Chemical Book India

Chemical Safety Data Sheet MSDS / SDS

Binapacryl SDS

Revision Date: 2024-04-25 Revision Number: 1

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name: Binapacryl CAS: 485-31-4

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

Relevant identified For R&D use only. Not for medicinal, household or other use.

uses:

Uses advised none

against:

Company Identification

Company: Chemicalbook.in

Address: 5 vasavi Layout Basaveswara Nilayam Pragathi Nagar Hyderabad, India -500090

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SECTION 2: Hazards identification

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

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)

Prevention

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P273 Avoid release to the environment.

P203 Obtain, read and follow all safety instructions before use.

Response

P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P317 Get medical help.

P321 Specific treatment (see ... on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P318 IF exposed or concerned, get medical advice.

Storage

P405 Store locked up.

Disposal

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.

Other hazards which do not result in classification

no data available

SECTION 3: Composition/information on ingredients

Substance

Chemical name: Binapacryl
Common names and Binapacryl

synonyms:

CAS number: 485-31-4
EC number: 207-612-9
Concentration: 100%

SECTION 4: First aid measures

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.

Most important symptoms/effects, acute and delayed

no data available

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

SECTION 5: Firefighting measures

Suitable extinguishing media

Use water spray, powder, foam, carbon dioxide.

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.

Special protective actions for fire-fighters

Use water spray, powder, foam, carbon dioxide.

SECTION 6: Accidental release measures

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.

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.

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.

SECTION 7: Handling and storage

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.

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.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

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.

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

SECTION 9: Physical and chemical properties and safety characteristics

Physical state: COLOURLESS CRYSTALLINE POWDER.

Colour: COLORLESS CRYSTALLINE POWDER

Coloration of the coloration o

68-69°C

Odour: Faint aromatic odor

Melting

point/freezing

point:

Boiling point or 436.7°C at 760mmHg

initial boiling point and boiling range:

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:

Flash point: 171.7°C

Auto-ignition

no data available

no data available

temperature:

Decomposition

no data available

temperature:

pH: no data available no data available Kinematic

viscosity:

Insoluble in water but soluble in organic solvents as follows: acetone 78%; ethanol 11%; Solubility:

isophorone 57%; kerosene 10%; xylene 70%

Partition log Kow= 4.75 (est)

coefficient noctanol/water:

Vapour pressure: 7.9E-08mmHg at 25°C

Density and/or relative density:

Relative vapour

density:

no data available

1.238g/cm3

Particle no data available

characteristics:

SECTION 10: Stability and reactivity

Reactivity

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

Chemical stability

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

Possibility of hazardous reactions

Burns at temp above 150 deg c.

Conditions to avoid

no data available

Incompatible materials

no data available

Hazardous decomposition products

no data available

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.

SECTION 12: Ecological information

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

Persistence and degradability

no data available

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).

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 Rf of 0.03, indicating very limited mobility(4).

Other adverse effects

no data available

SECTION 13: Disposal considerations

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.

SECTION 14: Transport information

UN Number

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

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.)

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.)

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.)

Environmental hazards

ADR/RID: Yes IMDG: Yes IATA: Yes

Special precautions for user

no data available

Transport in bulk according to IMO instruments

no data available

SECTION 15: Regulatory information

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

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.

(PICCS)

Not Listed.

Vietnam National Chemical Inventory

Not Listed.

IECSC)

Not Listed.

Korea Existing Chemicals List (KECL)

Listed.

SECTION 16: Other information

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

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-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.

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