target Organ Toxicity (Repeated Exposure) - Category 2
Long-term Hazard To The Aquatic Environment - Category 2

Pictograms

Signal Word Danger

Hazard Statements

H227	Combustible liquid.
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention	**P280**	Wear protective gloves/protective clothing/eye protection/face protection.
	P260	Do not breathe mist/vapour/spray.
	P201	Obtain special instructions before use.
	P273	Avoid release to the environment.
	P270	Do not eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P233	Keep container tightly closed.
Response	**P303 + P361 + P353**	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P310	Immediately call a POISON CENTER or doctor.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
	P363	Wash contaminated clothing before reuse.
	P391	Collect spillage.
	P370 + P378	In case of fire: Use carbon dioxide (CO2), dry chemical, alcohol resistant foam or water spray for extinction.
	P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P308 + P313	IF exposed or concerned: Get medical attention.

Storage	**P405**	Store locked up.
	P403 + P235	Store in a well-ventilated place. Keep cool.
Disposal	**P501**	Dispose of contents/container in accordance with local / regional / national / international regulations.

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

Dangerous Goods Classification	Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Physical Hazards	**3.1D**	Flammable liquid - low hazard
	Health Hazards	**6.1C**	Substances that are acutely toxic- Toxic
		8.2B	Substances that are corrosive to dermal tissue UN PGII
		8.3A	Substances that are corrosive to ocular tissue
		6.6B	Substances that are suspected human mutagens
		6.9B	Substances that are harmful to human target organs or systems
	Environmental Hazards	**9.1C**	Substances that are harmful in the aquatic environment

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Phenol	C6H6O	108-95-2	87 - 91 %
Water	H2O	7732-18-5	9 - 13 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty 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.
Eye	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. *Do NOT use Polyethylene glycol (PEG) in the eye!
Skin	IF ON SKIN (or hair): Remove and isolate contaminated clothing and shoes. Immediately wash skin and hair thoroughly with Polyethylene glycol (e.g. PEG 300), then rinse 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.
Inhaled	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. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with

	a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult.
Advice to Doctor	Caution: A low symptom or symptom-free interval is possible - Medical observation is indicated. No specific antidote therapy for phenol poisoning is known. Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that attending medical personnel are aware of identity and nature of product(s) involved, and take precautions to protect themselves. In case of inhalation, to prevent pulmonary oedema, initiate inhalative cortisone therapy as early as possible (e.g. every 10 minutes, 5 strokes of a cortisone containing aerosol dosing spray); administer codeine against dry coughing. In case of commencing or manifested pulmonary oedema, systemic administration of cortisone. If swallowed, gastric lavage after intubation, activated charcoal, saline laxative.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	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.
Flammability Conditions	Combustible liquid; May burn but does not ignite readily.
Extinguishing Media	Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction - Do not use water jets. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used.
Fire and Explosion Hazard	Containers may explode when heated. When heated, vapours may form explosive mixtures with air. Vapours are heavier than air and will spread at floor level. Contact with metals may evolve flammable hydrogen gas.
Hazardous Products of Combustion	Fire will produce irritating, toxic and/or corrosive gases, including Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.
Special Fire Fighting Instructions	Contain runoff from fire control water - Runoff may be toxic and/or corrosive and pollute waterways. Fire residuals and contaminated extinguishing water must be disposed of in accordance with local regulations.
Personal Protective Equipment	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.
Flash Point	81 °C [DIN EN ISO 2719]
Lower Explosion Limit	1.3 %
Upper Explosion Limit	9.0 %
Auto Ignition Temperature	715 °C
Hazchem Code	2X

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation - Ventilate enclosed spaces before entering. ELIMINATE all ignition sources. Do not touch or walk through spilled material - Slippery when spilt. Avoid accidents, clean up immediately! Do not breathe vapours and prevent contact with eyes, skin and clothing.
Clean Up Procedures	Allow the leaked product to solidify, if this is possible, or absorb liquid phenol with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13).
Containment	Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas.
Decontamination	Collect the rinsing water when cleaning-down contaminated equipment and plant components.
Environmental Precautionary Measures	Spillages and decontamination runoff should be prevented from entering drains and watercourses.
Evacuation Criteria	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.
Personal Precautionary Measures	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8). *Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for this material.

