

Date of issue: 2021/09/01

## Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: Bis(2,2,2-trifluoroethyl)carbonate SDS No. : 9979E-1 Details of the supplier of the safety data sheet Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD. Address: 3-1, Honmachibashi, Chuo-ku,Osaka ,JAPAN Division: Safety Management Dept. of Chemicals Telephone number: +81-6-6946-8061 FAX: +81-6-6946-1607 e-mail address: kagakuhinanzenkanri@kishida.co.jp 2. Hazards identification GHS classification and label elements of the product Classification of the substance or mixture **HEALTH HAZARDS** Skin corrosion/irritation: Category 2 Serious eye damage/eye irritation: Category 2 Specific target organ toxicity - single exposure: Category 3 (Respiratory tract irritation) Label elements Signal word: Warning HAZARD STATEMENT Causes skin irritation Causes serious eye irritation May cause respiratory irritation PRECAUTIONARY STATEMENT Prevention Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash contaminated parts thoroughly after handling. Wear protective gloves. Wear eye protection/face protection.

Response

Call a POISON CENTER/doctor/physician if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

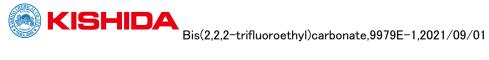
present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Storage

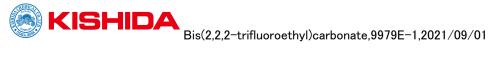
Store in a well-ventilated place. Keep container tightly closed.

Disposal



## Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients
Mixture/Substance selection:
Substance
Ingredient name:Bis(2,2,2-trifluoroethyl)carbonate
Content (%):99(min)
Chemical formula:C5H4F6O3
CAS No.:1513-87-7
MW:226.07
Note : The figures shown above are not the specifications of the product.
4. First-aid measures
Descriptions of first-aid measures
General measures
Call a POISON CENTER/doctor/physician if you feel unwell.
IF INHALED
Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.
IF ON SKIN (or hair)
Take off immediately all contaminated clothing. Rinse skin with water or shower.
Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy
to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED
Rinse mouth.
Call a POISON CENTER/doctor/physician if you feel unwell.
5. Fire-fighting measures
Extinguishing media
Suitable extinguishing media
Use appropriate extinguishing media suitable for surrounding facilities.
Unsuitable extinguishing media
Unsuitable extinguishing media data is not available.
Specific hazards arising from the substance or mixture
Containers may explode when heated.
Fire may produce irritating, corrosive and/or toxic gases.
Advice for firefighters Specific fire-fighting measures
Evacuate non-essential personnel to safe area.
Special protective equipment and precautions for fire-fighters
Wear fire resistant or flame retardant clothing.
Wear protective gloves/protective clothing/eye protection/face protection.
Firefighters should wear self-contained breathing apparatus with full face peace operated
positive pressure mode.



6. Accidental release measures	
Personnel precautions, protective equipment and emergency procedures	
Ventilate area until material pick up is complete.	
Wear proper protective equipment.	
Environmental precautions	
Prevent spills from entering sewers, watercourses or low areas.	l waste
Methods and materials for containment and cleaning up	
Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste	
container.	
Preventive measures for secondary accident	
Collect spillage.	
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7. Handling and storage	
Precautions for safe handling Preventive measures	
(Exposure Control for handling personnel) Avoid breathing dust/fume/gas/mist/vapors/spray.	
(Protective measures against fire and explosion)	
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No	
smoking.	
(Exhaust/ventilator)	
Exhaust/ventilator should be available.	
(Safety treatments)	
Avoid contact with skin.	
Avoid contact with eyes.	
Safety Measures	
Juse only outdoors or in a well-ventilated area.	
Wear protective gloves, protective clothing or face protection.	
Wear eye protection/face protection.	
When using do not eat, drink or smoke.	
Any incompatibilities	
See ″10.Stability and Reactivity″	
Advice on general occupational hygiene	
Wash contaminated parts thoroughly after handling.	
Take off contaminated clothing and wash it before reuse.	
Storage	
Conditions for safe storage	
Keep container tightly closed.	
Store in a cool, dry place. Do not store in direct sunlight.	
Container and packaging materials for safe handling	
Glass	
Stainless steel	
8. Exposure controls/personal protection Control parameters	

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures



Respiratory protection Wear respiratory protection. Hand protection Wear protective gloves. Eye protection Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties Physical state: Liquid (20°C) Color: Colorless to light yellow, clear Odor: Characteristic odor Melting point/Freezing point data is not available. Boiling point or initial boiling point data is not available. Boiling range data is not available. Flammability (gases, liquids and solids) data is not available. Lower and upper explosion limit/flammability limit data is not available. Flash point data is not available. Auto-ignition temperature data is not available. Decomposition temperature data is not available. pH data is not available. Kinematic viscosity data is not available. Solubility: Solubility in water: Insoluble n-Octanol/water partition coefficient data is not available. Vapor pressure data is not available. Density and/or relative density: 1.50 g/cm3 (20°C) Relative vapor density (Air=1) data is not available. Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity
Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Not available.

Conditions to avoid

Contact with incompatible materials.
Contact with fire source.

Incompatible materials

Acids, Bases, Strong oxidizing agents
Hazardous decomposition products
Carbon oxides, Hydrogen fluoride

11. Toxicological Information Information on toxicological effects Acute toxicity data is not available. Irritant properties Skin corrosion/irritation [Company proprietary data]



(Bis(2,2,2-trifluoroethyl)carbonate) Category 2 Serious eye damage/irritation [Company proprietary data] (Bis(2,2,2-trifluoroethyl)carbonate) Category 2 Allergenic and sensitizing effects data is not available. Mutagenic effects data is not available. Carcinogenic effects data is not available. Reproductive toxicity data is not available. STOT STOT-single exposure [cat.3 (resp. irrit.)] [Company proprietary data] (Bis(2,2,2-trifluoroethyl)carbonate) Respiratory tract irritation STOT-repeated exposure data is not available. Aspiration hazard data is not available.

12. Ecological Information

Ecotoxicity
Ecotoxicity data is not available.

Persistence and degradability

Persistence and degradability data is not available.

Bioaccumulative potential

Bioaccumulative potential data is not available.

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging Waste treatment methods Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No. or ID No.: Not applicable Not applicable to IMDG Code Not applicable to IATA Dangerous Goods Regulations Environmental hazards MARPOL Annex III – Prevention of pollution by harmful substances Marine pollutants (yes/no) : no

15. Regulatory Information

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.



## 16. Other information

GHS classification and labelling

Skin Irrit. 2: H315 Causes skin irritation Eye Irrit. 2: H319 Causes serious eye irritation

STOT SE 3: H335 May cause respiratory irritation

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN IMDG Code, 2018 Edition (Incorporating Amendment 39–18) IATA Dangerous Goods Regulations (62nd Edition) 2021 2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2021 TLVs and BEIs. (ACGIH) Supplier's data/information

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2019).