

# MATERIAL SAFETY DATA SHEET

## Melamine

### Section 1 - Chemical Product and Company Identification

<b>MSDS Name:</b>	<b>Melamine</b>
<b>Synonyms:</b>	2,4,6-Triamino-s-triazine
Company Identification: (INDIA)	Veritas House, 70 Mint Road, Fort, Mumbai - 400 001. INDIA
For information in the INDIA, call:	Tel: +91 - 22 - 2275 5555 / 6184 0000, Fax: +91 - 22 - 2275 5556 / 6184 0001

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
108-78-1	Melamine	99%	203-615-4

<b>Hazard Symbols:</b>	XN
	
<b>Risk Phrases:</b>	21 44

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

*Harmful in contact with skin. Risk of explosion if heated under confinement.*

#### Potential Health Effects

<b>Eye:</b>	Causes mild eye irritation. Causes redness and pain.
<b>Skin:</b>	May cause skin irritation. Harmful if absorbed through the skin.
<b>Ingestion:</b>	May cause irritation of the digestive tract. May be harmful if swallowed.
<b>Inhalation:</b>	May cause respiratory tract irritation.
<b>Chronic:</b>	

### Section 4 - First Aid Measures

<b>Eyes:</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
<b>Skin:</b>	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
<b>Ingestion:</b>	Get medical aid. Wash mouth out with water.
<b>Inhalation:</b>	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
<b>Notes to Physician:</b>	Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

<b>General Information:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion. Containers may explode if exposed to fire. Risk of explosion if heated under confinement.
<b>Extinguishing Media:</b>	Use water spray, dry chemical, carbon dioxide, or chemical foam.

## Section 6 - Accidental Release Measures

<b>General Information:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Spills/Leaks:</b>	Vacuum or sweep up material and place into a suitable disposal container.

## Section 7 - Handling and Storage

<b>Handling:</b>	Use with adequate ventilation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.
<b>Storage:</b>	Store in a cool, dry place. Store in a tightly closed container.

## Section 8 - Exposure Controls, Personal Protection

<b>Engineering Controls:</b>	Use adequate ventilation to keep airborne concentrations low.
<b>Exposure Limits</b>	CAS# 108-78-1:
<b>Personal Protective Equipment</b>	
<b>Eyes:</b>	Wear chemical splash goggles.
<b>Skin:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Respirators:</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Crystalline powder
<b>Color:</b>	white - fine
<b>Odor:</b>	odorless
<b>pH:</b>	8.4-8.9 (10% aq soln)
<b>Vapor Pressure:</b>	0.204mbar @20 deg C
<b>Viscosity:</b>	Not available
<b>Boiling Point:</b>	Not available
<b>Freezing/Melting Point:</b>	354 deg C ( 669.20°F)
<b>Autoignition Temperature:</b>	658 deg C ( 1,216.40 deg F)
<b>Flash Point:</b>	> 280 deg C (> 536.00 deg F)
<b>Explosion Limits: Lower:</b>	Not available
<b>Explosion Limits: Upper:</b>	Not available
<b>Decomposition Temperature:</b>	
<b>Solubility in water:</b>	3 g/l (20°C)
<b>Specific Gravity/Density:</b>	1.573
<b>Molecular Formula:</b>	C3H6N6

<b>Molecular Weight:</b>	126.12
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### Section 10 - Stability and Reactivity

<b>Chemical Stability:</b>	Stable under normal temperatures and pressures. When heated to decomposition cyanide fumes are released.
<b>Conditions to Avoid:</b>	Incompatible materials, dust generation, temperatures above 300°C.
<b>Incompatibilities with Other Materials</b>	Strong oxidizing agents, strong acids.
<b>Hazardous Decomposition Products</b>	Carbon monoxide, carbon dioxide, nitrogen oxides (NOx) and ammonia (NH3).
<b>Hazardous Polymerization</b>	Will not occur.

### Section 11 - Toxicological Information

<b>RTECS#:</b>	CAS# 108-78-1: OS0700000
<b>LD50/LC50:</b>	RTECS: <b>CAS# 108-78-1:</b> Draize test, rabbit, eye: 500 mg/24H Mild; Inhalation, rat: LC50 = 3248 mg/m3; Oral, mouse: LD50 = 3296 mg/kg; Oral, rat: LD50 = 3161 mg/kg; Skin, rabbit: LD50 = >1 gm/kg; Other:
<b>Carcinogenicity:</b>	Melamine - IARC: Group 3 (not classifiable)
<b>Other:</b>	See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

### Section 12 - Ecological Information

<b>Ecotoxicity:</b>	Fish: Gold orfe: LC50 >500 mg/l; 48H; Algae: Gold orfe: EC50 >940 mg/l; 96H; Daphnia: Gold orfe: EC50 >2000 mg/l; 48H;
<b>Other:</b>	Not readily biodegradable. Avoid entering into waters or underground water. Do not empty into drains. log Pow: -1.14

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	Not regulated.	Not regulated.	Not regulated.
<b>Hazard Class:</b>			
<b>UN Number:</b>			
<b>Packing Group:</b>			

## Section 15 - Regulatory Information

### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

#### Risk Phrases:

- R 21 Harmful in contact with skin.
- R 44 Risk of explosion if heated under confinement.

#### Safety Phrases:

- S 36/37 Wear suitable protective clothing and gloves.

#### WGK (Water Danger/Protection)

- CAS# 108-78-1: 1

#### Canada

- CAS# 108-78-1 is listed on Canada's DSL List

#### US Federal

- TSCA
- CAS# 108-78-1 is listed on the TSCA Inventory.

## Section 16 - Other Information

<b>MSDS Creation Date:</b>	July 22, 2015
<b>Revision #0 Date</b>	

*The Information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*