Material Safety data sheet
Di-Isononyl Phthalate(DINP)

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Catalogue No.:
Product name: Di-isononyl phthalate (DINP)
Manufacturer/supplier identification
Company: TENOIT CO.,LTD.
Adress: Rm.4, 5FL. , No. 109, Sec 6, Mingquan E. Rd. Taipei, Taiwan
Emergency telephone No.:+886 (02) 8792-2185

2. Composition / information on ingredients

Synonyms
2,5-Furanedione
CAS-No.: 28553-12-0
Molar mass: 419
Molecular formula:$C_6H_4(COOC_9H_{19})_2$

3. Hazards identification

No specific hazards are known.

4. First aid measures

General advice

Take off all contaminated clothing immediately.

Skin contack

Wash off with plenty of water and soap immediately, seek medical advice if necessary.

Eye contact

Rinse with plenty of water immediately and seek medical advice.

Ingestion

Seek medical advice immediately.

5. Fire-fighting measures

Suitable extinguishing media:
Spray water,foam,carbon dioxide,dry powder

6. Accidental release measures

Personal precautions

Use personal protective equipment.
Avoid contact with skin and eyes.

Environmental precautions

Do not allow to entrance in sewage water,drainage systems,stretches of water,soil.
Inform the company environmental protection department immediately if this product has left the production area.

Methods for 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.

7.Handling and storage

Handling:

Safe handling advice
IF possible,use material transfer/filling,metering and blending plants that are closed.
Advice on protection against fire anda explosion
Normal measures of preventive fire protection

Storage:

Requirements for storage areas and containers
Keep containers tightly closed.

8.Exposure controls/personal protection

Components with workplace control parameters

CAS-No. 28553-12-0
Control Parameters 5mg/m^3 Time Weighted Average(TWA):(EH400ES)

Engineering measures

If possible,use material transfer/filling,metering and blending plants that are closed.

Personal protective equipment:

Respiratory protection:
In case of dusts/vapors/aerosols being formed or if the limit values like TLV are exceeded:
Use respiratory equipment with suitable filter(filter type A or wear a self contained)respiratory apparatus.

Hand protection:

Suitable protective gloves,e.g.rubber gloves
Eye protection:
Safety glasses

Hygiene measures

Do not inhale vapors/aerosols.
Avoid contact with skin and eyes.

9.Physical and chemical properties

Form: liquid
Color: colorless to yellowish
Odor: odorless

PH value	(20℃)	neutral/aqueous extract	
Viscosity dynamic	(20℃)	72,00-82,00 mPa.s	Method: DIN 53 015
Melting point	ca.-54℃	Stock point	
Boiling point	270-280℃ (5hPa)		
Ignition temperature	ca.400℃		Method: DIN 51 794
Flash point	ca.200℃		Method: DIN EN 22 719
Explosion limits	no explosion limits under standard conditions		
Vapour pressure	(20℃)	< 0.01 hPa	
Density	(20℃)	0.972-0.977 g/cm^3	

Partition coefficient(n-octanol/water)
Log pow: 9.98(calculated)

Related to substance: di-isononyl phthalate

10.Stability and reactivity

Hazardous decomposition products	no
Thermal decomposition	> 280℃
Hazardous reactions	no

11.Toxicological information

Acute oral toxicity LD50(rat): > 10,000 mg/kg.
Own study

Skin irritation not irritating
Method: OECD Test Guideline 404
Own study

Eye irritation not irritating
Method: OECD Test Guideline 405
Own study

Toxicity to reproduction no evidence of reproduction-toxic properties

12.Ecological information

Elimination information(persistence and degradability)

Biodegradability readily biodegradable
81% Method:(CO_2;modif.Sturm test-92/69/EEC part C.4-C

Behaviour in environmental compartments

Ecotoxicity effects:

Toxicity to fish LC0 Brachydanio rerio:≧ 10,000mg/l /96 h
Method: EC 92/69
fish,acute toxicity test
tested in the presence of emulsifiers
In the range of water solubility not toxic under test conditions.

Toxicity to daphnia Daphnia magna
Test in the presence of emulsifiers
in the range of water solubility not toxic under test conditions.

Toxicity to algae EC50 scenedesmus subspicatus:> 10,000mg/l /72 h
Method: EC 92/69
cell multiplication inhibition test
tested in the presence of emulsifiers
NOEC secnedesmus subspicatus:≧ 10,000 mg/l /72 h
Method: EC 92/69
cell multiplication inhibition test
tested in the presence of emulsifiers

Toxicity in terrestrial plants EC50 Lepidium sativum:≧1,000mg/l
Method:OECD 208
EC50 Triticum aestivum:≧1,000mg/l
Method:OECD 208
EC50 Lactuca sativa(lettuce):≧1,000mg/l
Method:OECD 208

13.Disposal considerations
Product: With respect to local regulations,e.g.dispose of to waste incineration plant. Waste code may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose. In agreement with the waste code must be determined regional waste disposal authority or company.
14.Transport information
Transport/further information Not classified as dangerous in the meaning of transport regulations.
15.Regulatory information
Labelling according to EEC Directives Statutory basis/list Not subject to labeling provision. National legislation
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.