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# Material Safety Data Sheet
# Di-isononyl phthalate

## Section 1 - Product Identification

| | | |
|---|---|---|
| Synonym | : | DINP, 2,5-Furanedione. |
| Chemical Formula | : | $C_6H_4(COOC_9H_{19})_2$ |
| Company Identification | : | Tradeasia International Pte. Limited |
| Address | : | 133 Cecil Street # 12-03 Keck Seng Tower, Singapore<br>Tel: +65-6227 6365<br>Fax: +65-6225 6286<br>Email: contact@chemtradeasia.com |

## Section 2 – Hazards Identification

### 2.1. Classification
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

### 2.2. Label elements
**Symbols/Pictograms**
Not applicable
**Signal Word**
Not applicable
**Hazard Statements**
Not applicable
**Precautionary Statements**
Not applicable

### 2.3. Other hazards
Not applicable

## Section 3 – Composition/Information on Ingredients

### 3.1 Composition comments

| Chemical Name | EC No/CAS No | Purity, % |
|---|---|---|
| DI-ISONONYL PHTHALATE | 28553-12-0 | min 96.6 |

## Section 4 – First-Aid Measures

### 4.1. Description of first aid measures
**General advice**
Take off all contaminated clothing immediately.
**Eyes**
Rinse with plenty of water immediately and seek medical advice.
**Skin**
Wash off with plenty of water and soap immediately, seek medical advice if necessary.
**Ingestion**

Seek medical advice immediately.

**4.2. Most important symptoms and effects, both acute and delayed**
N.A.

**4.3. Indication of any immediate medical attention and special treatment needed**
N.A.

## Section 5 – Fire Fighting Measures

**5.1. Suitable Extinguishing media**
Spray water,foam,carbon dioxide,dry powder

**5.2. Unsuitable Extinguishing media**
N.A.

**5.3. Specific hazards arising from the chemical**
N.A.

**5.4. Special protective actions for fire-fighters**
N.A.

## Section 6 – Accidental Release Measures

**6.1. Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment.
Avoid contact with skin and eyes.

**6.2. Environmental precautions**
Do not allow entrance into sewage water,drainage systems,stretches of water,soil.
Inform the company environmental protection department immediately if this product has left the production area.

**6.3. Methods and material for containment and cleaning up**
Take up mechanically or with an absorbent material.
Fill into marked,sealable containers.
To be disposed of in compliance with existing regulations.
Suitable binder: universal absorbent,kieselguhr,oil absorbent.

## Section 7 – Handling and Storage

**7.1. Precautions for safe Handling**
IF possible,use material transfer/filling,metering and blending plants that are closed.
Advice on protection against fire and explosion.
Normal measures of preventive fire protection.

**7.2. Conditions for safe storage, including any incompatibilities**
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 – Exposure Controls/Personal Protection

**8.1. Appropriate engineering controls**
Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**8.2. Individual protection measures, such as personal protective equipment (PPE)**
**Eye/face protection**
Face shield and safety glasses.
**Skin protection**
Suitable protective gloves,e.g.rubber gloves.
**Respiratory protection**
In case of dusts/vapors/aerosols being formed or if the limit values like TLV are exceeded:
Use respiratory equipment with suitable filters (filter type A or wear a self contained respiratory apparatus).
**Hygiene Measures**
Do not inhale vapors/aerosols.
Avoid contact with skin and eyes.

