

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.05.2011

Revision: 05.05.2011

1 Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name ***Europium(III) fluoride, anhydrous***

Stock number: 13659

CAS Number: 13765-25-8

EINECS Number: 237-368-9

Relevant identified uses of the substance or mixture and uses advised against

Sector of Use SU24 Scientific research and development

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG
A Johnson Matthey Company
Benzstrasse 3
D-76185 Karlsruhe / Germany
Tel: +49 (0) 721 84007 280
Fax: +49 (0) 721 84007 300
Email: tech@alfa.com
www.alfa.com

Informing department: Product safety department.

Emergency telephone number: Product Safety Department +049 (0) 7275 988687-0 (business hours)
Carechem 24: +44 (0) 1235 239 670 (Multi-language 24 hour emergency)
Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240

2 Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

Information concerning particular hazards for human and environment:

Not applicable

Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The substance is classified and labelled according to the CLP regulation.



GHS07

Signal word

Hazard statements

Precautionary statements

Warning

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment (see on this label).
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT:

vPvB:

Not applicable.

Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

(CAS#) Designation:

13765-25-8 Europium(III) fluoride, anhydrous

Identification number(s):

EINECS Number:

237-368-9

4 First aid measures

Description of first aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.

After eye contact

After swallowing

Information for doctor

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.
Seek immediate medical advice.

No further relevant information available.

No further relevant information available.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents

Special hazards arising from the substance or mixture

Use fire fighting measures that suit the environment.

Can be released in case of fire:

Metal oxide
Hydrogen fluoride (HF)

Advice for firefighters

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

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

Printing date 06.05.2011

Revision: 05.05.2011

Trade name **Europium(III) fluoride, anhydrous**

(Contd. of page 1)

6 Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Do not allow material to be released to the environment without proper governmental permits.

**Environmental precautions:
Methods and material for containment and cleaning up:**

Ensure adequate ventilation.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Reference to other sections**7 Handling and storage****Handling
Precautions for safe handling**

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

The product is not flammable

Conditions for safe storage, including any incompatibilities**Storage
Requirements to be met by storerooms and containers:
Information about storage in one common storage facility:**

No special requirements.
Store away from water.
Store away from oxidizing agents.

Further information about storage conditions:

This product is hygroscopic.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from humidity and keep away from water.
No further relevant information available.

Specific end use(s)**8 Exposure controls/personal protection****Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters**Components with critical values that require monitoring at the workplace:****13765-25-8 Europium(III) fluoride, anhydrous (100.0%)**

WEL () Long-term value: 2.5 mg/m³
as F

Additional information:

No data

Exposure controls**Personal protective equipment****General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

Breathing equipment:

Use breathing protection with high concentrations.

Protection of hands:

Check protective gloves prior to each use for their proper condition.

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.

Penetration time of glove material

Impervious gloves

Eye protection:

Not determined

Body protection:

Safety glasses
Face protection
Protective work clothing.

9 Physical and chemical properties**Information on basic physical and chemical properties****General Information****Appearance:**

Form: Solid in various forms:
Colour: Not determined.
Smell: Not determined.
Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition

Melting point/Melting range: 1390°C
Boiling point/Boiling range: >2280°C
Sublimation temperature / start: Not determined

Inflammability (solid, gaseous) Not determined.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Self-inflammability: Not determined.

Danger of explosion: Product is not explosive.

Critical values for explosion:

Lower: Not determined
Upper: Not determined

Steam pressure: Not applicable.

Density Not determined
Relative density Not determined.
Vapour density Not applicable.
Evaporation rate Not applicable.

Segregation coefficient (n-octanol/water): Not determined.

(Contd. on page 3)
GB

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

Printing date 06.05.2011

Revision: 05.05.2011

Trade name **Europium(III) fluoride, anhydrous**

(Contd. of page 2)

Viscosity:	Not applicable.
dynamic:	Not applicable.
kinematic:	Not applicable.
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity	
Chemical stability	
Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
Possibility of hazardous reactions	No dangerous reactions known
Incompatible materials:	Water/moisture Oxidizing agents
Hazardous decomposition products:	Metal oxide Hydrogen fluoride

11 Toxicological information

Information on toxicological effects	
Acute toxicity:	
Primary irritant effect:	
on the skin:	Irritant for skin and mucous membranes.
on the eye:	Irritant effect.
Sensitization:	No sensitizing effect known.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. IARC-3: Not classifiable as to carcinogenicity to humans. ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.

12 Ecological information

Toxicity	
Acquatic toxicity:	No further relevant information available.
Persistence and degradability	No further relevant information available.
Behaviour in environmental systems:	
Bioaccumulative potential	No further relevant information available.
Mobility in soil	No further relevant information available.
Additional ecological information:	
General notes:	Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Do not allow material to be released to the environment without proper governmental permits.
Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
Other adverse effects	No further relevant information available.


13 Disposal considerations

Waste treatment methods	
Recommendation	Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.
Uncleaned packagings:	
Recommendation:	Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)	
ADR/RID-GGVS/E Class:	None
Maritime transport IMDG/GGVSea:	
IMDG/GGVSea Class:	None
Marine pollutant:	No
Air transport ICAO-TI and IATA-DGR:	
ICAO/IATA Class:	None
Special precautions for user	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	
Labelling according to Regulation (EC) No 1272/2008	The substance is classified and labelled according to the CLP regulation.
Hazard pictograms	
Signal word	GHS07
Hazard statements	Warning H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary statements	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P321 Specific treatment (see on this label). P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
National regulations	
Information about limitation of use:	Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals.

(Contd. on page 4)
GB

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

Printing date 06.05.2011

Revision: 05.05.2011

Trade name **Europium(III) fluoride, anhydrous**

(Contd. of page 3)

Technical instructions (air):

Class	Share in %
I	100.0

Water hazard class:

Chemical safety assessment:

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

A Chemical Safety Assessment has not been carried out.

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.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Contact: Zachariah C. Holt

Global EHS Manager

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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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

GB