

Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Classified as Dangerous Goods for transport, according to the New Zealand Standard NZS 5433:1999 Transport of Dangerous Goods on Land.

HSNO Classification:

- 3.1D - Substance that is flammable liquid: Low hazard.
- 6.1A - Substance that is acutely toxic.
- 6.9A - Substance that is toxic to human target organs or systems.
- 8.2B - Substance that is corrosive to dermal tissue.
- 8.3A - Substance that is corrosive to ocular tissue.
- 9.1D - Substance that is slightly harmful in the aquatic environment
- 9.3B - Substance that is toxic to terrestrial vertebrates.

Risk Phrase(s) R34 Causes burns.
R24/25 Toxic in contact with skin and if swallowed.

Safety Phrase (s) S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S27 Take off immediately all contaminated clothing.
S44 If you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible).
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
S24/25 Avoid contact with skin and eyes.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	m-Cresol	108-39-4	100 %

4. FIRST AID MEASURES

Inhalation Remove the source of contamination or move the affected person to fresh air. Ensure airways are clear. Allow to assume most comfortable position and keep warm. Keep at rest until fully recovered. If symptoms persist seek medical attention.

Ingestion Do NOT induce vomiting. Rinse mouth and lips thoroughly with water. Seek immediate medical attention.

Skin If on skin, remove any contaminated clothing, wash skin thoroughly with soap and water, then methylated spirits if available. Contact the Poisons Information Centre or a doctor.

Eye If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.

First Aid

Facilities	Eye wash station, safety shower and normal washroom facilities.
Advice to Doctor	Treat symptomatically or consult a Poison Information Centre.
Other Information	For advice in an emergency, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 POISON / 0800 764 766) or a doctor (at once).

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use water fog, water spray, foam, carbon dioxide or dry chemical powder.
Hazards from Combustion Products	Under fire conditions this product may emit toxic and/or irritating fumes including carbon monoxide, carbon dioxide and phenols.
Specific Hazards	Combustible liquid. This product will readily burn if exposed to fire.
Hazchem Code	2X
Precautions in connection with Fire	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing to prevent exposure to vapours, fumes or products of combustion. Water spray may be used to cool down heat-exposed containers.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Remove all sources of ignition. Increase ventilation. Evacuate all unnecessary personnel. Wear protective clothing and equipment to prevent exposure. If possible contain the spill. Place inert absorbent such as vermiculite or sand onto material. Prevent run off into drains and waterways. Use clean non-sparking tools to collect the material and place into suitable, labelled containers for subsequent recycling or disposal. If spillage enters the waterways inform the EPA and the local water authorities.
-----------------------------	---

7. HANDLING AND STORAGE

Precautions for Safe Handling	Avoid contact with skin and eyes. Wear overalls, impervious gloves and safety glasses. Use only in well ventilated areas. Avoid breathing vapour or spray mist. Keep containers closed when not in use. Do not empty into drains. Ensure that a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.
Conditions for Safe Storage	Store in a cool, dry, well ventilated area away from sources of ignition. This product should be stored away from foodstuffs, strong oxidising agents, acids and bases. Keep containers

tightly closed when not in use and when empty. Protect from damage. For information on the design of the store-room reference should be made to Australian Standard AS1940, The storage and handling of flammable and combustible liquids. Reference should also be made to any applicable local and national regulations.

Storage Regulations

Classified as a Class C1 (COMBUSTIBLE LIQUID) for the purposes of storage and handling, in accordance with the requirements of AS1940. This product should be stored and used in a well ventilated area away from naked flames, sparks and other sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards

Name	STEL (mgm3)	STEL (ppm)	TWA (mgm3)	TWA (ppm)	FootNote
m-Cresol			22	5	

Other Exposure Information

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
 STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Engineering Controls

Engineering control methods to reduce hazardous exposures are preferred. Methods include mechanical ventilation (dilution and local exhaust), process or personnel enclosure and control of process conditions. Use a corrosion-resistant ventilation system separate from other exhaust ventilation systems. Use local exhaust ventilation, and process enclosure if necessary, to control airborne mist and vapour. Supply sufficient replacement air to make up for air removed by exhaust systems.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable organic vapour filter and P1 particulate filter should be used. Final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, goggles or faceshield should be worn as described in Australian Standard AS/ANZ 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Chemically impervious gloves should be worn. Heavy PVC, butyl-viton or nitrile gloves are recommended.

Body Protection

Suitable protective clothing should be worn e.g. cotton overalls buttoned at neck and wrist.

Hygiene

Ensure a high level of personal hygiene is maintained when using

Measures this product. Always wash hands before eating, drinking, smoking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Colourless to yellowish liquid with a phenolic or coal tar odour.

Melting Point 12°C

Boiling Point 202°C

Solubility in Water Moderately soluble (2.35g/100mL at 20°C)

Solubility in Organic Solvents Soluble in ethyl alcohol, chloroform, ether, acetone, benzene, carbon tetrachloride and other common organic solvents.

Specific Gravity 1.03

Vapour Pressure 0.04 mmHg at 20°C.
0.12 mmHg at 30°C.

Vapour Density (Air=1) 3.72

Flash Point 86°C (closed cup)

Flammability Combustible liquid.

