

Safety Data Sheet



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: MELAMINE

Other name(s): 1,3,5-triazine-2,4,6-triamine; Cyanurotriamide; Cyanurotriamine; Isomelamine.

Recommended Use of the Chemical and Restrictions on Use Melamine resins; organic synthesis.

Supplier: Ixom Operations Pty Ltd
ABN: 51 600 546 512
Street Address: Level 8, 1 Nicholson Street
East Melbourne Victoria 3002
Australia

Telephone Number: +61 3 9906 3000
Emergency Telephone: 1 800 033 111 (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

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

Poisons Schedule (SUSMP): None allocated.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Melamine	108-78-1	99.8%	-

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.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

Eye Contact:

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Safety Data Sheet



Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

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

Specific hazards arising from the chemical:

Combustible solid. May form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards".

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. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

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

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

Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. Use non-sparking tools.

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid skin and eye contact and breathing in dust. In common with many organic chemicals, may form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards". Take precautionary measures against static discharges. Wash hands before breaks and at the end of the work day.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

Dusts not otherwise classified: 8hr TWA = 10 mg/m³

Safety Data Sheet



As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

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 to maintain air concentrations below Workplace Exposure Standards. 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, SAFETY GLASSES, GLOVES, DUST MASK.



Wear overalls, safety glasses and impervious gloves. If determined by a risk assessment an inhalation risk exists, wear a dust mask 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:	Crystalline Powder
Colour:	White
Odour:	Odourless or Ammoniacal
Molecular Formula:	C ₃ H ₆ N ₆
Solubility:	Insoluble in water. Slightly soluble in hot water.
Specific Gravity:	1.57
Relative Vapour Density (air=1):	4.34
Vapour Pressure (20 °C):	<0.02 kPa
Flash Point (°C):	>280 (Closed cup)
Flammability Limits (%):	Not available
Autoignition Temperature (°C):	>500
Melting Point/Range (°C):	345 (decompose)
Decomposition Point (°C):	>280

Product Name: MELAMINE
Substance No: 000031200901

Issued: 05/03/2019
Version: 5

Safety Data Sheet



pH: 7.5-9.5

10. STABILITY AND REACTIVITY

Reactivity:	No information available.
Chemical stability:	This material is chemically stable.
Possibility of hazardous reactions:	Dust explosion hazard.
Conditions to avoid:	Minimize dust generation and accumulation.
Incompatible materials:	Incompatible with strong acids , strong oxidising agents .
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Ammonia. Amines. Hydrogen cyanide.

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:	No adverse effects expected, however, large amounts may cause nausea and vomiting.
Eye contact:	May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.
Skin contact:	Repeated or prolonged skin contact may lead to irritation.
Inhalation:	Breathing in dust may result in respiratory irritation.
Acute toxicity: Oral LD50 (rat): 3161 mg/kg	
Respiratory or skin sensitisation:	Not a respiratory sensitiser. Not a skin sensitiser.

Chronic effects: Some animal test data suggests a carcinogenic potential for this material. These particular data sets are not considered relevant to normal industrial use but do emphasise the need for care in handling.

Specific Target Organ Toxicity (STOT) - single exposure:	No information available.
Specific Target Organ Toxicity (STOT) - repeated exposure:	No information available.
Aspiration hazard:	No information available.

In a two year feeding study (0.9% melamine of diet) exposed male rats showed the formation of bladder stones and associated transitional cell carcinomas of the bladder. No neoplasm related to treatment was observed following oral administration to female rats and mice in the same study. As these occurred only at very high dose levels, these data are not considered relevant to normal industrial use.

This material has been classified by the International Agency for Research on Cancer (IARC) as a Group 2B. Group 2B - The agent is possibly carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways.
Persistence/degradability:	Not readily biodegradable.
Bioaccumulative potential:	This product shows a low bioaccumulation potential.
Mobility in soil:	No information available.
Half-life in soil:	2-3 years
Log Octanol/Water Partition Coefficient:	-1.14
48hr EC50 (Daphnia magna):	>2000 mg/L
96hr LC50 (fish):	>3000 mg/L
96hr EC50 (algae):	325 mg/L

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification:

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

Poisons Schedule (SUSMP): None allocated.

This material is listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Safety Data Sheet



Supplier Safety Data Sheet; 06/ 2012.

Carcinogenesis Bioassay of Melamine on Rats and Mice; National Toxicology Program, US Dept of Health, 1983.

European Chemical Industry, Ecology & Toxicology Centre; Report on Melamine, 1983.

In: 'IARC Monographs on the Evaluation of Carcinogenic Risk to Humans'. World Health Organisation, Supplement 7, 1987.

In: 'Handbook of Environmental Data on Organic Chemicals'. 3rd Edition. Ed. Verschueren. Van Nostrand Reinhold Company, New York 1996.

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

Reason(s) for Issue:

5 Yearly Revised Primary SDS

Change in Accidental Release Measures

Update in Toxicological Information

Update in Ecological Information

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.