## Section 9 – Physical and Chemical Properties

**9.1. Information on basic physical and chemical properties**

Physical State: liquid
Appearance: transparent/yellowish
Odor: Odorless.
Vapor Pressure: < 0.01 hPa
Viscosity: 72,00-82,00 mPas
Boiling Point: 270-280℃
Ignition temperature: ~400℃
Freezing/Melting Point: ~ -54℃
Flash point: ~200℃
Partition coefficient(n-octanol/water): Log pow: 9.98 (calculated)
Density: 0.972-0.977 g/cm$^3$

## Section 10 – Stability and Reactivity

**10.1. Reactivity**
Non-reactive under normal temperatures and pressures.

**10.2. Chemical stability**
Stable under normal temperatures and pressures.

**10.3. Possibility of hazardous reactions**
Not available.

**10.4. Conditions to avoid:**
High temp. (over 400℃)

### 10.5. Incompatible materials
Not available.

### 10.6. Hazardous decomposition products
Not available.

## Section 11 – Toxicological Information

### 11.1 Health effects associated with ingredients
**Acute toxicity**
LD50(rat): > 10,000 mg/kg
dermal LD50 > 3,160 mg/kg rabbit OECD Guideline 402
**Skin corrosion/irritation**
Not available.
**Serious eye damage/eye irritation**
Not available.
**Respiratory or skin sensitization**
Not available.
**Germ cell mutagenicity**
Not available.
**Carcinogenicity**
Not available.
**Reproductive toxicity**
Not available.
**Specific target organ toxicity - single exposure**
Not available.
**Specific target organ toxicity - repeated exposure**
Not available.
**Aspiration hazard**
Not available.

## Section 12 – Ecological Information

### 12.1.Ecotoxicity
**Toxicity to fish:** LCO *Brachydanio rerio*:≧ 10,000mg/l /96 h
**Toxicity to daphnia:** *Daphnia magna*: Not toxic under test conditions.
**Toxicity to algae:**
EC50 *scenedesmus subspicatus*:> 10,000mg/l /72 h
NOEC *scenedesmus subspicatus*:≧ 10,000 mg/l /72 h
**Toxicity in terrestrial plants:**
EC50 *Lepidium sativum*:≧1,000mg/l
EC50 *Triticum aestivum*:≧1,000mg/l
EC50 *Lactuca sativa*(lettuce):≧1,000mg/l

### 12.2. Bioaccumulative potential
Not available.

### 12.3. Mobility in soil
Not available.

### 12.4. Persistence and Degradability
The substance is readily biodegradable.

### 12.5. Other adverse effects
Not available.

## Section 13 – Disposal Considerations

### 13.1. Disposal methods
Waste from residues/unused products
Disposal should be in accordance with applicable regional, national and local laws and regulations. Incinerate at a licensed installation.

## Section 14 – Transport Information

### 14.1. Transport/further information.
Not classified as dangerous in the meaning of transport regulations.

## Section 15 – Regulatory Information

### 15.1. Safety, health and environmental regulations
Not subject to labeling provision.

## Section 16 : Additional Information

### 16.1. List of abbreviation and acronyms used in this MSDS
**SDS** : Safety Data Sheets
**Index N°** : atomic number of the element most characteristic of the properties of the substance
**CAS No** : Chemical Abstracts Service number
**EC No** : EINECS Number : European Inventory of Existing Commercial Substances
**Repr. Cat. 2** : Substance presumed human reproductive toxicant
**Acute Oral Cat. 5** : Substance which is of relatively low acute oral toxicity.
**GHS** : Globally Harmonised System of Classification and Labelling
**$LD_{50}$** : Median Lethal Dose
**$LC_{50}$** : Lethal Concentration, 50%
**N.A.** : Not Applicable
**OSHA** : Occupational Safety & Health Administration
**Cal OSHA** : The State of California Division of Occupational Safety and Health (DOSH)
**PEL** : Permissible Exposure Limits
**ACGIH** : American Conference of Governmental Industrial Hygienists
**TLV** : Threshold Limit Value
**Japanese MITI** : Japanese Ministry of International Trade and Industry
**$EC_{50}$** : Half maximal effective concentration
**UN** : United Nations

**U.S. EPA TSCA Inventory**: Inventory of the chemical substances manufactured or processed in the United States according to Toxic Substances Control Act compiled and published under the autority of the Environmental Protection Agency
**Canadian DSL**: Canadian Domestic Substances List

**16.2. Disclaimer of Liability**
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