



UPC Technology Corporation

Safety Data Sheet

Date/Revised : 2021.11.19

1. Chemicals Identification

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| Chemicals Name: Di-isononyl phthalate (DINP) |
| Other Names: DINP |
| Recommended use and restrictions on use: Low-volatility plasticizer ; Plasticizers, adhesives, plastisols, nitrocellulose lacquer coatings ; Plastics products such as vinyl swimming pool, vinyl seat (furniture and car) and clothing (jackets, raincoats, boots, etc.) |
| Names, addresses, and phone numbers of the manufacturer , importer or supplier: UPC Technology Corporation – Linyuan Plant 3, Kung-Yeh 2nd Rd., Lin-Yuan District, Kaohsiung 832, Taiwan Phone number : (886)-7-6413501 |
| Emergency contact phone numbers/fax numbers: Phone number: (886)-7-6413501 Fax number: (886)-7-6421087 |

2. Hazard(s) identification

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| Chemicals hazard classification : According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200 Classification of the product, no need for classification according to GHS criteria for this product. |
| Labelling elements: none Signal word : none Hazard statements : none Precautionary statements : none |
| Other hazards: none |

3. Composition/information on ingredients

Substance:

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| Common name: Di-isononyl phthalate (DINP) |
| Synonyms: 1,2-benzenedicarboxylic acid, diisononyl ester ; Bis(3,5,5-trimethylhexyl) phthalate ; Phthalic acid, diisononyl ester ; Baylectrol 4200 ; Diisononyl phthalate ; Dinp ; Dinp2 ; Dinp3 ; ENJ 2065 ; Isononyl alcohol, phthalate (2:1) ; Jayflex DINP ; Palatinol DN ; Palatinol N ; Phthalic acid, diisononyl ester ; Phthalisocizer DINP ; Sansocizer DINP ; Vestinol NN ; Vinylcizer 90 ; Witamol 150 |
| Chemical Abstract Service (CAS) Registry Number: 28553-12-0 、 68515-48-0 |
| The hazardous ingredient (% of the content): >99.9% W/W |

| Component | CAS no. | Weigh-% |
|------------------------|------------|---------|
| Di-Iso Nonyl Phthalate | 28553-12-0 | 99.9 |
| Iso Nonyl Alcohol | 27458-94-2 | 0.05 |
| Water (Moisture) | 7732-18-5 | 0.05 |
| Total | | 100.00 |



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4. First-aid measures

The first-aid instructions by relevant routes of exposure:

Inhalation:

- Remove the patient to fresh air.
- Give respirator and medication if necessary.
- Keep patient warm and comfortable.

Skin contact:

- Remove contaminated clothing.
- Flush affected areas with water and soap.
- If irritation develops, get medical attention immediately.

Eye contact:

- Immediately flush affected eyes with plenty of water for at least 15 minutes and hold eyelids apart while washing.

Ingestion:

- Get medical attention immediately.

The most important symptoms and hazardous effects: —

The protection of first-aider:

Ensure that medical personnel be aware of this material, in order to take precautionary measures and protect themselves.

Notes to physicians:

Symptomatic treatment. Consult a physician. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media: Foam ; carbon dioxide ; dry powder ;

Specific hazards arising during fire-fighting: —

Specific fire-fighting methods:

Spray water to cool the containers exposed to fire until put out the fire.

Special protective equipment for firefighters:

Wear full chemical protective clothing and air breathing apparatus. Plus an anti-flash aluminum coat when necessary.

6. Accidental release measures

Personal precautions:

1. Evacuate the contaminated area of people till clearing up the spill area.
2. Make sure the clearing procedures are executed by properly trained people.
3. Wear appropriate personal protective equipments.



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Environmental precautions:

1. Removal of ignition sources.
2. Provision of sufficient ventilation.
3. Notify the government department of safety, health and environmental protection.

Methods and materials for cleaning up:

1. Do not touch the spill materials.
2. Avoid spill materials entry into drains, ground water, sewerage system and closed place.
3. Try to stop release under secure situation.
4. Use dirt, sand or absorbents, which do not react with spill materials, to bound and cover the spills.
5. If spill materials are in melted state, allow it to cool and solidify.
6. For small amounts liquid spill : Use suitable absorbents to absorb the spill materials, then place in appropriate sealed and labeled containers. If using water to wash the contaminated absorbents in spill area may cause same damage as spill materials.
7. For small amounts solid spill : Avoid generation of dust. Use vacuum equipment with HEPA filter to handle the dust. Or shovel the spills into clean, dry, sealed and labeled containers. Then wash the spill area by water.
8. For large amounts spill : Inform fire control department, emergency response department and material supplier for assistance.

7. Handling and storage

Handling:

1. Supply sufficient ventilation in working areas and take minimum use amounts when operating.
2. Avoid generation of mist and vapor at workplace.

Storage:

1. Store in a cool, dry and well-ventilated area. Avoid sunning.
2. Keep away from heat source, ignition source and incompatible substances.
3. Store in appropriate and labeled containers.
4. Store in appropriate and certified cabinet, tank, building, storeroom and warehouse.

8. Exposure controls/personal protection

Engineering control: —

Control parameters:

| 8 hours time weighted average exposure TWA | limits/Short-term exposure STEL | limits/maximum exposure CEILING | limits biological standards: BEIs |
|---|------------------------------------|------------------------------------|--------------------------------------|
| — | — | — | — |

Personal protective equipment:



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Respiratory protection: Organic-canister respirator.

Hand protection: Impervious gloves. The better material is Responder.

