

Trioctylmethylphosphonium bis(fluorosulfonyl)imide

Version number: GHS 2.0

Revision: 13.10.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Identification of the substance****Trioctylmethylphosphonium bis(fluorosulfonyl)imide****Registration number (REACH)**

unavailable

EC number

959-377-3

CAS number

None

Reference number (ECHA)

02-2120963953-41-0000

Alternative name(s)

TOMP FSI

Alternative number(s)

01236.1000, 01236.6010

1.2 Relevant identified uses of the substance or mixture and uses advised against**Relevant identified uses**Product and process oriented research and development
Scientific research and development**HS code**

29420000

1.3 Details of the supplier of the safety data sheetproionic GmbH
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A-8074 Raaba-Grambach
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Telephone: +43 (0) 316 4009-4200

e-mail: office@proionic.com

Website: www.proionic.com

1.4 Emergency telephone numberPoisoning information center Austria:
+43 (0) 1 406 43 43**Emergency information service**This number is only available during office hours
Austria
Mo-fr 8am-4pm (CET): +43 (0) 316/ 4009- 4200**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Caution! Substance not yet fully tested. Research chemical - research sample.

Classification according to Regulation (EC) No 1272/2008 (CLP)

Self-classification. All information refers to analogy circuits.

Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
3.10	acute toxicity (oral)	4	Acute Tox. 4	H302
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
4.1A	hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400

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Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
4.1C	hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word warning

- pictograms

GHS07, GHS09



- hazard statements

H302

Harmful if swallowed.

H315

Causes skin irritation.

H410

Very toxic to aquatic life with long lasting effects.

- additional statements

Substance not yet fully tested.

- precautionary statements

P270

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

P280

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

P330

Rinse mouth.

P332+P313

If skin irritation occurs: Get medical advice/attention.

P391

Collect spillage.

P501

Dispose of contents/container to industrial combustion plant.

2.3 Other hazards

There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance

Trioctylmethylphosphonium bis(fluorosulfonyl)imide

Identifiers

EC No

959-377-3

Purity

>99 – <99,9 %

Molecular formula

C₂₅H₅₄PF₂NO₄S₂

Molar mass

565,8 g/mol

Structural formula



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SECTION 4: First aid measures**4.1 Description of first aid measures****General notes**

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Have this safety data sheet ready.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water. Consult a doctor.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of complaints: Consult a doctor.

Following ingestion

Rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

The main symptoms and effects to be expected are described in section 2.2 and/or in chapter 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Water spray, Foam, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture**Hazardous combustion products**

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Phosphorus oxides (P_xO_y), Sulphur oxides (SO_x)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Wear self-contained breathing apparatus

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SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

Suitable protective equipment

See chapter 8 of the safety data sheet .

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up**Advice on how to contain a spill**

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder, Use isopropanol/ethanol to clean surfaces

Appropriate containment techniques

Use of adsorbent materials. Use inert absorbents . Use inert absorbents .

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Observe notes from section 2.2 .

Recommendations

Contaminated surfaces must not be cleaned with compressed air due to the possible formation of aerosols.

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in the original container in a cool, well-ventilated place. When not in use, keep containers tightly closed. Store upright.

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7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are foreseen. .

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values (Workplace Exposure Limits)**

this information is not available

8.2 Exposure controls

Take precautions, which are usual when handling chemicals.

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Eye/face protection

Wear eye/face protection.

Skin protection**- hand protection**

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. Disposal of contaminated gloves within the framework of legal regulations and good laboratory practice.

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. Dry hands thoroughly.

Respiratory protection

Respiratory protection not required.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state	liquid
Colour	colourless to lightly yellow
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined

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Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapour pressure	not determined
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Density and/or relative density

Density	not determined
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
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9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

Chemically stable.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

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10.4 Conditions to avoid

Exposure to moisture .

10.5 Incompatible materials

Oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

There are no available test data for this substance. All information refers to analogy circuits.

Classification according to GHS (1272/2008/EC, CLP)

There are no available test data for this substance.

Acute toxicity

Harmful if swallowed.

- acute toxicity estimate (ATE)

Oral 500 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

No data available.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

11.2 Information on other hazards

There is no additional information.

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SECTION 12: Ecological information**12.1 Toxicity**

There is no ecological information for this substance.
Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Waste treatment-relevant information**

Incineration. Residues and used material have to be disposed to an authorized waste treatment facility.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information**14.1 UN number or ID number**

ADR/RID/ADN UN 3082

IMDG-Code UN 3082

ICAO-TI UN 3082

14.2 UN proper shipping name

ADR/RID/ADN ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.

IMDG-Code ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.

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ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
Technical name	Trioctylmethylphosphonium bis(fluorosulfonyl)imide
14.3 Transport hazard class(es)	
ADR/RID/ADN	9
IMDG-Code	9
ICAO-TI	9
14.4 Packing group	
ADR/RID/ADN	III
IMDG-Code	III
ICAO-TI	III
14.5 Environmental hazards	hazardous to the aquatic environment
No data available. No data available.	
14.6 Special precautions for user	
Data are not available.	

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - additional information

Classification code	M6
Danger label(s)	9, fish and tree
 	
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	-
Hazard identification No	90

International Maritime Dangerous Goods Code (IMDG) - additional information

Marine pollutant	yes (hazardous to the aquatic environment) (Trioctylmethylphosphonium bis(fluorosulfonyl)imide)
Danger label(s)	9, fish and tree
 	
Special provisions (SP)	274, 335, 969
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F



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Stowage category	A
International Civil Aviation Organization (ICAO-IATA/DGR) - additional information	
Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	9, fish and tree
 	
Special provisions (SP)	A97, A158, A197, A215
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. There is no additional information.

Additional information

Substance is listed in the following national inventories:
C&L Inventory (Europe)

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ADR/RID/ADN	Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HS	Harmonized Commodity Description and Coding System (Harmonized System, drawn up by the World Customs Organisation)

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Abbr.	Descriptions of used abbreviations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

European Union

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Dangerous good

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Self-classification. The classification is based on positive results from close structural analogues.

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

The data contained in this safety data sheet are based on the current knowledge and experience of proionic GmbH and do not purport to be all inclusive. The safety data sheet shall be used only as a guide. The data do not describe the products properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose, except as mentioned, be deduced from the data contained in this safety data sheet. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.

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