Safety data sheet Version 2.2 Version 3.2.

Issued. 30.05.2007

Print date: 15 October 2020

Revised: 14.08.2019 Applicable: 01.06.2015

GRAFITBERGBAU KAISERSBERG Ges.m.b.H Bergmannstraße 39, A-8713 St. Stefan ob Leoben

MATERIAL SAFETY DATA SHEET

accord. to Regulation (EC) No. 1907/2006 (REACH), Annex II, in compliance with the Annex to Regulation (EU) 2015/830, and in accordance with the CLP Regulation, 1272/2008

1 – IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

1.1 Product name:

Macrocrystalline natural graphite 80 - 85%

Chemical family:

Carbon

Chemical name:

Natural graphite

EC substance name.:

Naturally occurring substance

Identification: EINECS Inventory: Reg. Nr. 310-127-6

CAS-Nr. 999999-99-4

REACH-Reg. No.: exempted in accordance with

Annex V. 7

1.2 Relevant identified

Uses and uses advised against:

Uses of the substance: Not recommandes uses: material, lubricant, colour, etc. details upon demand there are no specific uses identified which are not

recommended.

1.3 Details of the

Supplier of the MSDS:

Grafitbergbau Kaisersberg Ges.m.b.H.

Bergmannstraße 39, A-8713 St. Stefan

Telephone: 03832/22880

Fax: 03832/2045

Responsible person: Günther Twrdy

E-mail: info@grafit.at

1.4 Emergency phone:

as above mentioned

Monday – Thursday, 6.00 - 4.00 Uhr

Friday, 06.00 - 2.00 Uhr

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2 - HAZARDS IDENTIFICATION

2.1 Classification: This product does not meet the classification and labelling

criteria given in the Regulation (EC) No. 1272/2008

(CLP/GHS.

Not a substance meeting the criteria for PBT as well as vPvB accord. To Reg. (EC) No. 1907/2006, Annex XIII

2.2 Label elements: GHS label elements, hazard pictograms; signal word

and hazard statements accord. No. 1272/2008: Void

Although product is not subject to classification and labelling under hazardous materials Ordinances and EU-guidelines we recommend that the safety suggestions of this

data sheet are observed.

2.3 Other Hazards for Health at:

Eyes' contact: prolonged and repeated contact with dusts may be

abrasive and irritating to the eyes, moderate irritation with

symptoms of redness, swelling, itching and tearing.

Skin contact: skin absorption is not known to be a significant route of

over-exposure for this product, no evidence of long-term

health effects.

Inhalation: long-lasting and repeated inhalation may irritate the

respiratory tract (like most of non-toxic powders).

Symptoms may include coughing, shortness of breath, sore throat and runny nose. Effective protection is the obser-

vance of MAK-standard.

Ingestion: ingestion is not anticipated to be a route of occupational

exposure of this product.

3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Characterization: Natural graphite

Hazardous ingredients: none

REACH Article 33 (SVHC): this product includes <0,1 % of a substance, which is listed in article 59 (1,10) of the

Ordinance (EG) Nr.1907/2006.

Chemical formula:

C

Risks:

none

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4. - FIRST AID MEASURES

4.1 Description of first

aid measures:

General advice: in case of persisting adverse effects, consult a physician.

in case of eye contact: in case of contact, flush eyes with plenty of clean water for

at least 15 minutes. If irritation or redness develops, seek

medical attention.

in case of skin contact: no first aid is normally required, just flush affected areas

with clean water and soap.

if inhaled if extremely inhaled, remove afflicted person into fresh air.

If breathing difficulties develop artificial respiration or oxygen should be administered by qualified personnel.

Seek medical attention.

if swallowed: Never give anything by mouth to an unconscious person.

Rinse mouth with water. Seek medical attention.

