1. IDENTIFICATION OF SUBSTANCE

Product description:

Powder Coating

Trade Name:

Polyester/TGIC

· Article number:

38/30034

Manufacturer/Supplier:

TIGER DRYLAC U.S.A. INC.

1261 EAST BELMONT STREET

ONTARIO, CA 91761

Information department:

(909) 930-9100

Contact:

2. HAZARDOUS INGREDIENTS

Chemical characterization

Description:

Product is a mixture of hazardous and non-hazardous ingredients compounded in a polymer

 Hazardous components:
 CAS#
 PEL-OSHA
 TLV-ACGIH
 Conc. [%]

 Barium Sulfate
 7727-43-7
 15/5 mg/m³
 10/5 mg/m³
 10 - 30

 T-Glycid-T-Cyanurate (TGIC)
 2451-62-9
 N/E
 0.05 mg/m³
 5 - 10

3. POTENTIAL HEALTH EFFECTS

· Information pertaining to particular danger for man and environment

Harmful by inhalation and if swallowed.

Classification system

Classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data

NFPA ratings (scale 0-4)

Health 1 Fire 1 Reactivity 0

Effects of overexposure to:

Barium Sulfate

TLV and PEL are for Total dust/Respirable fraction. May cause mechanical irritation of

eyes or in great concentration overloading of the respiratory system.

Lungs may be affected by repeated or prolonged exposure to dust particles, resulting in

baritosis (a form of benign pneumoconiosis). Reacts violently with aluminium powder.

T-Glycid-T-Cyanurate (TGIC)

Warning! Severe eye irritant. Toxic by ingestion or if inhaled. May cause dermatitis and

sensitization. Can cause effects on the male reproduction system.

4. FIRST AID MEASURES

After inhalation

Supply fresh air and to be sure call for a doctor

After skin contact

Generally the product does not irritate the skin

After eye contact

Rinse opened eye for several minutes under running water

After swallowing

Rinse mouth out and then drink plenty of water. If symptoms persist consult doctor

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents

Use CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment

Wear self-contained respiratory device

6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions

Ensure adequate ventilation

Measures for environmental protection

Do not allow to enter sewer/surface or ground water

· Measures for cleaning/collecting

Pick up mechanically. Dispose contaminated material as waste according to item 13

7. HANDLING AND STORAGE

· Handling

Information for safe handling

Prevent formation of dust Ensure good ventilation/exhaustion at the workplace

Information about protection against explosions and fires —

Dust can combine with air to form an explosive mixture

· Storage

· Requirements to be met by storerooms and receptacles

Store in cool, dry place, in tightly closed container. Storage temperature not to exceed 25°C/77°F to ensure product quality. Shelf life of the product at that temperature up to 2 years, after that the performance of the product will deteriorate. Protect from heat and direct sunlight. Protect from humidity and water

Information about storage in one common storage facility

Not required

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems

No further data; see item 7

· Components with limited values that require monitoring at the workplace

Barium Sulfate

T-Glycid-T-Cyanurate (TGIC)

Personal protective equipment

Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. The usual precautionary measures for handling chemicals should be followed

· General protective and hygienic measures

• Inhalation: It is recommended to use MSHA approved respirator when handling powders. Powders are

considered nuisance dust.

Skin contact: Avoid skin contact, use long sleeved shirts and impermeable gloves at a minimum when

handling powders. TYVEK full body suits or equivalent are recommended for heavy exposure. Be sure to launder contaminated clothing before reuse. Wash skin with mild soap

and water if contact occurs. If symptoms develop, consult with a physician.

Eye protection: Require the use of safety goggles with side shields. Powder particles can be abrasive on the

cornea, in case of eye contact flush with plenty of fresh water. If irritation develops consult

with a physician

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Solid, finely divided powder
 Colour According to product specifications

Odour
 Nearly odourless

· Change in condition

Melting point/range
 Boiling point/range
 Flash point
 Not applicable
 Not applicable

Auto igniting Product is not self-igniting

• Danger of explosion Product does not normally present an explosive hazard. However, dust can combine

with air to form an explosive mixture if it comes in contact with a source of ignition.

LOWER EXPLOSION LIMIT: 15 g/m3 UPPER EXPLOSION LIMIT: 50 g/m3

Density: 1.2 g/cm3 – 1.7 g/cm3

Solubility in/miscibility with water

Not miscible or difficult to mix

Solvent content Organic solvents – 0.0%.

Solids content - 100%

10. STABILITY AND REACTIVITY

Product Stability:

No decomposition if used according to specifications

Thermal decomposition/conditions to be avoided:

Decomposition at high temperatures may yield Carbon Dioxide, Carbon Monoxide, Nitrous Oxides and other hazardous gases.

- Dangerous Reactions:
- Dangerous products of decompoition:

11. TOXICOLOGICAL INFORMATION

Primary irritant effect

On the skin - Powder can be irritating through mechanical action, also has a drying effect.

On the eye - Powder can be irritating through mechanical action, can cause abrasion on the cornea.

Sensitization

Sensitization possible through skin contact

Additional toxicological information

The product shows the following danger according to internally approved calculation methods for preparations:

Harmful

12. ECOLOGICAL INFORMATION

General notes

Water hazard class 1 (self-assessment); slightly hazardous for water

13. DISPOSAL CONSIDERATIONS

· Product

Recommendations

Must not be disposed of together with household garbage. Do not allow product to reach sewage systems

- · Uncleaned packaging
- Recommendations

Disposal must be made according to official regulations

14. TRANSPORTATION INFORMATION

· DOT regulations

Hazard class

Non Regulated

· Maritime transportation IMDG

Marine pollutant

No

15. REGULATIONS

Product related hazard information

The product has been classified and marked in accordance with directives on hazardous materials

Hazard symbols

Harmful

Hazard-determining components of labeling

TGIC

Risk phrases

Harmful by inhalation and if swallowed May cause sensitization by skin contact

Safety phrases

Keep out of the reach of children

Keep container dry

Keep container in a well ventilated place

Keep away from food, drink, and animal feed

Do not breathe gas/fumes/vapour/spray

If swallowed, seek medical advise immediately and show this container or label

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Pure, concentrated TGIC is toxic to humans. At the concentrations TGIC is found in powder coatings, it is not toxic and only contributes to nuisance dust. Users of TGIC containing powder coatings should be aware that such coatings could cause contact dermatitis or short term, asthma like symptoms in sensitive persons. The European Union regulates pure TGIC under its environment annex as a substance with potential reproductive effects.

WARNING: This product contains chemical(s) known by the State of California to cause cancer, birth defects or other reproductive harm.

Trade Name: Polyester/TGIC Powder Coatings