

Safety Data Sheet



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **MAGNASET R884**

Recommended Use of the Chemical and Restrictions on Use Resin for foundry sand binders.
Prohibition of direct contact with MAGNACAT; it can explode.

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

Telephone Number: +64 9 368 2700
Facsimile: +64 9 368 2710
Emergency Telephone: **0 800 734 607 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

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

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

SIGNAL WORD: DANGER

Subclasses:

Subclass 3.1 Category D (low hazard) - Flammable Liquids.
Subclass 6.1 Category C - Substances which are acutely toxic.
Subclass 6.4 Category A - Substances that are irritating to the eye.
Subclass 6.7 Category B - Substances that are suspected human carcinogens.
Subclass 6.1 Category E (respiratory tract irritant) - Substances that are respiratory tract irritants.
Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.

Additives, Process Chemicals and Raw Materials (Toxic [6.1 + 6.7], Combustible) Group Standard 2017
Approval Number: HSR002505



Hazard Statement(s):

H227 Combustible liquid.
H302+H312 Harmful if swallowed or in contact with skin.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet



Precautionary Statement(s):

Prevention:

P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260 Do not breathe mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.
P284 Wear respiratory protection.

Response:

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P322 Specific measures (see First Aid Measures on the Safety Data Sheet).
P361 Remove/Take off immediately all contaminated clothing.
P362 Take off contaminated clothing before re-use.
P363 Wash contaminated clothing before re-use.
P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P310 Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet for extinction.

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

P501 In 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) Notice 2017. This may also include any method of disposal that must be avoided.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Furfuryl alcohol	98-00-0	>60%	H302 H312 H319 H331 H335 H351 H373
Other ingredient(s)	-	to 100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Safety Data Sheet



Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. This material can be absorbed through the skin with resultant toxic effects. Seek immediate medical assistance.

Eye Contact:

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

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Symptoms may be delayed.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Unsuitable Extinguishing Media:

Water jet.

Hazchem or Emergency Action Code: 2X

Specific hazards arising from the chemical:

Combustible liquid.

Special protective equipment and precautions for fire-fighters:

On burning will emit toxic fumes, including those of oxides of carbon, and oxides of nitrogen. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. If safe to do so, remove containers from path of fire.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Ventilate closed spaces before entering. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Safety Data Sheet



Precautions for safe handling: Avoid skin and eye contact and breathing in vapour, mists and aerosols. When using do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Furfuryl alcohol: WES-TWA 10 ppm, 40 mg/m³; WES-STEL 15 ppm, 60 mg/m³, skin

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

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The average airborne concentration of a substance calculated over an eight-hour working day.

WES - STEL (Workplace Exposure Standard - Short Term Exposure Limit) - The 15-minute time weighted 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 time-weighted average exposures apply. Exposures at concentrations between the WES-TWA and the WES-STEL should be less than 15 minutes, should occur no more than four times per day, and there should be at least 60 minutes between successive exposures in this range.

'Skin' Notice - applicable to a substance that is capable of being significantly absorbed into the body through contact with the skin. 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:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

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 (PPE):

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, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Safety Data Sheet

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Wear overalls, chemical goggles and impervious gloves. If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator or an air-supplied respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Light Brownish
Odour:	Pungent
Solubility:	Miscible in water.
Specific Gravity:	1.10-1.25 @25°C
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 °C):	0.051 kPa (furfuryl alcohol)
Flash Point (°C):	75
Flammability Limits (%):	1.8-16.3 (furfuryl alcohol)
Autoignition Temperature (°C):	490 (furfuryl alcohol)
Boiling Point/Range (°C):	>171
pH:	6.0-9.0
Freezing Point/Range (°C):	-20

10. STABILITY AND REACTIVITY

Reactivity:	Reacts explosively with oxidising agents.
Chemical stability:	Stable.
Possibility of hazardous reactions:	A slow non-hazardous polymerisation occurs over several months, producing a gradual increase in viscosity.
Conditions to avoid:	Avoid exposure to air. Avoid exposure to light. Avoid exposure to heat, sources of ignition, and open flame.
Incompatible materials:	Incompatible with oxidising agents , metals , acids , alkalis , combustible materials.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	Swallowing may result in nausea, vomiting, and abdominal pain. Death may occur if large amounts are ingested.
Eye contact:	An eye irritant.

Safety Data Sheet



Skin contact: Contact with skin may result in irritation.

Inhalation: Breathing in vapour will produce respiratory irritation. Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

Acute toxicity: No LD50 data available for the product. However, for the major constituent:

Oral LD50 (rat): 177 mg/kg

Dermal LD50 (rabbit): 400 mg/kg

Inhalation LC50 (rat): 233 ppm/4hr

Respiratory or skin sensitisation: No information available.

Chronic effects: From results of exposures by humans there is no hazard from furfuryl alcohol vapour up to 16 ppm. Repeated oral administration caused liver, kidneys, thymus and spleen lesions in rats and mice. Signs of neurotoxicity were observed following repeated inhalation exposures in rats.

Mutagenicity: Not classified.

Carcinogenicity: Suspected of causing cancer.

Reproductive toxicity: No information available.

Specific Target Organ Toxicity (STOT) - single exposure: May cause respiratory irritation.

Specific Target Organ Toxicity (STOT) - repeated exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Persistence/degradability: No information available.

Bioaccumulative potential: No information available.

Mobility in soil: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

Safety Data Sheet



Road and Rail Transport

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



UN No: 2874
Transport Hazard Class: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: FURFURYL ALCOHOL MIXTURE
Hazchem or Emergency Action Code: 2X

Marine Transport

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

UN No: 2874
Transport Hazard Class: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: FURFURYL ALCOHOL MIXTURE

IMDG EMS Fire: F-A
IMDG EMS Spill: S-A

Air Transport

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

UN No: 2874
Transport Hazard Class: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: FURFURYL ALCOHOL MIXTURE

15. REGULATORY INFORMATION

Classification:

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

Subclasses:

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Additives, Process Chemicals and Raw Materials (Toxic [6.1 + 6.7], Combustible) Group Standard 2017
Approval Number: HSR002505

Product Name: MAGNASET R884
Substance No: 00000050055

Issued: 20/03/2020
Version: 4

Safety Data Sheet



Hazard Statement(s):

H227 Combustible liquid.

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H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

16. OTHER INFORMATION

Supplier Safety Data Sheet; 03/ 2020.

'Registry of Toxic Effects of Chemical Substances'. Ed. D. Sweet, US Dept. of Health & Human Services: Cincinnati, 2019.

MAGNASET is a registered trademark of ASK CHEMICALS.

This safety data sheet has been prepared by Ixom Operations Pty Ltd (Toxicology & SDS Services).

Reason(s) for Issue:

5 Yearly Revised Primary SDS

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.