

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name : **Diisononyl phthalate (DINP)**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Sector of Use

- SU7 Printing and reproduction of recorded media
- SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
- SU11 Manufacture of rubber products
- SU12 Manufacture of plastics products, including compounding and conversion
- SU19 Building and construction work

Product category

- PC1 Adhesives, sealants
- PC9a Coatings and paints, thinners, paint removers
- PC18 Ink and toners
- PC24 Lubricants, greases, release products
- PC0 Other: Plasticier

Process category

- PROC1 Use in closed process, no likelihood of exposure
- PROC2 Use in closed, continuous process with occasional controlled exposure
- PROC3 Use in closed batch process (synthesis or formulation)
- PROC5 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
- PROC7 Industrial spraying
- PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
- PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
- PROC9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
- PROC19 Hand-mixing with intimate contact and only PPE available

Environmental release category

- ERC2 Formulation of preparations
- ERC3 Formulation in materials
- ERC4 Industrial use of processing aids in processes and products, not becoming part of articles
- ERC5 Industrial use resulting in inclusion into or onto a matrix
- ERC6d Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
- ERC7 Industrial use of substances in closed systems
- ERC9a Wide dispersive indoor use of substances in closed systems
- ERC9b Wide dispersive outdoor use of substances in closed systems

Application of the substance / the preparation

- Sealant
- Intermediate
- Preparation of coatings
- Adhesives
- Pigment
- Cleaning agent/ Cleaner
- Lubricant
- Intermediate for synthesis of colouring agents

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier :

Petrochemicals 1st Div, Nan Ya Plastics Corporation
DOP Plant, Taiwan R.O.C
Tel: (886)5-6818477~78; Fax: (886)5-6812687

Only Representative

Nan Ya Technology Europe GmbH
Oststrasse 10
40211 Düsseldorf
Germany

1.4 Emergency telephone number

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Nan Ya Plastics Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See the reverse side of invoice or packing slip for additional terms and conditions of sale.

OR: 0049 211 5285050
 NYPCPFD:+886-5-6818477

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

The substance is not classified according to the CLP regulation.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Not applicable.

Information concerning particular hazards for human and environment:

Warning: A clear colorless, oily liquid, that is not normally irritating to eyes and skin. However, at processing temperatures, the product can emit fumes and vapors, which may cause irritation of the eyes and respiratory tract. Ingestion and prolonged contact should be avoided.

Eye Contact: No hazard expected in normal use.

Skin Contact: No hazard expected in normal use.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

The product does not require a hazard warning label in accordance with GHS criteria.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : 1,2-BENZENEDICARBOXYLIC ACID, DIISONONYL ESTER 、
 DINP 、
 ENJ 2065 、
 PALATINOL DN 、
 PHTHALIC ACID, DIISONONYL ESTER 、
 Palatinol N 、
 Sansocizer DINP 、
 Vestinol NN 、
 WITAMOL 150Phthalic acid dibutyl ester

CAS-No. : 68515-48-0

EC-No. :

REACH No. :

Molar mass : 418.61 g/mol

Molecular formula : C₂₆H₄₂O₄

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Immediately remove any clothing soiled by the product.

If inhaled

Supply fresh air; consult doctor in case of complaints.

In case of skin contact

Immediately wash with water and soap and rinse thoroughly.

In case of eye contact

Rinse opened eye for several minutes under running water.

If swallowed

If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

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No further relevant information available.	
5. FIREFIGHTING MEASURES	
5.1 Extinguishing media	
Suitable extinguishing media	CO ₂ , powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
5.2 Special hazards arising from the substance or mixture	No further relevant information available.
5.3 Advice for firefighters	Wear self contained breathing apparatus for fire fighting if necessary.
5.4 Further information	No special measures required.
6. ACCIDENTAL RELEASE MEASURES	
6.1 Personal precautions, protective equipment and emergency procedures	Wear protective equipment. Keep unprotected persons away.
6.2 Environmental precautions	Do not allow to enter sewers/ surface or ground water.
6.3 Methods and materials for containment and cleaning up	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
6.4 Reference to other sections	No dangerous substances are released. See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
7. HANDLING AND STORAGE	
7.1 Precautions for safe handling	Avoid exposure - obtain special instructions before use. Avoid inhalation of vapour or mist.
7.2 Conditions for safe storage, including any incompatibilities	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end uses	no data available
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
8.1 Control parameters	Components with workplace control parameters
8.2 Exposure controls	Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Personal protective equipment Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Body Protection impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	Form: Fluid Colour: Colourless
b) Odour	Light
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	-50°C
f) Initial boiling point and boiling range	252°C
g) Flash point	241°C
h) Evaporation rate	Not applicable
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	Lower : <0.1 Vol % Upper : 0.17 Vol %
k) Vapour pressure	0.006 hPa at 20°C
l) Vapour density	no data available
m) Relative density	0.976 g/cm ³ at 20 °C
n) Water solubility	6E-7 g/l at 20°C
o) Partition coefficient: n-octanol/water	8.8-9.7 log POW at 25°C
p) Autoignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity (at 20°C)	83 mPas
s) Explosive properties	no data available
t) Oxidizing properties	no data available

