



*This SDS for user in JP - Not correspond to the regulation of other countries.

Version 1.0 Revision Date: 2024/11/12

SAFETY DATA SHEET

according to JIS Z 7253:2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Benzenesulfonyl Fluoride
Product code	:	B6627
Company	:	TOKYO CHEMICAL INDUSTRY CO., LTD.
Address	:	6-15-9 Toshima, Kita-ku, Tokyo 114-0003, Japan
Responsible Department	:	Global Business Department
Telephone	:	+81-3-5640-8878
Telefax	:	+81-3-5640-8902
E-mail address	:	globalbusiness@tcichemicals.com
Recommended use	:	For laboratory research purposes.
Restrictions on use	:	Not for drug or household use.

2. HAZARDS IDENTIFICATION

GHS classification of chemical product

Flammable liquids	:	Category 4
Corrosive to Metals	:	Category 1
Acute toxicity (Oral)	:	Category 4
Skin corrosion/irritation	:	Sub-category 1B
Serious eye damage/eye irritation	:	Category 1

GHS label elements

Hazard pictograms



Signal Word : Danger

Hazard Statements : Combustible liquid.
May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep only in original packaging.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
Rinse mouth.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate-

ly call a POISON CENTER/ doctor.
Wash contaminated clothing before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Absorb spillage to prevent material damage.

Storage:

Store in a well-ventilated place.
Store locked up.
Store in a corrosion resistant container with a resistant inner liner.

Disposal:

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

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)	ENCS/ISHL number
Benzenesulfonyl Fluoride	368-43-4	>= 95 - <= 100	

4. FIRST AID MEASURES

If inhaled : Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor/ physician.

In case of skin contact : Take off all contaminated clothing immediately.
Wash off with soap and plenty of water.
Immediately call a POISON CENTER or doctor/ physician.

In case of eye contact : Rinse with plenty of water.
If easy to do, remove contact lens, if worn.
Immediately call a POISON CENTER or doctor/ physician.

If swallowed : Immediately call a POISON CENTER or doctor/ physician.
Rinse mouth.
Do NOT induce vomiting.

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. Ensure adequate ventilation. 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	: Collect as much of the spill as possible with a suitable absorbent material.

7. HANDLING AND STORAGE

Handling

Technical measures	: Prevent generation of vapor or mist. Take precautionary measures against static discharge. Use explosion-proof equipment.
Local/Total ventilation	: Ensure adequate ventilation. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Use a local exhaust ventilation.
Advice on safe handling	: Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not subject to grinding, shock or friction. Wash hands and face thoroughly after handling. Open drum carefully as content may be under pressure. Keep only in original packaging.
Avoidance of contact	: Oxidizing agents, Bases

Storage

Conditions for safe storage	: Keep container tightly closed. Store in a cool and shaded area. Keep in a well-ventilated place. Protect from moisture. Keep under inert gas. Store locked up.
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Threshold limit value and permissible exposure limits for each component in the work environment

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	: Gas mask Self-contained breathing apparatus
Hand protection	: Impervious gloves
Eye protection	: Safety glasses Safety goggles

Face-shield

Skin and body protection : Impervious protective clothing

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Color	: colorless - yellow
Odor	: No data available
Odor Threshold	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: 208 °C
Flammability	: No data available
Lower explosion limit and upper explosion limit / flammability limit	
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Flash point	: 87 °C
Decomposition temperature	: No data available
pH	: No data available
Autoignition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Vapor pressure	: 1.07 kPa (80 °C)
Density and / or relative density	
Relative density	: 1.34
Relative vapor density	: No data available
Molecular weight	: 160.16 g/mol

10. STABILITY AND REACTIVITY

Reactivity	:	No data available
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Dust may form explosive mixture in air.
Conditions to avoid	:	Electrical spark Open flame Electrostatic discharge Exposure to moisture.
Incompatible materials	:	Oxidizing agents, Bases
Hazardous decomposition products	:	Carbon monoxide, Carbon dioxide (CO ₂), Hydrogen fluoride

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

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

Components:

Benzenesulfonyl Fluoride:

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

Skin corrosion/irritation

Product:

Result : Causes burns.

Components:

Benzenesulfonyl Fluoride:

Result : Causes burns.

Serious eye damage/eye irritation

Product:

Result : Irreversible effects on the eye

Components:

Benzenesulfonyl Fluoride:

Result : Irreversible effects on the eye

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.
RTECS No.	: DB8940000 (Benzenesulfonyl Fluoride)

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Hazardous to the ozone layer

Not applicable

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	: Disposal in accordance with local and national regulations. Take precautions against ignition or explode. 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.	: UN 3265
Proper shipping name	: Corrosive liquid, acidic, organic, n.o.s.
Class	: 8
Packing group	: II

IMDG-Code

UN number	: UN 3265
Proper shipping name	: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Class	: 8
Packing group	: II
EmS Code	: F-A, S-B

ERG Code	: 153
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15. REGULATORY INFORMATION

Related Regulations

Fire Service Law

Group 4, Type 3 petroleum, Water insoluble liquid, Hazardous rank III

Chemical Substance Control Law

Not applicable for Specified Chemical Substance, Monitoring Chemical Substance and Priority Assessment Chemical Substance.

Industrial Safety and Health Law

Harmful Substances Prohibited from Manufacture

Not applicable

Harmful Substances Required Permission for Manufacture

Not applicable

Substances Prevented From Impairment of Health

Not applicable

Circular concerning Information on Chemicals having Mutagenicity - Annex 2: Information on Existing Chemicals having Mutagenicity

Not applicable

Circular concerning Information on Chemicals having Mutagenicity - Annex 1: Information on Notified Substances having Mutagenicity

Not applicable

Substances Subject to be Notified Names

Not applicable

Substances Subject to be Indicated Names

Not applicable

Ordinance on Prevention of Hazards Due to Specified Chemical Substances

Not applicable

Ordinance on Prevention of Lead Poisoning

Not applicable

Ordinance on Prevention of Tetraalkyl Lead Poisoning

Not applicable

Ordinance on Prevention of Organic Solvent Poisoning

Not applicable

Poisonous and Deleterious Substances Control Law

Not applicable

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof

Until March 31st, 2023

Not applicable

From April 1st, 2023

Not applicable

Water Pollution Control Law

Hazardous substance (Law Art. 2, Enforcement Order Art. 2, Cabinet Order Art. 1)

Narcotics and Psychotropics Control Act

Not applicable

Law on the Prohibition of Chemical Weapons and the Regulation of Specific Chemicals

Not applicable

16. OTHER INFORMATION

Date format : yyyy/mm/dd

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.