MATERIAL SAFETY DATA SHEET



2,2,4 - Trimethyl-1,3 - Pentanediol Ponoisobutyrate

1. CHEMICALS MANUFACTURER IDENTIFICATION

Company Name RAR Resin & Chemical Industries JLT

11th Floor, Jumeirah Lake Towers, P.O. Box: 47381, Dubai UAE

Tel: +971 4 4356516 / +971 4 4356517

Fax: +971 4 4356518 Email: info@rarresin.com Website: www.rarresin.com

2. ELEMENT & COMPONENT

Major components : pure C- 12

Chemical name : 2,2,4 - trimethyl - 1,3 - pentanediol monoisobutyrate

Molecular weight: 216. 3Molecular formula: C12 H24 O3Chemical category: Esters

3. HAZARDS SUMMARIZING

General chemicals, could cause irritation to the eyes, respiratory system and skin.

4. FIRST- AID MEASURES

Splashed on skin

General recommendations : take off contaminated clothes immediately.

In case of Inhaling : Keep the patient calm, and move him to a place with fresh

air, medical treatment is needed as soon possible.: Wash thoroughly with plenty of water immediately.

Splashed into the eye: Flip the eyelid, wash the eye with flow water for over 15 minutes, please turn to an ophthalmologist as soon as

possible.

Ingestion : wash the mouth immediately, adn then drink plenty of water,

turn to the doctor for medicare care.

5. FIRE PROTECTION

Flammability : Flammable Flash Point : 120 °C Self- ignition temperature : 393 °C

applicable fire extinguishing media : Anti- incoluble foam, dry powder, carbon dioxide, sand.

DISCI AIMER

This information contained in the data sheet is to the best of our knowledge correct and up to date. Under well-defined conditions. Its accuracy or suitability under the actual conditions of any independent use is not guaranteed and must be determined by the user. All advice given about this product is given in good faith. Since as we have no control over conditions of substrate, manufacturer and seller cannot accept any liability in connection with the use of the product relative to coverage, performance, injury, or damage, unless we specify in writing to do so. The information in this data sheet is subject to change without prior notice and it is the user responsibility to ensure it is current. For further information and advice please contact RAR RESIN Technical Service Department.

6. SPILLS/ LEAKS EMERGENCY TREATMENT

Methods of removing the leakage:

For large quantity: Remove with a pump first, and then clean absorbing materials. Disposal the usedabsorbing materials properly.

For small quantity: Absorb with appropriate materials (such as: sand, sawdust). Clean with water, disposal the used absorbing materials properly.

7. OPERATION AND STORAGE

Operation announcements: Airtight operation and comprehensive ventilation. The operator mustgp through specialized training, and adherence to rules strictly. Safety glasses and protective overalls are recommended during operation. Keep away from fire, smoking is strictly prohibited. Use Explosion-proof ventilation systems and equipment to prevent vapor leakage into the air in the workplace. Avoid contact with strong base and strong acid. handle with care to prevent damages to the containers. Corresponding fire equipment and leaking emergency equipment shall be allocated in all necessary varieties and quantity. Clean the possible residues in the containers.

Storage: Store in a cool, ventilated warehouse. Keep away from fire. Warehouse temperature shall not exceed 30 °C. Keep the containers sealed. Store separately with strong base and strong acid, avoid hybrid storage. Leaking emergency treatment equipment and proper absorbing materials should be equipped in the storage area.

8. PROTECTION MEASURES

Eye protection : wear chemical safety glasses

Physical protection: put on appropriate protective overalls

Hand protection : wear latex gloves

others : Smoking is strictly prohibited in the working place. take a shower after work.

Pay attention to personal hygiene.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chroma (Pt-Co) : ≤ 10 Molecular weight (C12 H24 O3) : 216.3 Density (20 °C), g/cm3 : 0.95 Solubility under 20°C, wt% C-12 in water : insoluble Solubility under 20°C, wt%, wt% C-12 in water : insoluble **Evaporation rate(Butyl Acetate =1)** : 0.002 Refractive index, 20 °C : 1.4423 vapor pressure, 20 °C, in mmHg column, : 255

°C initial boiling point

boiling range in 760 mmHg column, °C : 260.5

final boiling point

Freezing point : -50 °C Flash point, vleveland open cup type : 120 °C Self- ignition temperature : 393 °C

liquid viscosity @ 20 °C : 13.5Cp (mpa.s)

DISCI AIMER

This information contained in the data sheet is to the best of our knowledge correct and up to date. Under well-defined conditions. Its accuracy or suitability under the actual conditions of any independent use is not guaranteed and must be determined by the user. All advice given about this product is given in good faith. Since as we have no control over conditions of substrate, manufacturer and seller cannot accept any liability in connection with the use of the product relative to coverage, performance, injury, or damage, unless we specify in writing to do so. The information in this data sheet is subject to change without prior notice and it is the user responsibility to ensure it is current. For further information and advice please contact RAR RESIN Technical Service Department.

10. STABILITY AND REACTIVITY

Stability : stable

Polymerization hazards: non- polymerizationAvoid contact with: open flame, high heatProhibited contact with: strong base, strong acid

Combustion decomposer : carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

Toxicity : LD506517 mg/ kg (rat through mouth) ; : LD50 1800- 3200 mg/ kg (rat inhaled)

- **12. ECOLOGY INFORMATION:** This substance does not harm the environment, however, attention should be paid to water pollution.
- **13. ABANDON:** Please refer to relative national and local laws and regulations before disposal. Please refer to "Storage & Transportation notes" while store the waste. Control incinerating dumping disposal apprpriately.

14. TRANSPORATION

Packaging mark : non- hazardous

Packing method : 25KG, 50KG, 200KG in drums

TRANSPORT NOTES: Rail transport: should be transported strictly according the provisions of the Ministry of Railways. Road transport: transport as general chemicals. Transportation vehicles should be equipped with leaking emergency treatment devices and proper absorbing materials in corresponding varieties and quantity. Exposure to solirization, rain, high temperature should be avoided. Keep far away from fire source and high temperature zone during stopover. Do not remein in populated areas or densely populated places while driving on routes according to the previous of road transport. Humping is strictly prohibited in rail transport by wooden or bulk carrier is strictly prohibited.

15. REGULATION

Please refer to the provisions of general chemicals during safety use, production, storage, transportation, handling and other aspects.

16. ADDITIONAL INFORMATION

Proposed usages : For industrial purposes only.

restriction on use of : cosmetics, medicines

This product is an industrial product and shall be used in industrial purposes only unless otherwise specified. Any other uses shouldbe discussed with the producer in advance.