9.2 Other safety information

No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity	no data available
10.2 Chemical stability	no data available
10.3 Thermal decomposition / conditions to be avoided	No decomposition if used according to specifications
10.4 Possibility of hazardous reactions	no data available
10.5 Conditions to avoid	no data available
10.6 Incompatible materials	no data available
10.7 Hazardous decomposition products	No dangerous decomposition products known

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Assessment of acute toxicity: The inhalation of a highly enriched/saturated vapor-air-mixture represents an unlikely acute hazard. Virtually nontoxic after a single skin contact.

Skin corrosion/irritation

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

Serious eye damage/eye irritation

Species: rabbit

Result: non-irritant

skin sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Guinea pig maximization test

Species: guinea pig

Germ cell mutagenicity

No mutagenic effects were determined in various investigations of microorganisms, cell cultures and in vivo data.

Toxicity to reproduction Animal experiment studies revealed no evidence of an embryotoxic effect at dosage / concentration levels that are not toxic in the parent animals.

Carcinogenicity

Assessment of carcinogenicity: In long-term studies in rodents exposed to high doses, a tumorigenic effect was found; however, these results are thought to be due to a rodent-specific liver effect that is not relevant to humans.

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<p>Reproductive toxicity Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.</p> <p>Aspiration hazard not applicable</p> <p>Potential health effects</p> <p>Inhalation May be harmful if inhaled. May cause respiratory tract irritation.</p> <p>Ingestion May be harmful if swallowed.</p> <p>Skin May be harmful if absorbed through skin. May cause skin irritation.</p> <p>Eyes May cause eye irritation.</p>	
<p>12. ECOLOGICAL INFORMATION</p> <p>12.1 Toxicity</p> <p>Toxicity to fish no data available</p> <p>12.2 Persistence and degradability no data available</p> <p>12.3 Bioaccumulative potential no data available</p> <p>12.4 Mobility in soil no data available</p> <p>12.5 Results of PBT and vPvB assessment no data available</p> <p>Other adverse effects Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.</p>	
<p>13. DISPOSAL CONSIDERATIONS</p> <p>13.1 Waste treatment methods</p> <p>Recommendation Smaller quantities can be disposed of with household waste.</p> <p>Uncleaned packaging :</p> <p>Recommendation : Disposal must be made according to official regulations.</p>	
<p>14. TRANSPORT INFORMATION</p> <p>14.1 Class : No data available</p> <p>14.2 UN number : No data available</p> <p>14.3 UN proper shipping name</p> <p>ADR/RID: Not classified as dangerous in the meaning of transport regulations.</p> <p>IMDG: Not classified as hazardous sea cargo.</p> <p>IATA: Not hazardous freight in air traffic.</p> <p>14.4 Special precautions for user Not applicable</p>	
<p>15. REGULATORY INFORMATION</p> <p>This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.</p> <p>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture NanYa DINP is in compliance with the inventory listing of the countries listed below: Europe (EINECS/ELINCS) USA (TSCA) Canada (DSL) Australia (AICS) Japan (MITI) Korea (TCCL) Philippines (PICCS) China</p> <p>15.2 Chemical Safety Assessment no data available</p>	
<p>16. OTHER INFORMATION</p> <p>Exposure scenarios This substance is not classified for human health or the environment, is not a CMR and is not PBT or vPvB. Thus it is not required the development of exposure scenarios</p> <p>Further information This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.</p>	