

# SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.0  
Creation Date: July 15, 2019  
Revision Date: July 15, 2019

## SECTION 1: Identification

### 1.1 GHS Product identifier

**Product name** Binapacryl

### 1.2 Other means of identification

**Product number** -  
**Other names** 2-sec-butyl-4,6-dinitrophenyl-3,3-dimethylacrylate; Dapacryl; Morrocid

### 1.3 Recommended use of the chemical and restrictions on use

**Identified uses** Industrial and scientific research use.  
**Uses advised against** no data available

### 1.4 Supplier's details

**Company** Shanghai Yansheng Internet Technology Co., Ltd  
**Address** 513, A3 / F, green space future center, Fengxian District, Shanghai, 201400, China  
**Telephone** +86-4000-6969-66

### 1.5 Emergency phone number

**Emergency phone number** +86-4000-6969-66  
**Service hours** Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Acute toxicity - Category 4, Oral  
Acute toxicity - Category 4, Dermal  
Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1  
Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 1  
Reproductive toxicity, Category 1B

### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)**



**Signal word** Danger  
**Hazard statement(s)** H302 Harmful if swallowed  
H312 Harmful in contact with skin  
H410 Very toxic to aquatic life with long lasting effects  
**Precautionary statement(s)**

<b>Prevention</b>	<p>P264 Wash ... thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...</p> <p>P273 Avoid release to the environment.</p>
<b>Response</b>	<p>P203 Obtain, read and follow all safety instructions before use.</p> <p>P301+P317 IF SWALLOWED: Get medical help.</p> <p>P330 Rinse mouth.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water/...</p> <p>P317 Get medical help.</p> <p>P321 Specific treatment (see ... on this label).</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p> <p>P318 IF exposed or concerned, get medical advice.</p>
<b>Storage</b>	P405 Store locked up.
<b>Disposal</b>	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

## 2.3 Other hazards which do not result in classification

no data available

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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Binapacryl	Binapacryl	485-31-4	207-612-9	100%

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## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

#### If inhaled

Fresh air, rest. Artificial respiration may be needed. Refer for medical attention. See Notes.

#### Following skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention .

#### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

#### Following ingestion

Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention . See Notes.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

1) wash contaminated skin & hair promptly with soap & water, or with water alone if soap is not available. 2) flush chemical from eyes with copious amt of clean water. 3) in...systemic poisoning: a) reduce elevated body temp by physical means. admin sponge baths & cover victim with low-temp blankets. in fully conscious patient, admin cold, sugar-containing liq by mouth as tolerated. b) admin oxygen continuously by mask to minimize tissue anoxia. c) unless there are manifestations of cerebral edema, admin iv fluids at max tolerated rates to enhance urinary excretion of toxicant & to support

physiologic mechanisms for heat loss. in the presence of cerebral edema, iv fluids must be admin very cautiously to avoid incr the cerebral injury. nitrophenolic herbicides

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## **SECTION 5: Fire-fighting measures**

### **5.1 Suitable extinguishing media**

Use water spray, powder, foam, carbon dioxide.

### **5.2 Specific hazards arising from the chemical**

Combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.

### **5.3 Special protective actions for fire-fighters**

Use water spray, powder, foam, carbon dioxide.

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## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Sweep spilled substance into covered sealable containers. Carefully collect remainder. Then store and dispose of according to local regulations.

### **6.2 Environmental precautions**

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Sweep spilled substance into covered sealable containers. Carefully collect remainder. Then store and dispose of according to local regulations.

### **6.3 Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

NO open flames. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### **7.2 Conditions for safe storage, including any incompatibilities**

Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs. Well closed. Keep in a well-ventilated room.

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## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **Occupational Exposure limit values**

no data available

#### **Biological limit values**

no data available

### **8.2 Appropriate engineering controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear safety goggles or face shield.

#### Skin protection

Protective gloves. Protective clothing.

#### Respiratory protection

Use local exhaust.

#### Thermal hazards

no data available

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## SECTION 9: Physical and chemical properties and safety characteristics

Physical state	COLOURLESS CRYSTALLINE POWDER.
Colour	COLORLESS CRYSTALLINE POWDER
Odour	Faint aromatic odor
Melting point/freezing point	68-69°C
Boiling point or initial boiling point and boiling range	436.7°C at 760mmHg
Flammability	Combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.
Lower and upper explosion limit/flammability limit	no data available
Flash point	171.7°C
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	Insoluble in water but soluble in organic solvents as follows: acetone 78%; ethanol 11%; isophorone 57%; kerosene 10%; xylene 70%
Partition coefficient n-octanol/water	log Kow= 4.75 (est)
Vapour pressure	7.9E-08mmHg at 25°C
Density and/or relative density	1.238g/cm <sup>3</sup>
Relative vapour density	no data available
Particle characteristics	no data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Decomposes on heating and on burning. This produces toxic fumes including nitrogen oxides. Reacts slowly with water. This produces harmful Dinoseb.

