

SAFETY DATA SHEET



Revision date: 21-Apr-2020

Revision Number 6

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name PEPSET 1620

Product Code(s) 000000016025

Other means of identification

Proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S. (CONTAINS PHENOL)

UN number 2922

Recommended use of the chemical and restrictions on use

Recommended use Foundry sand binder.

Uses advised against No information available.

Details of the supplier of the safety data sheet

Supplier

Ixom Operations Pty Ltd (Incorporated in Australia)
NZBN: 9429041465226 Address: 166 Totara Street
Mt Maunganui South
New Zealand

Telephone Number: +64 9 368 2700

Facimile: +64 9 368 2710

For further information, please contact

Contact Point Product Safety Department

Emergency telephone number

Emergency Telephone 0 800 734 607 (ALL HOURS)

2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

GHS Classification

SIGNAL WORD

Danger

Subclass 9.2 Category A - Substances that are very ecotoxic in the soil environment.

Subclass 9.3 Category C - Substances that are harmful to terrestrial vertebrates.

Additives, Process Chemicals and Raw Materials (Corrosive, Combustible, Toxic [6.1 + 6.7]) Group Standard 2017

Approval Number: HSR002507

Aspiration hazard	Category 1 (HSNO - 6.1E)
Acute toxicity - Oral	Category 4 (HSNO - 6.1D)
Acute toxicity - Dermal	Category 4 (HSNO - 6.1D)
Acute toxicity - Inhalation (Vapors)	Category 3 (HSNO - 6.1C)
Skin corrosion/irritation	Category 1 Sub-category B (HSNO - 8.2B)
Serious eye damage/eye irritation	Category 1 (HSNO - 8.3A)
Skin sensitization	Category 1 (HSNO - 6.5B)
Germ cell mutagenicity	Category 1B (HSNO - 6.6A)
Carcinogenicity	Category 1B (HSNO - 6.7A)
Reproductive toxicity	Category 2 (HSNO - 6.8B)
Specific target organ toxicity (repeated exposure)	Category 1 (HSNO - H372)
Acute aquatic toxicity	Category 3 (HSNO - 9.1C)
Chronic aquatic toxicity	Category 3 (HSNO - 9.1C)

Label elements



Hazard statements

H227 - Combustible liquid
 H302 - Harmful if swallowed
 H304 - May be fatal if swallowed and enters airways
 H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H331 - Toxic if inhaled
 H340 - May cause genetic defects
 H350 - May cause cancer
 H361 - Suspected of damaging fertility or the unborn child
 H372 - Causes damage to organs through prolonged or repeated exposure
 H412 - Harmful to aquatic life with long lasting effects
 H421 - Very toxic to the soil environment
 H433 - Harmful to terrestrial vertebrates

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Use only outdoors or in a well-ventilated area
 Do not breathe dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Avoid release to the environment

Precautionary Statements - Response

Specific treatment (see First aid on this SDS)
 Immediately call a POISON CENTER or doctor/physician
 Specific treatment (see First aid on this SDS)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician

Call a POISON CENTER or doctor/physician if you feel unwell
 Wash contaminated clothing before reuse
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 If skin irritation or rash occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a POISON CENTER or doctor/physician
 Rinse mouth
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting
 Collect spillage

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

Other hazards which do not result in classification

No information available.

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

Not applicable Not applicable.

Mixture

Chemical name	CAS No.	Weight-%
Phenol, polymer with formaldehyde	9003-35-4	50-<70
Solvent naphtha (petroleum) heavy arom.	64742-94-5	10-<20
Dimethyl glutarate	1119-40-0	10-<20
Phenol	108-95-2	1-<10
Solvent naphtha (petroleum), light arom.	64742-95-6	1-<10
Dimethyl succinate	106-65-0	1-<10
1,2,4-Trimethylbenzene	95-63-6	1-<10
Dimethyl adipate	627-93-0	1-<10
Naphthalene	91-20-3	1-<10
Formaldehyde	50-00-0	0.1-<1
Diethylbenzene	25340-17-4	0.1-<1
Non hazardous component(s)	-	to 100

4. FIRST AID MEASURES**Description of first aid measures**

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Emergency telephone number Poisons Information Center, New Zealand: 0800 764 766
 Poisons Information Center, Australia: 13 11 26

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. 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. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention. Aspiration into lungs can produce severe lung damage. Avoid direct

	contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention. May cause an allergic skin reaction.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	Burning sensation. Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.
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5. FIRE FIGHTING MEASURES**Suitable Extinguishing Media**

Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.
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Unsuitable extinguishing media	Do not use straight streams. Do not scatter spilled material with high pressure water streams.
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Specific hazards arising from the chemical

Specific hazards arising from the chemical	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact.
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Hazardous combustion products	Carbon oxides. Hydrocarbons.
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Special protective actions for fire-fighters

Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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Hazchem code	2X
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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.
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Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Cover liquid spill with sand, earth or other non-combustible absorbent material. Pick up and transfer to properly labelled containers. Use clean non-sparking tools to collect absorbed material.