Auto-Ignition Temperature 558°C

Flammable Limits - Lower Not available

Flammable Limits - Upper Not available

Explosion Limit - Upper Not available

Explosion Limit - Lower 1.1% at 150°C

10. STABILITY AND REACTIVITY

Chemical Stability Stable.

Incompatible Materials Strong oxidizing agents, acids, bases and oleum.

Hazardous Decomposition

Products Carbon monoxide, carbon dioxide and phenols.

Hazardous Polymerization Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information LD50 (Oral, Rat): 242 mg/kg.
LD50 (Dermal, Rabbit): 2050 mg/kg.

Inhalation Inhalation of vapours or mists may irritate the nose and throat. Signs and symptoms may appear within 20-30 minutes including headache, stomach upset, depression, dizziness, mental confusion, irregular and rapid breathing, weak pulse, muscle weakness, cloudy vision and ringing in the ears. In extreme cases, loss of consciousness, lung damage (edema), damage to the kidney, liver, pancreas and spleen, and death may result.

Ingestion Toxic if swallowed. Will cause severe irritation and burns to the mouth, esophagus, and stomach. Symptoms may include nausea, vomiting, and abdominal pain.

Skin Toxic in contact with the skin. Concentrated solutions are very corrosive to all tissues and cause burns if not removed quickly. Soon after contact, sensations of prickling and intense burning occur, followed by loss of feeling. The affected skin becomes soft, wrinkled and discoloured. Later, gangrene may occur. Dilute solutions can cause redness, blistering and ulceration.

Eye Will cause severe irritation and burns to the eyes, which will result in pain, permanent eye damage (including blindness), unless removed immediately. Damage such as clouding of the cornea may be partially or wholly reversible. Healing may take several months.

Chronic Effects Prolonged or repeated absorption through the skin and by ingestion and inhalation can cause chronic poisoning. The effects may include abundant production of saliva, vomiting, diarrhea, loss of appetite, headache, dizziness, mental disturbances and fainting. There may be temporary or permanent damage to the lungs, liver, kidneys, heart and sometimes the pancreas and spleen. Certain individuals can develop contact dermatitis to the liquid. Rarely, prolonged skin contact with cresol can result in a disorder called ochronosis, a darkening of the skin, conjunctiva and cartilage of the nose and ears. However, no sensitization reactions or irritation have been observed following application of 4% p-cresol in petrolatum on 25 human subjects.

12. ECOLOGICAL INFORMATION

Ecotoxicity Not available

Persistence / Degradability Not available

Mobility Not available

Bioaccumulative Potential Not available

Environment Protection Do not allow product to enter drains, waterways or sewers.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information Australia
This material is classified as Class 6.1 Toxic Substance according to the Australian Code for the Transport of Dangerous Goods. Class 6.1 Toxic Substances are incompatible in a placard load with any of the following:

- Class 1, Explosives.
- Class 3, if the Class 3 Dangerous Goods are nitromethane.
- Class 5.1, if the Class 6 Dangerous Goods are fire risk substances.
- Class 5.2, if the Class 6 Dangerous Goods are fire risk substances.
- Class 8, if the Class 6 Dangerous Goods are cyanides and the Class 8 Dangerous Goods are acids;

and are incompatible with food and food packaging in any quantity.

New Zealand
This material is classified as a Class 6.1 - Toxic Substances according to NZS 5433:1999 Transport of Dangerous Goods on Land.

This material must not be loaded in the same freight container or on the same vehicle with:

- (Class 1) Explosives,

and are incompatible with food and food packaging in any quantity.

Note 1; Cyanides (Class 6.1) must not be loaded in the same freight container or on the same vehicle with acids (Class 8). Must not be loaded with in the same freight container; and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

- (Class 5.1) Oxidising Substances
- (Class 5.2) Organic Peroxides

Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:

- (Class 5.1) Oxidising Substances
- (Class 5.2) Organic Peroxides

and are incompatible with food and food packaging in any quantity.

U.N. Number 2076

Proper Shipping Name CRESOLS

DG Class 6.1
Sub.Risk 8
Hazchem Code 2X
Packaging Method 3.8.6.1RT7
Packing Group II
EPG Number 6.0.004
IERG Number 36

15. REGULATORY INFORMATION

Regulatory Information Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia. Classified as a Scheduled Poison (S6) according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

Poisons Schedule S6

National and or International Regulatory Information New Zealand: Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. ERMA Approval Code: HSR001531 (Phenol, methyl- mixed isomers, (cresol))

Hazard Category Toxic, Corrosive

AICS (Australia) All constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Date of preparation or last revision of MSDS MSDS Reviewed: June 2007
Supersedes: June 2002

Contact Person/Point For further information contact Tom Sadler on 1300 884 078 during business hours. In case of emergency call Australia 1800 638 556/ New Zealand 0800 154 666.

IMPORTANT ADVICE: This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Ajax Finechem Pty Ltd. Our responsibility for products sold is subject to our standard terms and conditions, a copy of

which is sent to our customers and is also available on request.

End of MSDS

(C) Copyright ACOHS Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.

The compilation of MSDS's displayed is the intellectual property of Acohs Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Acohs Pty Ltd.

Print Date: 11/04/2011

BS: 1.10.9