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation - Use only outdoors or in a well-ventilated area. The substance should only be handled in closed apparatus or systems. Obtain special instructions before use - Do not handle until all safety directions have been read and understood. Do not breathe mist/vapours/spray and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection; In case of inadequate ventilation, wear respiratory protection (see SECTION 8). This material should be handled with EXTREME caution. Keep away from heat and sources of ignition - No smoking. Avoid release to the environment - Collect spillage (see SECTION 6).
Storage	Store in a cool, dry and well-ventilated place, at a temperature between 15 °C and 25 °C. Protect from sunlight. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat and sources of ignition - No smoking. Keep away from food, drink and animal foodstuffs. Keep away from incompatible materials (see SECTION 10). Store locked up - Only trained personnel should be allowed to enter storage area.
Container	Keep in the original container or compatible material, i.e. steel or refined steel. Unsuitable materials: metals, rubber, various plastics, alloys.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	COMPONENT: Phenol (CAS No. 108-95-2): - Safe Work Australia Exposure Standard: TWA = 1 ppm (4 mg/m3); Absorption through the skin may be a significant source of exposure (Sk). - New Zealand Workplace Exposure Standard (2020): TWA = 1 ppm (3.8 mg/m3); STEL = 2 ppm (7.7 mg/m3); Skin absorption (skin). - OSHA PEL: TWA = 5 ppm (19 mg/m3) [skin]. - NIOSH REL: TWA = 5 ppm (19 mg/m3); 15 minute CEILING: 15.6 ppm (60 mg/m3) [skin]. - Immediately dangerous to life or health (IDLH) concentration: 250 ppm.
Exposure Limits	No Data Available
Biological Limits	Derived no-effect levels (DNELs) for Workers: - Inhalative, Long-term: 8 mg/m3 - Dermal, Long-term: 1.23 mg/kg/day. Predicted no-effect concentrations (PNECs): - Freshwater: 0.0077 mg/l - Marine water: 0.0077 mg/l - Freshwater sediment: 0.0915 mg/kg dw. - Marine water sediment: 0.00915 mg/kg dw. - Soil: 0.136 mg/kg dw.
Engineering Measures	Use engineering controls to reduce air contamination to permissible exposure level. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Process exhaust through separator/filter as needed.
Personal Protection Equipment	- Respiratory protection: Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists. Recommended: Combination filter, type ABEK (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Goggles; Face protection shield. - Hand protection: Wear protective gloves. Recommended: Neoprene (Break through time: 140 min); Polyvinyl chloride (Break through time: 75 min). - Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Protective suit (PVC); Safety shoes.
Special Hazards Precaustions	Strong skin absorption as main danger of phenol poisoning at the workplace with paralysis of the central nervous system (with lethal consequences in severe cases) as well as liver and kidney damage.
Work Hygienic Practices	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and shoes immediately and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Liquid (above 5 °C)
Odour	Phenolic
Colour	Colourless or faintly coloured
pH	4 - 5 (10 g/l @ 20 °C)
Vapour Pressure	0.2 hPa @ 20 °C - 3 hPa @ 50 °C (@ No Data Available)
Relative Vapour Density	3.2 Air = 1
Boiling Point	99 - 182 °C
Melting Point	0 - 5 °C
Freezing Point	No Data Available
Solubility	84 g/l @ 20 °C; 87 g/l @ 25 °C - Fully miscible @ 68 °C
Specific Gravity	No Data Available
Flash Point	81 °C [DIN EN ISO 2719]
Auto Ignition Temp	715 °C
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	1.120 g/cm3 @ 25 °C - 1.045 g/cm3 @ 50 °C
Specific Heat	No Data Available
Molecular Weight	94.11 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	1.47 log P(o/w)
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	20 °C
Viscosity	3.437 mPas (@ 50 °C)
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	The substance is hygroscopic and will absorb water by contact with the moisture in the air.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Combustible liquid; May burn but does not ignite readily.
Reactions That Release Gases or Vapours	Combustion/thermal decomposition may produce irritating, toxic and/or corrosive gases, including Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.
Release of Invisible Flammable Vapours and Gases	When heated, vapours may form explosive mixtures with air.