- (1) Eye protection: Splash-proof safety goggles.
- (2) Working area should be equipped with eye wash and shower equipment.

Skin and body protection: Impervious coveralls and work boots.

To flee: Gas respirator with organic vapor canister or self-contained air breathing apparatus

Hygiene measures:

1. Remove contaminated clothing immediately after work. Launder clothing soaked or soiled with this material before reuse or discard. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.
2. No smoking, eating or drinking at working place.
3. Wash hands thoroughly after handling this material.
4. Keep working place clean.

9. Physical and chemical properties:

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| Appearance (physical state, color, etc) : Colorless or light-yellow liquid | Odor: no odor or slightly irritating fragrance |
| Odor threshold: — | Melting point: -48°C |
| pH value: — | Boiling point / boiling point range: 252°C (5 mmHg) |
| Flammability (solid, gas): — | Flash point: 234°C |
| Decomposition temperature: — | Test method: — |
| Auto-ignition temperature: — | Explosion limits: — |
| Vapor pressure: 0.045mmHg @25°C | Vapor density: — |
| Density: 0.972-0.977g/cm ³ @20°C | Solubility: 0.005g/100ml (in water) |
| Partition coefficient (n-octanol/water, log Kow): 9.37 | Evaporation rate: — |

10. Stability and reactivity

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| <u>Stability:</u> Stable under ordinary conditions of use and storage. |
| <u>Possible hazardous reactions under specific conditions:</u> — |
| <u>Conditions to avoid :</u> avoid extreme heat, avoid fire |
| <u>Materials to avoid :</u> Strong acid, strong oxidant, permanganate and nitrates. |
| <u>Hazardous decomposition products:</u> May decompose when being heated and generate acrid smoke and irritating materials. |

11. Toxicological information

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| <u>Routes of exposure:</u> Inhalation, eye contact, skin contact, ingestion. |
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Symptoms: Tearing, conjunctival redness, testicular atrophy, liver hypertrophy, erythema

Acute toxicity:

LD50(rat, oral) :

> 10g/Kg(10,000mg/Kg)

> 3,160 mg/kg (rabbit, dermal)

LC50 : —

Chronic toxicity or long-term toxicity: IARC : No classification.

12. Ecological information:

Toxicity to fish

LCO Brachydanio rerio: $\geq 10,000\text{mg/l /96 h}$

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: $> 10,000\text{mg/l /72 h}$

NOEC scenedesmus subspicatus: $\geq 10,000 \text{ mg/l /72 h}$

Toxicity in terrestrial plants

EC50 Lepidium sativum: $\geq 1,000\text{mg/l}$

EC50 Triticum aestivum: $\geq 1,000\text{mg/l}$

EC50 Lactuca sativa(lettuce): $\geq 1,000\text{mg/l}$

Persistence and degradability:

1. When released to soil, this material is expected to hydrolyze or biodegrade.
2. When released into the air, this material is expected to degrade by reaction with ozone and hydroxyl radicals produced by photochemical reactions.

half-life time(air) : —

half-life time(water surface) : —

half-life time(groundwater) : —

half-life time(soil) : —

Bioaccumulative potential: The biological concentration in aquatic life is expected to be low.

Mobility in soil: —

Other adverse effects: —



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13. Disposal considerations

Methods of waste disposal:

1. Comply with relevant state and local waste disposal regulations.
2. Store un-handled waste in accordance with warehousing conditions.
3. The waste could be handled with specified incineration method or sanitary landfill method.

14. Transport information

United Nations number (UN No): Not Regulated

UN Proper shipping name: Not Regulated

Transport hazard class: Not Regulated

Packing group: Not Regulated

Marine pollutant (Yes/No): No

Specific transport measures and precautionary conditions: Not Regulated

15. Regulatory information

Applicable regulations:

1. Occupational Safety and sanitation rules.
2. Labeling of hazardous chemicals and Liberal rule.
3. Traffic Regulation.
4. Method and Facility Standards for Industrial Waste Storage, Clearance, and Disposal.
5. State Regulations

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

WARNING! This product contains a chemical known to the State of California to cause cancer.

di-isononyl phthalate

CAS-No. 28553-12-0

6. National/regional chemical inventory requirement information

International Chemical Inventory Status

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact representative person in section 16 other information.

Europe (EINECS/ELINCS) listed/registered

USA (TSCA) listed/registered

Canada (DSL) listed/registered

Australia (AICS) listed/registered

Japan (MITI) listed/registered

Korea (TCCL) listed/registered

Philippines (PICCS) listed/registered

China listed/registered

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

HMIS Ratings

Health : 1*

Flammability : 1



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Physical Hazard : 0

NFPA Ratings

Health : 1

Flammability : 1

Reactivity : 0

16. Other information

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| Literature references | Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, CONCAWE Product Dossiers, publications from other trade associations, such as the EU Hydrocarbon Solvents REACH Consortium, U.S. HPV Program Robust Summaries, the EU IUCLID Data Base, U.S. NTP publications, and other sources, as appropriate. | |
| Prepared by | Organization Name: UPC Technology Corporation – Linyuan Plant | |
| | Address : 3, Kung-Yeh 2nd Rd., Lin-Yuan, Kaohsiung County 832, Taiwan, R.O.C. | |
| | Phone number : (886)-7-6413501 | |
| | Safety Engineer | |
| Date/Revised : | 2021/11/19 | Version : 7 |
| Note | In the above-mentioned information, symbol ”–“ means data not available at present, and ”/“ means this item is not applicable for this product. | |

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