

MSDS Report

According to UN GHS (the 5th revised edition)

Issue date: Oct. 20, 2021



Service requested: Material Safety Data Sheet for the Product

Version: 1.0

Applicant: CHIZHOU FANGDA SCIENCE AND TECHNOLOGY CO.,LTD

Address : XIANGYU CHEMICAL ZONE,
DONGZHI COUNTY, CHIZHOU CITY,
ANHUI PROVINCE

Product name: ISO BORNYL ACRYLATE

Composition/Ingredient: Refer to MSDS content

Issued by: Nande (China) Service of Testing
Yinfeng Ind Zone, Hangcheng Street, Gushu, Xixiang,
Bao'an Dist, Shenzhen, China

Written by: Linda
(Linda)

Inspected by: Jose
(Jose)



Material Safety Data Sheet

Product name: ISO BORNYL ACRYLATE

MSDS No.: E66.170.412.001.TDL

Revision date: Oct. 20, 2021

Section 1 - Product and Company Identification

Product name: ISO BORNYL ACRYLATE

Product name abbreviation: IBOA

HS code: 2916129000

Applicant: CHIZHOU FANGDA SCIENCE AND TECHNOLOGY CO.,LTD

Address: XIANGYU CHEMICAL ZONE, DONGZHI COUNTY, CHIZHOU CITY, ANHUI PROVINCE

Post code: 247160

Manufacturer: CHIZHOU FANGDA SCIENCE AND TECHNOLOGY CO.,LTD

Address: XIANGYU CHEMICAL ZONE, DONGZHI COUNTY, CHIZHOU CITY, ANHUI PROVINCE

Recommended use: For radiation curing paint, ink, adhesives, used as reactive diluent etc.

Section 2 - Hazard Description

2.1. GHS Classification: Skin sensitization, Category 1;

Skin corrosion / irritation, Category 2;

Eye / damage irritation, Category 2A;

Hazardous to the aquatic environment - Long-Term (Chronic) Hazard, Category 2.

2.2. Label elements:

Pictures:



Signal word: Warning

Dangerous state:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Warning statement

Material Safety Data Sheet

Product name: ISO BORNYL ACRYLATE

MSDS No.: E66.170.412.001.TDL

Revision date: Oct. 20, 2021

Preventive measures:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

Accident response:

P391 Collect spillage.

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

P332+P313 If skin irritation occurs: Get medical advice/attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Safety storage:

Not applicable

Waste disposal:

P501 Dispose of contents/container to the approval of the waste treatment plant

2.3. Other Hazards: None

Section 3 - Composition / Ingredient Data

Material	√ Mixture	
Ingredient name	CAS No.	Concentration
ISO BORNYL ACRYLATE	5888-33-5	98.5%
Water	7732-18-5	0.5%
Acrylic acid	79-10-7	1%

Section 4 - First Aid Measures

4.1. General advice: Show this safety data sheet to the doctor in attendance. After receiving the first-aid measure required,

Material Safety Data Sheet

Product name: ISO BORNYL ACRYLATE

MSDS No.: E66.170.412.001.TDL

Revision date: Oct. 20, 2021

consult a physician if necessary.

- 4.2. Skin contact: Remove contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If chemical burns or skin sustained stimulation, consult a physician immediately.
- 4.3. Eyes contact: Check for and remove any contact lenses. Get medical attention. Immediately flush eyes with running water for at least 30 minutes, disappear until the chemical residues so far, keeping eyelids open. Provide a readily-accessible eyewash facility and quick-drench safety shower. Do not rubbing eyes with hand.
- 4.4. Inhalation: Move exposed person to fresh air. Keep person warm and at rest. If not breathing or if breathing is irregular, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
- 4.5. Ingestion: Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
- 4.6. Most important acute and delayed symptoms/effects: See Section 2 and Section 11 for more information.
- 4.7. Immediate / special treatment: Continue with first aid measures. Treat symptomatically and supportively. Symptoms may be delayed.

Section 5 – Firefighting Measures

- 5.1. Hazardous characteristics: Non inflammable goods.
- 5.2. Extinguishing method and extinguishing agent:
- Suitable extinguishing media: Dry chemical, carbon dioxide or alcohol-resistant foam.
- Unsuitable extinguishing media: Do not use a solid water stream as it may scatter or spread fire.
- 5.3. Special hazards arising from the substance or mixture: Carbon oxides.
- 5.4. Fire precautions and measures: Firefighters must wear self-contained breathing apparatus, wear full body fire suit, fire extinguishing in the upwind. As far as possible will be transferred to empty containers from the scene. Keep the fire water spray container cooling, until the end of fire.

Section 6 - Accidental Release Measures

Material Safety Data Sheet

Product name: ISO BORNYL ACRYLATE

MSDS No.: E66.170.412.001.TDL

Revision date: Oct. 20, 2021

- 6.1. Personal precautions, protective equipment and emergency procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material, avoid slipping. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- 6.2. Environmental precautions: Prevent further leakage or spillage if safe to do so. To prevent leak into the water, the basement and limited space. Prevent entry into the sewage system.
- 6.3. Collecting, clearing method and disposal material: Collecting, clearing method and disposal material: Small spill: Stop leak if without risk. Move containers from spill area. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Disposal: Contaminated material must be disposed of in accordance with all State and/or Local regulations.

Section 7 - Handling and Storage

- 7.1. Handling precautions: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes. Do not ingest. Avoid breathing dust, vapour or mist. Normal measures for preventive fire protection. Observe good housekeeping procedures and hygiene practices. Wash thoroughly after handling. Handling of light when light disposal to prevent packaging and container is damaged. Equipped with corresponding varieties and number of fire equipment and spill contingency processing equipment.
- 7.2. Information about protection against explosions and fires: Non inflammable and explosive. Compliance with fire regulations.
- 7.3. Precautions for storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be

Material Safety Data Sheet

Product name: ISO BORNYL ACRYLATE

MSDS No.: E66.170.412.001.TDL

Revision date: Oct. 20, 2021

carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.4. Packaging materials: Recommended-Use original container.

Section 8 - Exposure Controls/ Personal Protection

8.1. Exposure limit: Acrylic acid: ACGIH TLV-TWA 70 mg/m³ (20 ppm).

8.2. Engineering control: Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Set up emergency exit and necessary risk-elimination area.

8.3. Respiratory protection: If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

8.4. Eye protection: Wear safety glasses when there is a potential for eye contact.

8.5. Skin and body protection: Wear general work clothes.

8.6. Hand protection: Wear protective gloves (such as butyl rubber).

8.7. Other protection: Smoking, eating and drinking water is forbidden in the workplace. After work, shower and change clothes. To maintain good health habits.

Section 9 - Physical and Chemical Properties

Appearance and shape: Colorless transparent liquid, mild odor

pH value: No data

Melting point/ freezing point (°C): -35

Boiling point(°C):207

Explosion limit: No data

Flash point(Closed cup, °C): 120

Steam pressure(20°C): No data

Vapor density: No data

Relative density (water =1): 0.986g/cm³

Water soluble: Insoluble in water

Partition coefficient: noctanol/water: No data

Ignition temperature(°C): No data

Decomposition temperature: No data

Flammability (solid, gas): Not applicable

Section 10 - Stability and Reactivity

10.1.Stability: The product is chemically stable.

10.2. Reactivity: Stable under proper operation and storage conditions.

Material Safety Data Sheet

Product name: ISO BORNYL ACRYLATE

MSDS No.: E66.170.412.001.TDL

Revision date: Oct. 20, 2021

10.3. Incompatible materials: Oxidizing agent.

10.4. Conditions to avoid: Incompatible materials, overheat and fire source.

10.5. Hazardous Polymerization: Will not occur.

10.6. Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 - Toxicological Information

11.1. Acute toxicity: Acrylic acid: Oral-rabbit LD50: 1200mg/kg; Oral-mouse LD50: 1250mg/kg;

Oral-rat LD50: 1060mg/kg .

11.2. Skin corrosion/irritation: Causes skin irritation.

11.3. Eye corrosion/irritation: Causes serious eye irritation.

11.4. Respiratory or skin sensitization: May cause an allergic skin reaction.

11.5. Germ cell mutagenicity: According to the existing data, the product is not classified.

11.6. Carcinogenicity: According to the existing data, the product is not classified.

11.7. Reproductive toxicity: According to the existing data, the product is not classified.

11.8. Specific target organ toxicity - single exposure: According to the existing data, the product is not classified.

11.9. Specific target organ toxicity - repeated exposure: According to the existing data, the product is not classified.

11.10. Aspiration hazard: According to the existing data, the product is not classified.

Section 12 - Ecological Information

12.1. Ecotoxicity values: No data.

12.2. Persistence and degradability: No data.

12.3. Bioaccumulative potential: No data.

12.4. Mobility in soil: No data.

12.5. Other adverse effects: Toxic to aquatic life with long lasting effects. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment.

Section 13 - Disposal Considerations

13.1. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

Consult state, local or national regulations for proper disposal. The generation of waste should be avoided or

Material Safety Data Sheet

Product name: ISO BORNYL ACRYLATE

MSDS No.: E66.170.412.001.TDL

Revision date: Oct. 20, 2021

minimized wherever possible. Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Refer to Section 7-Handling and Storage and Section 8-Exposure Controls/ Personal Protection for additional handling information and protection of employees.

Section 14 - Transport Information

14.1.UN number

IMDG: 3082

14.2. UN proper shipping name

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3.Transport hazard class(es)

IMDG: 9

14.4.Packing group

IMDG: III

14.5. Packaging label:



14.6.Environmental hazards

IMDG Marine pollutant: Yes



14.7.Precautions for transport: Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

Section 15 - Regulatory Information

15.1. International regulations

Material Safety Data Sheet

Product name: ISO BORNYL ACRYLATE

MSDS No.: E66.170.412.001.TDL

Revision date: Oct. 20, 2021

CAS No.	TSCA	EINECS	DSL	IECSC	NZIoC	PICCS	KECI	AICS
5888-33-5	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
7732-18-5	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
79-10-7	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed

TSCA: United States Toxic Substances Control Act Inventory

EINECS: European Inventory of Existing Commercial Chemical Substances

DSL: Canadian Domestic Substances List

IECSC: China Inventory of Existing Chemical Substances

PICCS: Philippines Inventory of Chemicals and Chemical Substances

NZIoC: New Zealand Inventory of Chemicals

KECI: Existing and Evaluated Chemical Substances

AICS: List of existing chemical substances in Australia

Section 16 - Other Information

16.1. Legal disclaimer: The above information is believed to be correct but we can not guarantee the absolute universality and accuracy 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. The above-named supplier and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.