10. STABILITY AND REACTIVITY

General Information	Upon heating, toxic fumes are formed. The solution in water is a weak acid. Reacts with oxidants causing fire and explosion hazard.
Chemical Stability	Stable under normal temperature conditions and recommended use.
Conditions to Avoid	Keep away from heat and sources of ignition. Avoid exposure to direct sunlight - It may react to form catechol, hydroquinone, as result of radical formation.
Materials to Avoid	Incompatible/reactive with oxidising agents, aldehydes, isocyanates, nitrites, nitrides, Friedel-craft catalysts.
Hazardous Decomposition Products	Combustion/thermal decomposition may produce irritating, toxic and/or corrosive gases, including Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.
Hazardous Polymerisation	Will not polymerise.

11. TOXICOLOGICAL INFORMATION

General Information

- Acute toxicity: Toxic if swallowed, in contact with skin and if inhaled. Corrosive on ingestion. The substance may cause effects on the central nervous system, heart and kidneys, resulting in convulsions, coma, cardiac disorders, respiratory failure, collapse. Exposure may result in death. The effects may be delayed.
- Skin corrosion/irritation: Causes severe skin burns. Corrosive to the skin.
- Eye damage/irritation: Causes serious eye damage. Corrosive to the eyes, with pain, redness, severe (deep) burns, permanent loss of vision.
- Respiratory/skin sensitisation: Not sensitising.
- Germ cell mutagenicity: Suspected of causing genetic defects. COMPONENT: Phenol (CAS No. 108-95-2): Bacterial mutagenicity: negative; Chromosomal aberrations, in-vitro: positive; Micronucleus test, in-vitro: positive; Gene-mutations, mammalian cells, in-vitro: positive; Sister chromatid exchange, in-vitro: positive; Micronucleus test, in-vivo: weak positive.
- Carcinogenicity: COMPONENT: Phenol (CAS No. 108-95-2) is listed in the IARC Monographs, Group 3: Not classifiable as to its carcinogenicity to humans.
- Reproductive toxicity: No evidence of reproductive toxicity; does not show specific developmental toxicity.
- STOT (single exposure): The substance, and the vapour, is corrosive to the respiratory tract - Inhalation of vapour may cause lung oedema. Strong skin absorption as main danger of phenol poisoning at the workplace with paralysis of central nervous system (with lethal consequences in severe cases) as well as liver and kidney damage.
- STOT (repeated exposure): May cause damage to organs through prolonged or repeated exposure. COMPONENT: Phenol (CAS No. 108-95-2): The substance may have effects on the liver and kidneys.
- Aspiration toxicity: No information available.

Acute

Ingestion

Acute toxicity (Oral):
COMPONENT: Phenol (CAS No. 108-95-2):
- LD50, Rats: 340 mg/kg bw [aqueous preparation, containing 20% phenol].
*Oral toxicity of phenol in humans leading to the death of the victim is reported for doses as low as 140 - 290 mg/kg bw.

Other

Acute toxicity (Dermal):
COMPONENT: Phenol (CAS No. 108-95-2):
- LD50, undiluted phenol: 660 - 707 mg/kg bw.
*A dose of 100 % phenol has been shown to be less toxic than the same dose of phenol given as a diluted solution.
*Death following dermal application of phenol has been reported. Following skin contact, absorption is very rapid and the symptoms develop rapidly (within 15–20 minutes). Death can occur within 30 minutes to several hours.

Inhalation

Acute toxicity (Inhalation):
COMPONENT: Phenol (CAS No. 108-95-2):
- LC50, Rats: >236 ppm (900 mg/m3) 8 h.
*All the treated animals survived the 14-day observation period.