### 10.2 Chemical stability

Unstable in alkali & concentrated acids, suffers slight hydrolysis on long contact with water & is slowly decomposed by ultra violet light.

### 10.3 Possibility of hazardous reactions

Burns at temp above 150 deg c.

#### **10.4 Conditions to avoid**

no data available

#### **10.5 Incompatible materials**

no data available

#### **10.6 Hazardous decomposition products**

no data available

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### **SECTION 11: Toxicological information**

#### **Acute toxicity**

- Oral: LD50 Rat, female oral 58 mg/kg
- Inhalation: no data available
- Dermal: no data available

#### **Skin corrosion/irritation**

no data available

#### **Serious eye damage/irritation**

no data available

#### **Respiratory or skin sensitization**

no data available

#### **Germ cell mutagenicity**

no data available

#### **Carcinogenicity**

no data available

#### **Reproductive toxicity**

no data available

#### **STOT-single exposure**

The substance may cause effects on the metabolism. This may result in high body temperature and sweating. The effects may be delayed. Medical observation is indicated.

#### **STOT-repeated exposure**

no data available

#### **Aspiration hazard**

No indication can be given about the rate at which a harmful concentration of this substance in the air is reached on evaporation at 20°C.

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### **SECTION 12: Ecological information**

#### **12.1 Toxicity**

- Toxicity to fish: LC50 Rainbow trout 50 ug/l/96 hr @ 13 deg C (95% confidence limit 46-55 ug/l), wt 1.1 g. Static bioassay without aeration, pH 7.2-7.5, water hardness of 40-50 mg/l as CaCo3 and alkalinity of 30-35 mg/l. Technical material, 99.9%.
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

#### **12.2 Persistence and degradability**

no data available

### 12.3 Bioaccumulative potential

Based on an estimated log octanol/water partition coefficient of 4.75(1, SRC), a calculated bioconcentration factor of 2400 can be calculated for binapacryl using an appropriate regression equation(2, SRC). The magnitude of this value indicates that binapacryl may significantly bioconcentrate in fish and aquatic organisms(SRC).

### 12.4 Mobility in soil

Based on an estimated log octanol/water partition coefficient of 4.75(1, SRC), a calculated soil adsorption coefficient of 9100 can be calculated for binapacryl using an appropriate regression equation(2, SRC). This value indicates that binapacryl will be essentially immobile in soil(3). The movement of binapacryl through a silty clay loam was investigated by TLC experiments in which it was found to have an R<sub>f</sub> of 0.03, indicating very limited mobility(4).

### 12.5 Other adverse effects

no data available

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## SECTION 13: Disposal considerations

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## SECTION 14: Transport information

### 14.1 UN Number

ADR/RID: UN2779 (For reference only, please check.)

IMDG: UN2779 (For reference only, please check.)

IATA: UN2779 (For reference only, please check.)

### 14.2 UN Proper Shipping Name

ADR/RID: SUBSTITUTED NITROPHENOL PESTICIDE, SOLID, TOXIC (For reference only, please check.)

IMDG: SUBSTITUTED NITROPHENOL PESTICIDE, SOLID, TOXIC (For reference only, please check.)

IATA: SUBSTITUTED NITROPHENOL PESTICIDE, SOLID, TOXIC (For reference only, please check.)

### 14.3 Transport hazard class(es)

ADR/RID: 6.1 (For reference only, please check.)

IMDG: 6.1 (For reference only, please check.)

IATA: 6.1 (For reference only, please check.)

### 14.4 Packing group, if applicable

ADR/RID: I (For reference only, please check.)

IMDG: I (For reference only, please check.)

IATA: I (For reference only, please check.)

### 14.5 Environmental hazards

ADR/RID: Yes

IMDG: Yes

IATA: Yes

### 14.6 Special precautions for user

no data available

## 14.7 Transport in bulk according to IMO instruments

no data available

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## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Binapacryl	Binapacryl	485-31-4	207-612-9
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Not Listed.
China Catalog of Hazardous chemicals 2015			Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Not Listed.
Vietnam National Chemical Inventory			Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Not Listed.
Korea Existing Chemicals List (KECL)			Listed.

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## SECTION 16: Other information

### Information on revision

**Creation Date** July 15, 2019

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### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

### Other Information

Binapacryl is the dimethyl acrylic ester of harmful Dinoseb. It is metabolized to form Dinoseb. Toxicity is attributed to Dinoseb. Use all available methods for reducing body temperature. Carrier solvents used in commercial formulations may change physical and toxicological properties. See ICSCs 0149 and 0882.

**Any questions regarding this SDS, Please send your inquiry to [sds@xixisys.com](mailto:sds@xixisys.com)**

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*Disclaimer: 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. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.*