Precautions to prevent secondary hazards

Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
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7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from incompatible materials (refer to SDS).
Incompatible materials	Acids. Bases. Oxidizing agents. Metals. Isocyanates.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Limits**

. No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituent(s):

Chemical name	New Zealand	ACGIH
Phenol 108-95-2	120 mg/g creatinine urine end of shift Phenol	250 mg/g creatinine

Naphthalene: WES-TWA 10 ppm, 52 mg/m³; WES-STEL 15 ppm, 79 mg/m³

Phenol: WES-TWA 1 ppm, 4 mg/m³, skin

Trimethyl benzene: WES-TWA 25 ppm; 123 mg/m³

Formaldehyde: Ceiling 1 ppm (1.2 mg/m³), 6.7A Known or presumed human carcinogen, Sen

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

WES - STEL (Workplace Exposure Standard - Short Term Exposure Limits) - The 15 minute average exposure standard. Applies to any 15 minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both short-term and eight-hour, time-weighted average exposures should be determined.

WES - Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

'Sen' Notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

'Skin' Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls**Engineering controls**

Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



Eye/face protection	Face protection shield. If splashes are likely to occur, wear safety glasses with side-shields.
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
Environmental exposure controls	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available.
Color	Amber
Odor	No information available.
Odor threshold	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	181°C	None known
Flash point	75°C	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	8.5% (V)	
Lower flammability or explosive limits	1% (V)	
Vapor pressure	<2.9 hPa @20°C	None known
Vapor density	>1 (air=1)	None known
Relative density	1.102	None known
Water solubility	slightly soluble	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	180 mPa.s @25°C	None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

Reactivity	No information available.
<u>Chemical stability</u>	
Stability	Stable under normal conditions.
<u>Explosion data</u>	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
<u>Possibility of hazardous reactions</u>	
Possibility of hazardous reactions	None under normal processing.
<u>Conditions to avoid</u>	
Conditions to avoid	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.
<u>Incompatible materials</u>	
Incompatible materials	Acids. Bases. Oxidizing agents. Metals. Isocyanates.
<u>Hazardous decomposition products</u>	
Hazardous decomposition products	Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
Inhalation	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Causes burns. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts.
Ingestion	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the

mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

Symptoms

Redness. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes. Hives. Difficulty in breathing. Dizziness.

Acute toxicity**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	1,115 mg/kg
ATEmix (dermal)	1,500 mg/kg
ATEmix (inhalation-vapor)	8.66 mg/l (4 hr)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Phenol, polymer with formaldehyde	> 5 g/kg (Rat)	> 2 g/kg (Rat)	-
Solvent naphtha (petroleum)heavy arom.	> 5000 mg/kg (Rat)	> 2 mL/kg (Rabbit)	> 590 mg/m ³ (Rat) 4 h
Dimethyl glutarate	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 5.6 mg/L (Rat) 4 h
Phenol	= 340 mg/kg (Rat) = 317 mg/kg (Rat)	= 630 mg/kg (Rabbit)	= 316 mg/m ³ (Rat) 4 h
Solvent naphtha (petroleum), light arom.	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Dimethyl succinate	> 5 g/kg (Rat)	> 5 g/kg (Rabbit)	-
1,2,4-Trimethylbenzene	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
Dimethyl adipate	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Naphthalene	= 490 mg/kg (Rat) = 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit) > 20 g/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 h
Formaldehyde	= 100 mg/kg (Rat)	= 270 mg/kg (Rabbit)	= 0.578 mg/L (Rat) 4 h
Diethylbenzene	= 2050 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

Classification based on data available for ingredients. Causes burns.

Serious eye damage/eye irritation

Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

Respiratory or skin sensitization

May cause sensitization by skin contact

Germ cell mutagenicity

Classification based on data available for ingredients. Contains a known or suspected mutagen.

Carcinogenicity

Classification based on data available for ingredients. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as carcinogenic.