4.2 Most important symptoms and effects,

Both acute and delayed: To the best of our knowledge, the chemical, physical, and

toxicological properties have not been thoroughly investigated,

no data available

4.3 Indication of any immediate medical

attention/special treatment: no data available

5. – FIRE-FIGHTING MEASURES

not inflammable, not explosive.

5.1 Fire extinguishing material:

Suitable extinguishing media: normally all kinds of extinguishers can be used. We re-

commend to use water spray, alcohol-resistant foam.

Graphite is difficult to combust. Extinguishing measures to

suit surroundings.

Unsuitable exting. Media:

No data available

5.2 Special hazards arising from

the substance:

Hazards from the substance: fine dust clouds may form explosive mixtures with air. Under

practical conditions probability of ignition of dust-air mixtures

is very low due to a very high minimum ignition energy.

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Hazardous combustion

Products:

in the event of fire carbon monoxide (CO), carbon dioxide

(CO2) can be released. .

5.3 Advice for firefighters:

Special equipment:

Use self-contained breathing apparatus. Wear protective

Clothing conforming to EN 469.

5.4 Additional information:

Avoid generating dust.

6. – ACCIDENTAL RELEASE MEASURES

6.1. Precautionary measures:

For non-emergency personnel: Minimize exposure to dust. Keep away unnecessary and

unprotected personnel from entering. Provide adequate

ventilation.

For emergency responders:

during excessive pollution mask should be used. Refer to

Section 8 for details.

6.2 Environment's protection:

normally not necessary, but we recommend to avoid

discharging into the drains/surface waters/groundwaters.

6.3 Methods of cleaning:

mechanical absorption. If you clean the floor by washing,

keep attention to the danger of sliding.

6.4 Waste disposal method:

in accordance with Local, State and Federal Waste Dis-

posal Regulations.

7. - HANDLING AND STORAGE

7.1 Precautions for safe handling

advice on safe handling:

avoid breathing dust. Use ventilation or other engineering controls to minimize potential exposure and to maintain air levels below the recommended exposure limit. If limits are exceeded, respiratory protection approved for this particular

job must be worn.

General protective and

Hygiene measres:

Do not eat, drinkg or smoke during work time. Keep away

from foodstuffs and beverages. Avoid getting in eyes. Wash

thoroughly after handling.

Working areas, steps, etc. which are covered by graphite,

should be kept dry because of sliding's danger.

advice on protection

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dust can form an explosive mixture with air. Take against fire and explosion:

precautionary measures against static charges. Keep away

from sources of heat and ignition.

Dust explosion class ST1 (slightly dust explosive)

Environmental protection

measures:

treat material as prescribed under heading 6.2.

7.2 Conditions for safe storage: Store in a dry place away from direct sunlight, heat and

> incompatible materials (Oxidizing Agents, Fluorine, Halogenated Solvents, Potassium and Potassium Oxides).

All usual kinds of packing can be used.

Advice on storage assembly: none known

7.3 Specific end use(s): no data available

8. – EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters: concentration of dust during work should be controlled

according to regional directions.

See NIOSH (RTECS Number MD9659600

8.2 Exposure controls:

Appropriate engineering controls: Handle in accordance with good industrial hygiene and

safety practice. Wash hands before breaks and at the end of

workday

Personal protective equipment:

Respiratory protection: if necessary, suitable ventilation or vacuum pumps should

be installed.

When exceeding MAK-values use dust-mask with filter

P 1.

Workers with dry skin an use a grease paste. Sufficient Hand protection:

protection is given wearing suitable protective gloves,

appropriate material rubber

PVC gloves with impervious boots, apron or coveralls. Skin protection:

Employees should wash their hands and face before eating,

drinking or using tobacco products.

During extreme pollution safety glasses or goggles. Eyes' protection:

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9. - PYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Physical form:

powder

Color: Odor: gray to black

odourless

9.2 Others

Melting point:

approx. 3500 °C

Boiling point:

not available

Flash point:

not available

Flammability:

under practical conditions probability of ignition of dust-

air mixtures is very low due to a very high minimum ignition

energy

Danger of explosion:

dust explosion class St1

Fire supp. properties:

no one $2,26 \text{ g/cm}^3$

Specific gravity: Solubility in water:

< 0.1 %

9.3. Further information:

no further information of security relevant parameters.

