DYNAMIC (NANJING) CHEMICAL INDUSTRY CO., LTD.

MSDS

DIETHYLENE GLYCOL MONOBUTYL ETHER

1. Product Identification and Manufacture Information.

Trade Names/Synonyms: Diethylene Glycol Monobutyl Ether CAS NO: 112-34-5 Manufacturer: Dynamic (Nanjing) Chemical Industry Co.,Ltd. Add.: 1-A22-1 Bailong Road,Nanjing Chemical Industry Park,China Tel: 86-25-58392798 Fax: 86-25-58391028

Emergency Telephone:

Shanghai Chemical Accident Counseling Service: 86-21-62533429 China National Chemical Accident Counseling Service: 86-532-3889090

2. Composition/Information on Ingredients

Main content: diethylene glycol monobutyl ether Percentage: 90-100.00% Usage: can be used as solvent of gum and spray paint and dyestuff. dilution or some chemical intermediates

3. Hazards Identification

Hazard class: Not hazard product

Harmful if swallowed, inhaled or absorbed through skin/eyes

Health Jeopardize:

Inhalation: do harm to the body

Eye contact: Irritate eyes to make it uncomfortable and ache.

Skin contact: a little irritation to the skin if contact slightly.

Ingestion: symptom just as alcohol

Danger of explosion: Flammable

4. First Aid Measures

Skin contact: take off polluted clothes, immediately flush it with water completely. Get medical attention immediately.

Eye contact: lift the eyelid and flush it with water or physiological saline. Call a physician.

Inhalation: Immediately remove to fresh air. keep respiratory tract unobstructed. If breathing is difficult, give oxygen, if not breathing, give artificial respiration. Call a physician.

Ingestion: Drink enough water. Call a physician.

5. Fire Fighting Measures

Flammability and Explosion: flammability will be caused by fire and high temperature.

Harmful Burn Decomposition Products: carbon monoxide, carbon dioxide. Extinguishing measures: Remove the containers from the fired place to open and safe place; Spray water to cool the containers until the fire fighting is over. Withdraw immediately in case of rising sound from venting safety device or any discoloration of containers due to fire.

Fire extinguishing media: Vapor, foam, dry chemical, or carbon dioxide, sand.

6. Accidental Release Measure:

Keep all the staffs from the polluted area to safety place, and isolate the hazard area, keep unnecessary and unprotected personnel from entering. Cut off all sources of ignition. In the event of a fire, emergency staffs should wear self-contained positive pressure breathing apparatus. Wear common work clothes. Cut off the source of leakage and prevent the leaked material enter sewer or drain as well as some other limited space. Small spill: collect it with sand and vermiculiter etc inertia material. Also can be flush by emulsion which be made of unflammable dispersing agent, then dilute the flush liquid and put them into worthless water system. Large spill: Dike or sap for disposal. Divert spilled material to the tanker or special purpose collector by pump, reclaim or transport to rubbish disposal place.

7. Handling and Storage

Handling Notes: operate in hermetic and well-ventilated location. Operator must be trained strictly and abide by the regulation of operation. Advice operators to wear filter respirator (a half-face organic vapor respirator), chemical proff gloves. Away from any area where the fire or high temperature and No Smoking in the place. The ventilating device should meet the requirements of explosion proof; prevent the vapor from leaking into the air of the work place. Avoid contacting with oxidizer and acid product. Loading and unloading should be carefully, no damage to package and container. Relative enough fire fighting device and emergency leakage disposal equipment should be equipped. Note maybe there is some harmful leftover in the emptied container.

Storage note: store in the cool and well-ventilated place. Keep far away from the source of ignition and heat. Separate it from dioxide, acid. Avoid mixing storage. Equipped with appropriate variety and quantity fire-fighting equipment. Equipped with emergency leakage disposal equipment and appropriate collective material.

8. Exposure Controls / Personal Protection

Contact limit in work place. China MAC (mg/m³): no regulation American: ACGIH no regulation Engineering Control: The manufacturing process should be wind tight, general exhaust ventilation is necessary.

Breathing System Protection: staff must wear filter respirator (a half-face) when the density of air exceeds the standard. Rescue or withdraw from the emergency, must wear air respirator

Eye protection: use chemical safety goggles when necessary

Body protection: wear common protective clothing

Hand protection: wear chemical proof glovers.

Others: No smoking in the work area. Avoid contacting it repeatedly for a long time. Have regular physical examination.

9. Physical and Chemical Properties

Appearance and odor: colorless liquid. A little bitter butyl odor Melting Point: no data Relative Density (water=1):0.9553(20°C) **Boiling Point: 231** Relative Density (Air=1): 5.58 Saturated Vapor Press: 0.023mmHg(20°C) Inflammation Heat: no data Critical temperature ($^{\circ}$ C): No data Critical pressure (Mpa): no data Octanol/water distribution coefficient: no data. Flash Point (°C):78 Ignition temperature (°C):204 LEL [%(v/v)]: 24.6%(135°C) UEL [%(v/v)]: 24.6%(182.2°C) Solidifying point: no data Max explosion pressure(Mpa): no data Solubility: soluble and mixable in water **10. Stability and Reactivity**

Stability: stable Hazardous Polymerization: will not occur Incompatibilities: strong oxidizing agent, acid Heat Decomposition Products: peroxide.

11. Toxicological Information

Toxicity Data: LD50: 5660mg/kg (big oral rat)

12.Ecological Information

No amassment, it will be metabolized in body and will be released with urine after it is absorbed by skin, lung, intestines and stomach.

13.Disposal Consideration:

Dispose in accordance with all national and local applicable regulations in incinerator Advice to burn it for disposal.

14.Transport Information

Home:

Hazard Commodity Description No: No data UN No: No data Packing Mark: No data Packing Group: No data Packing methods: No data International(IMO): No data

Attention: check that if containers are integrated and airtight. To be sure that container don't leak, collapse, fall and be damaged during the transportation. Prohibit mix transporting with oxide agent and acid. Isolate it with the electric source and ignition source when transport by ship. Drive in accordance with the regulated road when transport by truck.

15.Regulatory Information

Product Description: Diethylene glycol monobutyl ether In current Chinese Chemical Inventory: Yes Severe toxin classification, sort and description No (GB57-93): not suitable Hazard Commodity Description No (GB12268-90): no regulation Fatal Hazard Sources Labeling (GB18218-2000): no regulation

16.Other Information

All the information in the MSDS is from our latest database, they are only for users' reference; users shall prepare its own operating regulation in accordance with practical situation.

Prepared by: Shanghai Chemical Toxin Counseling Service of China National Economics& Trade Committee

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