Chemical name	New Zealand	IARC
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Phenol - 108-95-2		Group 3
Naphthalene - 91-20-3	Suspected carcinogen	Group 2B
Formaldehyde - 50-00-0	Confirmed carcinogen	Group 1

Legend**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Reproductive toxicity	Classification based on data available for ingredients. Contains a known or suspected reproductive toxin.
STOT - single exposure	No information available.
STOT - repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION**Ecotoxicity****Ecotoxicity** Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Solvent naphtha (petroleum)heavy arom.	EC50: =2.5mg/L (72h, Skeletonema costatum)	LC50: =19mg/L (96h, Pimephales promelas) LC50: =2.34mg/L (96h, Oncorhynchus mykiss) LC50: =1740mg/L (96h, Lepomis macrochirus) LC50: =45mg/L (96h, Pimephales promelas) LC50: =41mg/L (96h, Pimephales promelas)	EC50: =0.95mg/L (48h, Daphnia magna)
Dimethyl glutarate	-	LC50: 19.6 - 26.2mg/L (96h, Pimephales promelas)	EC50: 122.1 - 163.5mg/L (48h, Daphnia magna)
Phenol	EC50: =46.42mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.0188 - 0.1044mg/L (96h, Pseudokirchneriella subcapitata) EC50: 187 - 279mg/L (72h, Desmodesmus subspicatus)	LC50: 11.9 - 50.5mg/L (96h, Pimephales promelas) LC50: 20.5 - 25.6mg/L (96h, Pimephales promelas) LC50: =32mg/L (96h, Pimephales promelas) LC50: 5.449 - 6.789mg/L (96h, Oncorhynchus mykiss) LC50: 7.5 - 14mg/L (96h, Oncorhynchus mykiss) LC50: 4.23 - 7.49mg/L (96h, Oncorhynchus mykiss) LC50: =27.8mg/L (96h, Brachydanio rerio) LC50: =0.00175mg/L (96h, Cyprinus carpio) LC50: 33.9 - 43.3mg/L (96h, Oryzias latipes) LC50: 23.4 - 36.6mg/L (96h, Oryzias latipes) LC50: 5.0 - 12.0mg/L (96h, Oncorhynchus mykiss) LC50: =13.5mg/L (96h, Lepomis macrochirus) LC50: 11.9 - 25.3mg/L (96h, Lepomis macrochirus) LC50: =11.5mg/L (96h, Lepomis macrochirus) LC50: 34.09 - 47.64mg/L (96h, Poecilia reticulata) LC50: =31mg/L (96h, Poecilia reticulata)	EC50: 4.24 - 10.7mg/L (48h, Daphnia magna) EC50: 10.2 - 15.5mg/L (48h, Daphnia magna)
Solvent naphtha (petroleum), light arom.	-	LC50: =9.22mg/L (96h, Oncorhynchus mykiss)	EC50: =6.14mg/L (48h, Daphnia magna)

Dimethyl succinate	-	LC50: 50 - 100mg/L (96h, Brachydanio rerio)	-
1,2,4-Trimethylbenzene	-	LC50: 7.19 - 8.28mg/L (96h, Pimephales promelas)	EC50: =6.14mg/L (48h, Daphnia magna)
Naphthalene	EC50: =0.4mg/L (72h, Skeletonema costatum)	LC50: 5.74 - 6.44mg/L (96h, Pimephales promelas) LC50: =1.6mg/L (96h, Oncorhynchus mykiss) LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss) LC50: =1.99mg/L (96h, Pimephales promelas) LC50: =31.0265mg/L (96h, Lepomis macrochirus)	LC50: =2.16mg/L (48h, Daphnia magna) EC50: =1.96mg/L (48h, Daphnia magna) EC50: 1.09 - 3.4mg/L (48h, Daphnia magna)
Formaldehyde	-	LC50: 22.6 - 25.7mg/L (96h, Pimephales promelas) LC50: =1510µg/L (96h, Lepomis macrochirus) LC50: =41mg/L (96h, Brachydanio rerio) LC50: 0.032 - 0.226mL/L (96h, Oncorhynchus mykiss) LC50: 100 - 136mg/L (96h, Oncorhynchus mykiss) LC50: 23.2 - 29.7mg/L (96h, Pimephales promelas)	LC50: =2mg/L (48h, Daphnia magna) EC50: 11.3 - 18mg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil No information available.

