

# MATERIAL SAFETY DATA SHEET

**Date: MAR, 17.2010**

**Melamine**

## 1. Chemical product and company Identification

Chemical Name: Melamine

Common Chemical Name: 2,4,6-TriAmino-1,3,5-Triazine

Chemical Formula:C3H6N6

CAS No.:108-78-1

EIENCS No.:203-615-4

Producer: Luxi Chemicals

## 2. Composition/information on Ingredients

Chemical Name of Substance CAS No.%(w/w) Symbol R PHRASES

2,4,6-triamino-1,3,5-Triazine 108-78-1 99.8min none none

Impurities contributing to the hazard: Not applicable

## 3.Hazards Identification

Physical/chemical hazards: None

Environment hazards: The final product in its current form is not considered by the United States Environmental Protection Agency as Hazardous under 40CFR part 266.

Effect(s) of (over) exposure: Above threshold limit value of 10 mg/m<sup>3</sup>, irritating to nose. Throat, and respiratory tract. Mildly irritating to eyes.

Symptom(s) of (over) exposure:

Inhalation: Irritating

Ingestion: 10g may result in abdominal pain

Skin contact: Not irritating.

Eye contact: Redness, pain.

## 4. First Aid Measures

Ingestion: Rinse mouth with plenty of water. Consult a doctor in event of complaints.

Inhalation: remove victim to fresh air. Consult a doctor in event of complaints.

## **5. First Fighting Measures.**

Extinguishing media

Suitable: Melamine is non-combustible, use water to cool. In case of fire

In immediate vicinity: use any extinguishing agent.

Unusual fire and explosion hazards: Melamine is non-combustible. It can however, decompose, emitting toxic vapors when exposed to high temperatures.

Protection of fire fighters: Self-contained breathing equipment.

## **6. Accidental Release Measure**

Personal precautions: As mentioned under heading 8

Environmental precautions: Not Applicable

Methods for cleaning up: Collect spilled material in sealable containers.

Disposal according to local, provincial, and federal regulations

Remarks: Prevent formation of melamine dust.

## **7. Handling and Storage**

Handling

Technical measure: Provide mechanical or natural ventilation to maintain nuisance dust concentrations within acceptable levels

Safe handling advice: Avoid breathing dust

Storage

Technical measures: Do not stack more than two bul-bags > 1000kg on top of each other because of tear risk

Storage conditions: store away from highly flammable substances. Keep in a dry place.

Incompatible products: None

Packaging Materials:

Recommended: No special precautions

## **8. Exposure Controls/Personal Protection**

Engineering measure: Ventilation recommended to minimize dust exposure.

Hygienic measures: When using do not eat, drink or smoke

Personal protection

Respiratory system: Exposure to high concentration: dust mask

Skin and body: Not applicable

Hands: Not applicable

Eyes: Safety goggles

Occupational exposure limits: Workplace Environmental Exposure Level(WEEL)

10mg/m<sup>3</sup> inhalable fraction

5m/m<sup>3</sup> respirable fraction

This 8 hour time Weight Average (TWA)was established by the WEEL committee of the American Industrial Hygiene Association(AIHA). Ballot passed on March 6, 1998.

### **9. Physical And chemical properties:**

Appearance : Crystalline powder

Color:white

Odor:odorless

Molecular weight:126.13

Melting Point:345°C

Boiling point: sublimes

Decomposition temperature: 345°C

Density:1573kg/m<sup>3</sup>(200°C)

Solubility in water:3g/l (200°C)

PH(10% slurry in water): typically 7-9

Flash Point:>280°C

Auto ignition temperature:658°C

Dust explosion class according to VDI 3673:St.1

Ignition energy:>1000mJ(200°C)

### **10 Stability And Reactivity:**

Stability: stable under normal storage conditions

Conditions to avoid: Avoid temperature above 300°C

Hazardous decomposition products: melamine is stable under normal conditions

It can however decompose, emitting toxic vapors when Exposed to high temperatures

Hazardous reactions: Will not occur.

### **11.Toxicological Information**

Acute toxicity

Oral: LD50 male rat:3,100mg/kg

LD50 female rat: 3,800mg/kg

LD50 male mouse: 3,300mg/kg

LD50 female mouse: 7,000mg/kg

Eye Irritation: Mildly irritating

Skin Irritation: Not irritating

Sensitization: Not sensitizing

Chronic toxicity: No relevant chronic toxicity

Carinogenicity: The International Agency for Reasearch on Cancer labeled Melamine as not classifiable as to its carcinogenicity in humans(class3)

Mutagenicity: Not mutagenic.

## **12.Ecological Information**

Mobility: Adsorption on soil is not expected

Persistence and degradability: The substance is not readily biodegradable. It is however inherently biodegradable

Ecotoxicity: melamine has been shown to have low toxicity to aquatic life.

96 h LC 50 (for fresh): >3,000mg/l

(= solubility melamine in water)

NOEC fish chronic test:>1,000mg/l

48 h LC5 0 ( for Deohnia): >2,000mg/l

NOEC Daphnia magna 21 days: 18mg/l

EC5 0 Algae:940 mg/l

NOEC Alage:320mg/l

EC5 0 bacteria:>10,000 mg/l

## **13.Disposal Considerations**

Responsibility of the receiver to have knowledge of national and local regulations.

Methods of disposal: Please comply with all local, provincial, and federal regulations.

## **14.Transport Information**

Land- Road/ Railway: Not restricted.

Inland waterways: Not restricted

Sea: Not restricted.

Air: Not restricted

## **15.Regulatory information**

Responsibility of receive to have knowledge of national and local regulations. EC

Classification

Label name : Not classified as a dangerous substance according to EC vriteria.

Hazard symbol: None

Risk phrases: None

Safety phrases: None

HMIS rating:

Health: 1

Flammability:0

Reactivity:0

WHMIS Class: D2B

National Regulations

WGK(Germany):1

Listed on TSCA- inventory: Yes

Listed on DSL- inventory: Yes

Listed on AICS- inventory: Yes

Listed on MITI- inventory: Yes

Listed on ECL- inventory: Yes,number 3-2801

## **16. Other Information**

All information given by or on behalf of SELLER as to properties, specifications, use , etc.

Of the products is based on research, including literature and is believed reliable. SELLER can however, not assume any responsibility therefore nor for performance nor for results obtained through the use of the products or information involved, nor for any damages that may be caused by or to the products or information.

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