Carcinogen Category None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: COMPONENT: Phenol (CAS No. 108-95-2): - LC50, Fish: 8.9 mg/L (96 h). - NOEC, Fish: 0.077 mg/L (60 d). - EC50, Daphnia: 3.1 mg/L (48 h). - EC10, Daphnia magna: 0.46 mg/L (16 d). - EC50, Algae (freshwater): 61.1 mg/L (96 h). - EC50, Algae (marine water): 76 mg/L (72 h).
Persistence/Degradability	- Abiotic degradation: Air (indirect photo-degradation by reaction with OH radicals): half-life (DT50): approx. 14 d. - Activated sludge: Readily biodegradable (62 %, 100 h) [OECD 301C]; Rapidly biodegradable under anaerobic conditions (80.1 %, 50 d) [ECETOC method]. - Water: Not susceptible to hydrolysis. Easily biodegradable (86 - 96 %, 20 d) [BOD-test APHA]. - COD: 2.3 g/g - ThOD: 2.26 mg/l
Mobility	- The product is soluble in water. - The soil sorption coefficient indicates a low sorption of phenol onto organic matter (Soil Koc: 82.8 @ 20 °C, calculated as log Pow). - The calculated Henry's Law constant indicates a low to moderate volatility from aqueous solutions (Henry's Law Constant: 0.022 Pa m3/mol @ 20 °C).
Environmental Fate	Toxic to aquatic life with long lasting effects - Avoid release to the environment.
Bioaccumulation Potential	- Significant bioaccumulation potential is not to be expected (BCF: 17.5, Danio rerio). - Appreciable bioaccumulation is not expected (log P(o/w): 1.47).
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container via a licensed disposal contractor and in accordance with local/regional/national regulations.
Special Precautions for Land Fill	Contaminated packaging: Proceed in the same manner as when disposing of the product.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	PHENOL SOLUTION
Class	6.1 Toxic and Infectious Substances - Toxic Substances
Subsidiary Risk(s)	C1 Combustible Liquids - Flash Point >60°C - <=93°C, Closed Cup
EPG	36 Toxic And/Or Corrosive Substances Combustible
UN Number	2821
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	PHENOL SOLUTION
Class	6.1 Toxic and Infectious Substances - Toxic Substances

Subsidiary Risk(s)	No Data Available
EPG	36 Toxic And/Or Corrosive Substances Combustible
UN Number	2821
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Land Transport (New Zealand)
NZS5433

Proper Shipping Name	PHENOL SOLUTION
Class	6.1 Toxic and Infectious Substances - Toxic Substances
Subsidiary Risk(s)	No Data Available
EPG	36 Toxic And/Or Corrosive Substances Combustible
UN Number	2821
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Land Transport (United States of America)
US DOT

Proper Shipping Name	PHENOL SOLUTION
Class	6.1 Toxic and Infectious Substances - Toxic Substances
Subsidiary Risk(s)	No Data Available
ERG	153 Substances - Toxic and/or Corrosive (Combustible)
UN Number	2821
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Sea Transport
IMDG Code

Proper Shipping Name	PHENOL SOLUTION
Class	6.1 Toxic and Infectious Substances - Toxic Substances
Subsidiary Risk(s)	No Data Available
UN Number	2821
Hazchem	2X
Pack Group	II
Special Provision	No Data Available
EMS	F-A, S-A
Marine Pollutant	Yes

Air Transport
IATA DGR

Proper Shipping Name	PHENOL SOLUTION
Class	6.1 Toxic and Infectious Substances - Toxic Substances
Subsidiary Risk(s)	No Data Available
UN Number	2821
Hazchem	2X

Pack Group	II
Special Provision	No Data Available

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

Dangerous Goods Classification	Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information	PHENOL
Poisons Schedule (Aust)	Schedule 6

Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR002511 HSR006388 (Revoked)

National/Regional Inventories

Australia (AIIC)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	203-632-7
Europe (REACh)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	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	PHENOL7700, PHENOL7800, PHENOL7900, PHENOL8000, PHENOL8800, PHENOL8801, PHENOL9000
Revision	5
Revision Date	31 Mar 2020
Reason for Issue	SDS updated
Key/Legend	**<** Less Than **>** Greater Than **AICS** Australian Inventory of Chemical Substances **atm** Atmosphere **CAS** Chemical Abstracts Service (Registry Number) **cm^2** Square Centimetres **CO2** Carbon Dioxide **COD** Chemical Oxygen Demand **deg C (°C)** Degrees Celcius **EPA (New Zealand)** Environmental Protection Authority of New Zealand **deg F (°F)** Degrees Farenheit **g** Grams **g/cm^3** 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 **inH2O** Inch of Water **K** Kelvin **kg** Kilogram **kg/m^3** 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^3** Cubic Metre **mbar** Millibar **mg** Milligram **mg/24H** Milligrams per 24 Hours **mg/kg** Milligrams per Kilogram **mg/m^3** Milligrams per Cubic Metre **Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present. **mm** Millimetre **mmH2O** Millimetres of Water **mPa.s** Millipascals per Second **N/A** Not Applicable **NIOSH** National Institute for Occupational Safety and Health **NOHSC** National Occupational 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