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Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 13.07.2010 Revision: 13.07.2010

1 Identification of substance

Product details

Trade name Thulium (III) oxalate

Stock number:

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

Informing department: Emergency information:

Product safety department. Giftnotruf Universität Mainz / Poison Information Center Mainz www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

2 Hazards identification

Hazard designation:

Xn Harmful

Information pertaining to particular dangers for man and environment GHS label elements

Prevention: Response:

R 21/22 Harmful in contact with skin and if swallowed.

Warning

H302 - Harmful if swallowed. H312 - Harmful in contact with skin.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P322 Specific measures (see on this label).

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

3 Composition/information on ingredients

Chemical characterization:

Thulium (III) oxalate, hydrate (CAS# 58176-73-1)

Designation: (CAS#)
Identification number(s):
EINECS Number: Index number:

221-887-2 607-007-00-3

4 First aid measures

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

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

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

5 Fire fighting measures

Suitable extinguishing agents Special hazards caused by the material, its products of combustion or flue gases:

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Can be released in case of fire: Carbon monoxide and carbon dioxide Metal oxide Wear self-contained breathing apparatus.

Protective equipment:

Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Measures for environmental protection: Measures for cleaning/collecting: Additional information:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Do not allow material to be released to the environment without proper governmental permits. Dispose of contaminated material as waste according to item 13. See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

7 Handling and storage

Handling Information 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:

Keep ignition sources away - Do not smoke.

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.

8 Exposure controls and 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.

Components with critical values that require monitoring at the workplace: Additional information:

Not required. No data

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.

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Trade name <i>Thulium (III) oxalate</i>	
Breathing equipment: Eye protection: Body protection:	Use breathing protection with high concentrations. Safety glasses Face protection Protective work clothing.
9 Physical and chemical properties:	
General Information	
Form: Smell:	Crystalline Not determined
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined Not determined Not determined
Flash point:	Not applicable
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product is not explosive.
Critical values for explosion: Lower: Upper:	Not determined Not determined
Steam pressure:	Not determined
Density Solubility in / Miscibility with	Not determined
Water:	Insoluble
10 Stability and reactivity Thermal decomposition / conditions to be avoided: Materials to be avoided: Dangerous reactions: Dangerous products of decomposition:	No decomposition if used and stored according to specifications. Water/moisture Oxidizing agents No dangerous reactions known Carbon monoxide and carbon dioxide
Zangoro ao producio or accomposition	Metal oxide
11 Toxicological information Acute toxicity: Primary irritant effect: on the skin: on the eye: Sensitization: Additional toxicological information:	Irritant for skin and mucous membranes. Irritant effect. No sensitizing effect known. Danger by skin resorption. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
12 Ecological information: 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.
13 Disposal considerations	
Product: Recommendation	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
Uncleaned packagings: Recommendation:	Disposal must be made according to official regulations.
14 Transport information	, 5 4 40 40 4
Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)	
ADR/RID-GGVS/E Class: Kemler Number: UN-Number: Packaging group: Label Designation of goods: Limited quantities (LQ) Transport category Tunnel restriction code	6.1 (T5) Toxic substances. 60 3288 III 6.1 3288 TOXIC SOLID, INORGANIC, N.O.S. (Thulium (III) oxalate) LQ9 2 E
Maritime transport IMDG/GGVSea: IMDG/GGVSea Class: UN Number: Label Packaging group: Marine pollutant:	6.1 3288 6.1 III No
1	(Contd. on page 3)

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Trade name *Thulium (III) oxalat*e

Correct technical name: TOXIC SOLID, INORGANIC, N.O.S. (Thulium (III) oxalate)

Air transport ICAO-TI and IATA-DGR:

6.1 3288 6.1 III ICAO/IATA Class: UN/ID Number: Label

Packaging group: Correct technical name: TOXIC SOLID, INORGANIC, N.O.S. (Thulium (III) oxalate)

UN "Model Regulation":

UN3288, TOXIC SOLID, INORGANIC, N.O.S., 6.1, III

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

Xn Harmful

21/22 Harmful in contact with skin and if swallowed. Risk phrases:

Safety phrases: 24/25 Avoid contact with skin and eyes.

National regulations

Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals. Information about limitation of use:

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

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:

Abbreviations and acronyms:

Health, Safety and Environmental Department.

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Zachariah Holt

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

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

RID: Ridiementional 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