

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*****Sphalerite, naturally occurring mineral*****Stock number:**

43376

Manufacturer/Supplier:Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com**Informing department:**

Product safety department.

Emergency information:Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240**2 Hazards identification****Hazard designation:**

void

Information pertaining to particular dangers for man and environment

R 31 Contact with acids liberates toxic gas.

GHS label elements

EUH031 - Contact with acids liberates toxic gas.

3 Composition/information on ingredients**Chemical characterization:****Designation: (CAS#)**

Zinc sulfide (CAS# 1314-98-3)

Identification number(s):**EINECS Number:**

215-251-3

4 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

Seek immediate medical advice.

After swallowing

Rinse opened eye for several minutes under running water. Then consult doctor.

Seek immediate medical advice.

5 Fire fighting measures**Suitable extinguishing agents**

Use fire fighting measures that suit the environment.

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

Can be released in case of fire:

Metal oxide

Sulphur oxides (SOx)

Wear self-contained breathing apparatus.

Wear full protective suit.

Protective equipment:**6 Accidental release measures****Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:

Ensure adequate ventilation.

Additional information:

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:

The product is not flammable

Storage**Requirements to be met by storerooms and containers:**

No special requirements.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Do not store together with acids.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

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:

Not required.

Additional information:

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.

Use breathing protection with high concentrations.

Breathing equipment:**Eye protection:**

Safety glasses

Face protection

Body protection:

Protective work clothing.

9 Physical and chemical properties:**General Information****Form:**

Granulate

Smell:

Odourless

Change in condition**Melting point/Melting range:**

1700°C

(Contd. on page 2)
GB

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 13.07.2010

Revision: 13.07.2010

Trade name **Sphalerite, naturally occuring mineral**

(Contd. of page 1)

Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	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:	Not determined
Upper:	Not determined
Steam pressure:	Not determined
Density at 20°C	4.102 g/cm ³
Solubility in / Miscibility with Water:	Insoluble

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
Materials to be avoided:	Acids Oxidizing agents
Dangerous reactions:	Contact with acids releases toxic gases
Dangerous products of decomposition:	Sulphur oxides (SOx) Hydrogen sulphide Metal oxide

11 Toxicological information

Acute toxicity:		
LD/LC50 values that are relevant for classification:		
Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4H	>5040 mg/m3/4H (rat)
Primary irritant effect:		
on the skin:		No irritant effect.
on the eye:		May cause irritation
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.
		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

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
Transport/Additional information:	Not dangerous according to the above specifications.

15 Regulatory information

Designation according to EC guidelines:	
Risk phrases:	31 Contact with acids liberates toxic gas.
Safety phrases:	50 Do not mix with acids.
National regulations	
Information about limitation of use:	For use only by technically qualified individuals.
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:	Health, Safety and Environmental Department.
Contact:	Zachariah Holt
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

(Contd. on page 3)
GB

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

Printing date 13.07.2010

Revision: 13.07.2010

Trade name *Sphalerite, naturally occuring mineral*

(Contd. of page 2)

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

GB