Chemical name	Partition coefficient
Solvent naphtha (petroleum)heavy arom.	2.9 - 6.1
Phenol	1.5
Dimethyl succinate	0.19
1,2,4-Trimethylbenzene	3.63
Naphthalene	3.6
Formaldehyde	0.35

Other adverse effects

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

UN number 2922
Proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S. (CONTAINS PHENOL)
Hazard class 8
Subsidiary hazard class 6.1
Packing group II
Hazchem code 2X

IATA Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 2922
UN proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S. (CONTAINS PHENOL)
Transport hazard class(es) 8
Subsidiary hazard class 6.1
Packing group II

IMDG Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 2922
UN proper shipping name CORROSIVE LIQUID, TOXIC, N.O.S. (CONTAINS PHENOL)
Transport hazard class(es) 8
Subsidiary hazard class 6.1
Packing group II
IMDG EMS Fire F-A
IMDG EMS Spill S-B

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

New Zealand

National regulations See section 8 for national exposure control parameters

Chemical name	New Zealand HSNO Chemical Classification
Phenol, polymer with formaldehyde - 9003-35-4	9.1D (All),9.1D (F),9.1D (C),9.1D (A),9.2A
Dimethyl glutarate - 1119-40-0	6.4A,9.1D (All),9.1D (F),9.1D (A)
Phenol - 108-95-2	6.1B (All),6.1B (I),6.1C (D),6.1C (O),6.6A,6.8B,6.9A (All),6.9A (D),6.9A (O),8.2B,8.3A,9.1D (All),9.1D (A),9.1D (C),9.1D (F),9.2D,9.3B 6.1B (All),6.1B (I),6.1C (D),6.1C (O),6.6B,6.8B,6.9A (All),6.9A (D),6.9A (O),8.2B,8.3A,9.1D (All),9.1D (A),9.1D (C),9.1D (F),9.2D,9.3B 6.1B (All),6.1B (I),6.1C (O),6.1C (D),6.6A,6.8B,6.9A (All),6.9A (O),6.9A (D),8.2B,8.3A,9.1D (All),9.1D (A),9.1D (C),9.1D (F),9.2D,9.3B
Dimethyl succinate - 106-65-0	3.1D,6.4A,9.1D (All),9.1D (F)
1,2,4-Trimethylbenzene - 95-63-6	3.1C,6.1D (All),6.1D (I),6.1E (O),6.3B,6.4A,6.9B (All),6.9B (I),9.1B (All),9.1B (C),9.1B (F)
Dimethyl adipate - 627-93-0	6.1D (All),6.1D (O),9.3C
Naphthalene - 91-20-3	4.1.1B,6.1D (All),6.1D (D),6.1D (O),6.3B,6.4A,6.7B,6.9A (All),6.9A (O),6.9A (I),9.1B (F),9.1B (C),9.1A (All),9.1A (A),9.3B
Formaldehyde - 50-00-0	3.1C,6.1B (All),6.1B (I),6.1C (D),6.1C (O),6.5B,6.6B,6.7A,6.9B (All),6.9B (I),6.9B (O),8.2C,8.3A,9.1D (All),9.1D (C),9.1D

	(F),9.2A,9.3B 3.1D,6.1B (All),6.1B (I),6.1C (D),6.1C (O),6.5B,6.6B,6.7A,6.9B (All),6.9B (I),6.9B (O),8.2C,8.3A,9.1D (All),9.1D (C),9.1D (F),9.2A,9.3B 6.1D (All),6.1D (D),6.1D (I),6.1D (O),6.3A,6.4A,6.5B,6.6B,6.7A,6.9A (All),6.9A (O),6.9B (I),9.1D (All),9.1D (C),9.1D (F),9.2B,9.3C 6.1E (All),6.3A,6.4A,6.5B,6.6B,6.7A,6.9B (All),9.2B 6.3A,6.4A,6.5B,9.2B
Diethylbenzene - 25340-17-4	3.1C,6.1E (All),6.1E (O),6.3B,6.4A,9.1A (All),9.1A (A),9.1A (F),9.1B (C)

International Inventories

NZIoC	All the constituents of this material are listed on the New Zealand Inventory of Chemicals.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend:

NZIoC	- New Zealand Inventory of Chemicals
TSCA	- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL	- Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	- Japan Existing and New Chemical Substances
IECSC	- China Inventory of Existing Chemical Substances
KECL	- Korean Existing and Evaluated Chemical Substances
PICCS	- Philippines Inventory of Chemicals and Chemical Substances
AICS	- Australian Inventory of Chemical Substances

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Supplier Safety Data Sheet 01/ 2017

Prepared By

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Issuing Date:

21-Apr-2020

Reason(s) For Issue:

5 Yearly Revised Primary SDS
Change in Hazardous Chemical Classification
Change to Transport Information

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 RTECS (Registry of Toxic Effects of Chemical Substances)
 World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet