

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name : 2,2'-Bis(trifluoromethyl)benzidine
CAS No. : 83558-87-6

Manufacturer or supplier's details

Company : Heynova (Shanghai) New Material Technology CO., Ltd
Address : Building 3, No. 690 Bibo Road, Pudong New Area, Shanghai, China

Telephone : +86-178-2110-2608
E-mail address : info@heynovachem.com

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance : Solid form
Color : white - yellow
Harmful if swallowed, in contact with skin or if inhaled.

GHS Classification

Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 4
Acute toxicity (Dermal) : Category 4

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

Precautionary Statements :

Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Physical and chemical hazards

Not classified based on available information.

Health hazards

Harmful if swallowed. Harmful if inhaled. Harmful in contact with skin.

Environmental hazards

Not classified based on available information.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

Chemical name	CAS RN	Concentration (% w/w)
2,2'-Bis(trifluoromethyl)benzidine	341-58-2	98

4. FIRST AID MEASURES

If inhaled : Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/ physician if you feel unwell.

In case of skin contact : Take off all contaminated clothing immediately.
Wash off with soap and plenty of water.
Call a POISON CENTER or doctor/ physician if you feel unwell.

In case of eye contact : Rinse with plenty of water.
If easy to do, remove contact lens, if worn.
If eye irritation persists: Get medical advice/ attention.

If swallowed : Call a POISON CENTER or doctor/ physician if you feel unwell.
Rinse mouth.

Most important symptoms and effects, both acute and delayed : None known.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry powder, Foam, Water spray, Carbon dioxide (CO2)

Specific hazards during fire fighting : No information available.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Immediately evacuate personnel to safe areas.
Remove undamaged containers from fire area if it is safe to do so.

Special protective equipment for fire-fighters : Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Wear suitable protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
Environmental precautions	: Prevent product from entering drains.
Methods and materials for containment and cleaning up	: Pick up and arrange disposal without creating dust.

7. HANDLING AND STORAGE

Handling

Technical measures	: Prevent dispersion of dust.
Local/Total ventilation	: Ensure adequate ventilation. Use a local exhaust ventilation.
Advice on safe handling	: Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Wash hands and face thoroughly after handling.
Avoidance of contact	: Oxidizing agents, Acids

Storage

Conditions for safe storage	: Keep container tightly closed. Store in a cool and shaded area.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	: Install a closed system or local exhaust. Also install safety shower and eye bath.
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Personal protective equipment

Respiratory protection	: Dust mask
Eye/face protection	: Safety glasses Face-shield
Skin and body protection	: Protective suit
Hand protection	: Protective gloves

*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: solid
Color	: white - yellow
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available

Melting point/freezing point	:	183 °C
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	soluble Solvent: Methanol
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Molecular weight	:	320.24 g/mol

10. STABILITY AND REACTIVITY

Reactivity	:	No data available
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	None under normal processing.
Incompatible materials	:	Oxidizing agents, Acids
Hazardous decomposition products	:	Carbon monoxide, Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Hydrogen fluoride

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	Assessment: The component/mixture is moderately toxic after single ingestion.
Acute inhalation toxicity	:	Assessment: The component/mixture is moderately toxic after short term inhalation.
Acute dermal toxicity	:	Assessment: The component/mixture is moderately toxic after single

contact with skin.

Components:**2,2'-Bis(trifluoromethyl)benzidine:**

Acute oral toxicity	:	Assessment: The component/mixture is moderately toxic after single ingestion.
Acute inhalation toxicity	:	Assessment: The component/mixture is moderately toxic after short term inhalation.
Acute dermal toxicity	:	Assessment: The component/mixture is moderately toxic after single contact with skin.
Skin corrosion/irritation	:	No information available.
Serious eye damage/eye irritation	:	No information available.
Respiratory or skin sensitization	:	No information available.
Germ cell mutagenicity	:	No information available.
Carcinogenicity	:	No information available.
Reproductive toxicity	:	No information available.
STOT-single exposure	:	No information available.
STOT-repeated exposure	:	No information available.
Repeated dose toxicity	:	No information available.
Aspiration toxicity	:	No information available.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues	:	Disposal in accordance with local and national regulations. Entrust disposal to a licensed waste disposal company.
Contaminated packaging	:	Disposal in accordance with local and national regulations. Before disposal of used container, remove contents completely.

14. TRANSPORT INFORMATION**International Regulations****IATA-DGR**

UN/ID No. : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable

IMDG-Code

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
EmS Code : Not applicable

Domestic regulation**GB 6944/12268**

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable

15. REGULATORY INFORMATION**Measures on the Environmental Administration of New Chemical Substances Registration**

Registration/Notification number : 0L2RX818LG

The ingredients of this product are reported in the following inventories:

CH BAGREG : Not in compliance with the inventory
TSCA : Substance(s) not listed on TSCA inventory
AICS : Not in compliance with the inventory
DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.
2,2'-Bis(trifluoromethyl)benzidine
ENCS : Not in compliance with the inventory
ISHL : Not in compliance with the inventory
KECI : Not in compliance with the inventory
PICCS : Not in compliance with the inventory
IECSC : On the inventory, or in compliance with the inventory
NZIoC : Not in compliance with the inventory

16. OTHER INFORMATION

Revision Date : 2024/09/22
Date format : yyyy/mm/dd

Disclaimer

This SDS was prepared sincerely based on the information obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling operations, sufficient care should be taken, in addition to the safety measures suitable for the given situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.