

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION*Identification of the product*

Catalogue No.:

Product name : Di (isononyl) Adipate(**DINA**)*Manufacturer/supplier identification*

Company: Petrochemicals 1st Div, Nan Ya Plastics Corporation .Taiwan,R.O.C

Tel: (886)5-6818477~78 ; Fax:(886)5-6812687

Emergency telephone No.: (886)5-6818477~78

2. Hazards identification

Clear Liquid; mild odor

*Potential Health Effects***Skin Contact:** Repeated or prolonged skin contact may cause skin irritation.**Eyes Contact:** May cause slight eye irritation of susceptible persons.**Ingestion:** Substance may be harmful if swallowed. May irritate mouth, throat and stomach.**Inhalation:** May cause dizziness.**3. Composition/information on ingredients***Synonyms*

Di (isononyl) Adipate

CAS-No.: 33703-08-1

EC NO. : 251-646-7

REACH No. : 01-2119435856-29-0005

Molar mass: 399

Molecular formula: $C_{24}H_{46}O_4$ **4. First aid measures****Skin Contact:** Wash affected skin with soap and water. Seek medical attention if symptoms persist.**Eyes Contact:** Flush eyes with large amounts of water for at least 15 minutes. If irritation persists, consult a physician.**Ingestion :** Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.**Inhalation :** Person should be move to a fresh air environment.**Notes to Physician :** Treat symptomatically.**5. Fire-fighting measures**

Fire and explosion hazards: Slightly fire hazard.

Extinguishing media : CO₂, regular dry chemical, Water fog, regular foam, alchohole resistant foam

Special Fire-Fighting Procedures : A MSHA/NIOSH approved self-contained breathing apparatus should be worn.

Unusual Fire and Explosion Hazards : Solid stream of water directed at burning liquid may cause frothing.

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6. Accidental release measures

Steps to Taken in Case Material is Released or Spilled :

Dike and contain the spill with inert material (i.e., sand, earth, sawdust) and transfer liquid and solid diking material to separate containers for recovery or disposal. Wash floor area with hot water solution. Remove contaminated clothing and wash before reuse. Wash affected skin area with soap and water. Keep spill out of all sewers and bodies of water.

7. Handling and storage

Any use of this product in an elevated process, should be evaluated to establish and maintain safe operating procedures. Keep from contact with oxidizing materials.

Containers should be kept tightly closed and stored in a dry well-ventilated place.

8. Exposure controls/personal protection

Exposure limits:

Di (isononyl) Adipate

No occupational exposure limits established by OSHA, ACGIH, or NIOSH

Ventilation :

Based on available information, additional ventilation is not required.

Ensure compliance with applicable exposure limits.

Respiratory Protection :

None required for normal operation.

Eye Protection :

Safety glasses.

Provide an emergency eye wash fountain quick drench shower in the immediate work area.

Skin Protection :

Wear appropriate chemical-resistant gloves.

Wear appropriate chemical-resistant clothing.

Engineering Measures:

For normal operation, local exhaust ventilation should suffice. Direct exhaust when material becomes heated and fumes are given off.

9. Physical and chemical properties

Form :	clear liquid
Color :	colorless
Odor :	mild odor
Specific Gravity :	0.923(20°C)
Vapor Pressure :	8.54E-07mmHg at 25°C
Vapor Density :	9.6 (Air=1)
Flash point :	235°C
Boiling point	405.8°C
PH:	N/A
Solubility in water :	negligible
Evaporation Rate :	N/A
Freezing Point :	-68°C

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10. Stability and reactivity

Stability : This product is stable under normal conditions.

Conditions to Avoid : Strong oxidizing agents.

Hazardous Polymerization : Will not occur normal circumstances.

11. Toxicological information

Acute Toxicity:

Oral LD₅₀ (rat) : 9.1 g/kg

Dermal LD₅₀ (rabbit) : 16.3ml/kg

Skin irritation (rabbit) : very slight

Skin irritation (human) : none

Eye irritation (rabbit) : very slight

Skin sensitization (human) : none

12. Ecological information

Summary :

Data for this material have been used to estimate its environmental impact. It has the following properties : a high potential to affect some aquatic organisms, some potential to biodegrade with acclimated microorganisms from activated sludge, a low potential to persist in the environment, and a low potential to bioconcentrate.

Acute aquatic Effects Data :

96 hour LC₅₀ (fathead minnow) : NOEC > 0.78mg/l

96 hour LC₅₀ (rainbow trout) : NOEC > 0.78mg/l

This product does not contain any ozone depleting compounds (ODC's)

13. Disposal considerations

Waste Disposal Methods :

Material should be disposed of in accordance to current local and national regulations. Contacting a waste disposal service is recommended.

14. Transport information

Not classified as hazardous according to the Department of Transportation.

15. Regulatory information

Toxic Substances Control Act (TSCA) :

This product is in compliance with the TSCA regulation of the United states.

Domestic Substance List (DSL) :

This product is listed on the DSL inventory of Canada.

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Australian Inventory of Chemical Substances (AICS) :

This product is listed on the AICS inventory of Australia.

European Inventory of Existing Chemical Substances (EINECS):

This product is list on the EINECS inventory of Europe. Registration # : 203-090-1

Superfund Amendments and Reauthorization Act (SARA) :

This product has the following hazards as defined in Section 311/312 of 40 CER Part 372 :

Hazards

None

This product contains the following chemicals subject to the reporting requirements of Section 313 or Title III of SARA and 40 CFR Part 372 :

Ingredients

None

California Proposition 65:

This product contains the following substances known to the State of California to cause cancer, birth defects, or other reproductive harm per the Safe Drinking Water and Toxic Enforcement Act of 1986 :

Ingredients

None

16. Other information

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.