

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 08.07.2021

Version number 3

Revision: 08.07.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** Cérium(III) bis(trifluoromethanesulfonyl)imide 99,5%**Article number:** M5808C**CAS Number:**

1046099-39-1

1.2 Relevant identified uses of the substance or mixture and uses advised against No other important information available.**Application of the substance / the mixture** This product is intended for the exclusive use of Research and Development**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Solvionic SA

11 chemin des Silos

31100 TOULOUSE

FRANCE

Phone: +33 (0).32.26.20.20

Further information obtainable from: Department of Regulatory affairs**1.4 Emergency telephone number:**

ORFILA (INRS): +33 (0)1.45.42.59.59

CCHST: 1-800-668-4284 (Canada & U.S.A)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008** The substance is classified and labelled according to the CLP regulation.**Hazard pictograms**

GHS05



GHS07

Signal word Danger**Hazard statements**

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statements

P260 Do not breathe dusts or mists.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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

P310 Immediately call a POISON CENTER/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.1 Chemical characterisation: Substances****- CAS No. / Description**

1046099-39-1 Cérium(III) bis(trifluoromethanesulfonyl)imide

Molecular formula: Ce (C2 F6 N O4 S2)3

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.07.2021

Version number 3

Revision: 08.07.2021

Trade name: Cérium(III) bis(trifluoromethanesulfonyl)imide 99,5%

Molar mass: 980,54 g/mol

(Contd. of page 1)

SECTION 4: First aid measures

4.1 Description of first aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- . **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- . **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- . **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- . **After swallowing:**
Call for a doctor immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- . **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters

- . **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective equipment. Keep unprotected persons away.
- Use individual protective gear.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

- Use neutralising agent.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.

6.4 Reference to other sections

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Thorough dedusting.
- . **Information about fire - and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

- . **Storage:**
Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility:** Not required.
- Further information about storage conditions:** Keep container tightly sealed.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information about design of technical facilities: No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- . **Additional information:** The lists valid during the making were used as basis.

8.2 Exposure controls

- **Personal protective equipment:**
- . **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.07.2021

Version number 3

Revision: 08.07.2021

Trade name: Cérium(III) bis(trifluoromethanesulfonyl)imide 99,5%

(Contd. of page 2)

. Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

. Protection of hands:



Protective gloves

Neoprene gloves

To minimise the wetness in the glove due to perspiration changing of gloves during a shift is required.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Neoprene gloves

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

. Eye protection:



Tightly sealed goggles

. Body protection: Use protective suit.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- General Information

. Appearance:

Form: Crystalline powder

Color: White

. Odor: Not determined.

. Odor threshold: Not determined.

- pH-value: Not applicable.

- Change in condition

. Melting point/freezing point: Undetermined.

. Initial boiling point and boiling range: Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gas): Product is not flammable.

. Decomposition temperature: Not determined.

- Auto-ignition temperature: Not determined.

- Explosive properties: Product does not present an explosion hazard.

- Explosion limits:

. Lower: Not determined.

. Upper: Not determined.

- Vapour pressure: Not applicable.

- Density: Not determined.

. Relative density Not determined.

. Vapour density Not applicable.

. Evaporation rate Not applicable.

- Solubility in / Miscibility with

. water: Not determined.

- Partition coefficient: n-octanol/water: Not determined.

- Viscosity:

. Dynamic: Not applicable.

. Kinematic: Not applicable.

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.07.2021

Version number 3

Revision: 08.07.2021

Trade name: Cérium(III) bis(trifluoromethanesulfonyl)imide 99,5%

(Contd. of page 3)

10.5 Incompatible materials: Strong oxidizer and strong base.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

- **Primary irritant effect:**

. **Skin corrosion/irritation**

Causes severe skin burns and eye damage.

. **Serious eye damage/irritation**

Causes serious eye damage.

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

Additional toxicological information:

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

. **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

. **Carcinogenicity** Based on available data, the classification criteria are not met.

. **Reproductive toxicity** Based on available data, the classification criteria are not met.

- **Specific target organ toxicity - single exposure**

May cause respiratory irritation.

- **Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP8	Corrosive

Uncleaned packaging:

. **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number

ADR/RID/ADN, IMDG, IATA

UN1759

14.2 UN proper shipping name

ADR/RID/ADN

UN1759 CORROSIVE SOLID, N.O.S. (Cérium(III) bis(trifluoromethanesulfonyl)imide)

IMDG, IATA

CORROSIVE SOLID, N.O.S. (Cérium(III) bis(trifluoromethanesulfonyl)imide)

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.07.2021

Version number 3

Revision: 08.07.2021

Trade name: Cérium(III) bis(trifluoromethanesulfonyl)imide 99,5%

(Contd. of page 4)

14.3 Transport hazard class(es)

ADR/RID/ADN, IMDG, IATA



Class	8 Corrosive substances.
Label	8

14.4 Packing group

ADR/RID/ADN, IMDG, IATA II

14.5 Environmental hazards: Not applicable.**14.6 Special precautions for user** Warning: Corrosive substances.**Hazard identification number (Kemler code):** 80**EMS Number:** F-A,S-B**Stowage Category** A**14.7 Transport in bulk according to Annex II of Marpol and the****IBC Code** Not applicable.**Transport/Additional information:**

ADR/RID/ADN

Limited quantities (LQ)**Excepted quantities (EQ)**

1 kg
Code: E2
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 500 g

Transport category**Tunnel restriction code****IMDG****Limited quantities (LQ)****Excepted quantities (EQ)**

2
E
1 kg
Code: E2
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 500 g

UN "Model Regulation":	UN 1759 CORROSIVE SOLID, N.O.S. (CÉRIUM(III) BIS(TRIFLUOROMETHANESULFONYL)IMIDE), 8, II
-------------------------------	---

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

Substance is not listed.

15.2 Chemical safety assessment:

For this product, no chemical safety assessment has been performed.

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

For research and development use only.

Department issuing SDS: Regulatory affairs department**Contact:**

Mail: hse@solvionic.com

Phone number: +33 (0)5.34.63.35.35

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 08.07.2021

Version number 3

Revision: 08.07.2021

Trade name: Cérium(III) bis(trifluoromethanesulfonyl)imide 99,5%

Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
*** Data compared to the previous version altered.**

(Contd. of page 5)

GB