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|  | Material Safety Data Sheet (MSDS) <i>According to the Directives 91/155/CEE-2001/58/CE-ISO 11014-1</i> | Page: 1 of 7 Revision Number: 1 |
| | Product Name: Melamine |  |

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/ UNDERTAKING



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| Identification of the substance or preparation: | Melamine |
| Country of origin: | Iran (Islamic Republic of Iran) |
| CAS Number: | 108-78-1 |
| Synonyms: | 2,4,6-Triamino-s-Triazine; Isomelamine; Cyanuramide |
| Company/undertaking identification | National Petrochemical Company Iran Petrochemical Commercial Company (IPCC) |
| Manufacturer subcontractor: | None |
| Emergency phone number: | 00982188881735 |
| Contact email: | msds@petrochem-ir.net |
| Fax: | 00982188839511 |
| Association/Organization: | None |
| Use of the substance/Preparation: | Melamine resins a very durable Thermosetting plastic |

2. COMPOSITION/INFORMATION ON INGREDIENTS

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| Hazardous substances: | Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant). |
| Hazardous label(s): | No labeling is required according to Directive 67/548/EEC |
| Toxicological characteristics: | Acute: ORAL (LD50) : 3161 mg/kg [Rat] 3296 mg/kg [Mouse]. Acute: DERMAL(LD50): 1000 mg/kg [Rabbit] |
| Substances present at a concentration below the minimum danger: | |
| Other component: | |

3. IDENTIFICATION OF HAZARDS

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| Risk phrases: | There is very low risk to human health |
| Skin contact: | It is an irritant when contact with the skin |
| Inhalation : | It is an irritant when inhaled |
| Eye contact: | It is an irritant when contact with eyes |
| If swallowed: | It causes lung irritation |
| Other information: | None |

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4. FIRST AID MEADURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor

NEVER induce swallowing in an unconscious person.

In case of exposure by inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

In case of splashes or contact with eyes:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

In case of swallowing:

Note of physician:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

5. FIRE FIGHTING MEASURES

Flammable class:

Suitable extinguishing media:

May be combustible at high temperature.

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...), cyanide fumes, irritating and toxic fumes and gases.

Special protective equipment for fire fighting :

Other information:

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:



Minimum Personal Protective Equipment should be Level B: triple-gloves (rubber gloves and nitrile gloves over latex gloves), tyvek or lab coat and boots, dust mask.

Environmental precautions:

Self-Contained Breathing Apparatus must be selected if releases which occur in confined or poorly ventilated areas or in situations in which the level of oxygen is below 19.5.

Methods for cleaning up and disposal:

Sweep up or vacuum spilled solid, minimizing

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the generation of airborne particulates. Rinse area with soap and water solution, followed by a water rinse. Close off sewers and take other measures to protect human health and the environment, as necessary.

Other information:

None

7. HANDLING AND STORAGE

The regulations relating to storage premises apply to workshop where the product is handled

Handling:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values:

Not available.

Exposure controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal protective equipment:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Gloves.

Eye protection:

Splash goggles or safety glasses.

Respiratory protection:

None normally required for routine chemical



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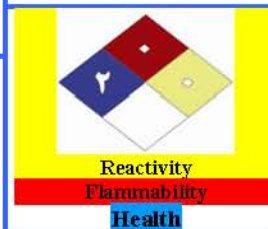
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use. Airborne contaminant concentrations must be maintained below guidelines listed in Section 2 (Composition and Information on Ingredients). If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

Hand protection:

Wear Neoprene Rubber gloves for routine industrial use. Use triple gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this MSDS.

Skin and body protection:

Use body protection appropriate for task.

Health measures:

Environmental exposure controls:

9. PHYSICAL AND CHEMICAL PROPERTIES

General information:

Appearance (at 20°C):

Colour:

Odour:

PH (at 20°C):

Boiling point/range (°C):

Flash point (°C):

Flammability:

Auto-ignition temperature:

Explosive properties:

Oxidising properties:

Vapour pressure (at 20°C):

Density (at 20°C):

Solubility (at 20°C):

Solid. (Crystalline solid.)

Powder

White powder

Mild odor like ammonia odor

9.2

Sublimes

-

Not flammable

-

Not explosive

No data available

Not applicable.

1.47

Water solubility: Partially soluble in cold water.

solubility in fats:



No data available

Not applicable.

Viscosity (40°C):

Evaporation rate:

Other information:

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10. STABILITY AND REACTIVITY

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| Stability: | Stable in environmental conditions |
| Conditions to avoid: | Avoid exposure or contact to extreme temperatures, incompatible chemicals. |
| Material to avoid: | Oxidizing agents, strong acids, chlorine, sodium nitrate, sodium hypochlorite |
| Hazardous decomposition products: | Thermal decomposition can generate nitrogen oxides and carbon oxides. |

11. TOXICOLOGICAL INFORMATION

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| Acute toxicity: | Acute oral toxicity (LD50): 3161 mg/kg [Rat]. LD50 (Oral-Mouse) : 3296 mg/kg Acute dermal toxicity (LD50): >1000 mg/kg [Rabbit]. |
| Sub chronic – chronic toxicity: | CARCINOGENIC EFFECTS: - Classified: 3 (Equivocal evidence.) By NTP. 3 -(Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. |
| Sensibilization: | |
| Carcinogenicity: | May also be tumorigenic (carcinogenic) based on animal data. |
| Reproductive effects: | May cause adverse reproductive effects (fertility, fetotoxicity), and may affect genetic material based on animal Data. |
| Human experience: | Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant). |
| Other information: | |

12. ECOLOGICAL INFORMATION

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| Ecotoxicity: | Not available. |
| Bioaccumulative potential: | The products of degradation are less toxic than the product itself. |
| Mobility: | No data available |



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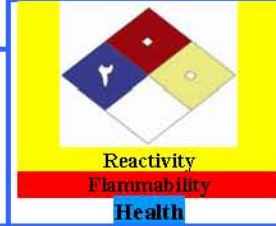
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Persistence and degradability:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Other adverse effects:

No data available

13. DISPOSAL CONSIDERATIONS

Disposal of product:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Disposal of packaging:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. TRANSPORT INFORMATION

Land transport:

THIS MATERIAL IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

ADR/RID:

Class:

Packaging group:

Not applicable.

Maritime transport:

Not applicable.

Air transport:

Not applicable.

15. REGULATORY INFORMATION

Hazardous label(s):

Safety phrases:



R36/37/38- Irritating to eyes, respiratory system and skin.

Risk phrases:

S24/25- Avoid contact with skin and eyes.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

16. OTHER INFORMATION

None

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The contents and format of this MSDS are in accordance with EEC Commission Directive 2001/58/EC

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