10. - STABILITY and REACTIVITY:

10.1 Reactivity: stable under regular conditions of transport, use and storage.

10.2 Chemical stability: stable under normal temperatures and pressures.

10.3 Possibility of hazardous

reactions:

no data available

10.4 Conditions to avoid:

no data available

10.5 Incompatibilities:

No dangerous reactions known—we recommend not to use

Fluorine, Chlorine trifluoride together with graphite.

10.6 Decomposition:

no hazardous decomposition products known

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11. – TOXICOLOGICAL INFORMATION

11.1 Information on

toxicological effects:

No acute toxic and no cancerous growing effects known, the

product is not listed by ACGIH, NIOSH, NTP, IARC or

regulated as a carcinogen by OSHA.

Inhalation: see item Nr. 2

Acute oral toxicity:

> 2000 mg/kg (rat OECD 401)

Acute dermal toxicity:

no data available

Acute inhalational toxicity:

no data available

Skin corrosion/Irritation:

non-irritant (rabbit OECD 404)

Serious eye damage/irritation:classification criteria are not met (rabbit OECD 4059

Carcinogenicity:

No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC

<u>12. – ECOLOGICAL INFORMATION</u>

12.1 Toxicity no data available

12.2 Persistence and

Degradability not degradable

12.3 Bioaccumulative potential: no data available

12.4 Mobility in soil: no data available

12.5 Results of PBT

and vPvB assessment no data available

12.6 Other information No defectiveness in biologic filter plants and waters.

No danger for waters accord. to § 19g clause 5 data 2 WHG (VwVwS dtd. May 17th 1999 (Banz. dtd. May 29th 1999

Nr. 98a)).

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13. – DISPOSAL CONSIDERATIONS

13.1 Waste treatment

Product Allocation of a waste number, accord. to the European Waste

catalogue, should be carried out in agreement with the

regional waste disposal company.

Packaging: residuals must be removed from packaging and when emptied

completely disposed of in accordance with the regulations for

waste removal.

<u>14. – TRANSPORT INFORMATION</u>

Product is no dangerous freight by land (ADR RID), air (ICAO/IATA) or sea (IMDG).

14.1. UN number: ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name: ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es): ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group: ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards: ADR/RID:

IMDG Marine pollutant: no

IATA: -

14.6 Special precautions for user:

no data available

14.7 Other information:

The product is not highly inflammable accord. to Regulation

(EG) Nr. 440/2008, method EC A.10 (flammability solids)

15. – REGULATORY INFORMATION

15.1 EU guidelines

15.1.1 Chemical safety assessment acc. to EU regulation no. 1907/2006:

A chemical safety assessment (CSA) according to Art. 14 par. 1 Regulation (EC) No. 1907/2006 (REACH) of graphite is not

yet available.

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15.1.2 Classification and labelling acc. to Directive 1272/2008 (CLP): The product is not due to classification and labelling.

15.1.3 Hazard determinant compounds

for labelling:

none

15.1.4 Specific labelling of designated

preparations:

none.

15.1.5 Authorisations and / or use

restrictions:

none.

15.1.6 Further EU provisions:

none.

15.1.7 Information on EU directive

1999/13/EC (VOC directive) for limitation of VOC emissions: None.

15.2 National regulations (UK):

15.2.1 Classification and labelling:

The product is not due to labelling according to UK

regulations.

15.2.2 Other UK regulations and guidances

Health and Safety at Work Act 1974.

The Management of Health and Safety at Work regulations 1992.

L5 Control of substances hazardous to Health. The Control of Substances Hazardous to

Health Regulations 2002. Aproved codes of practice and guidance.

Guidance Note EH40 – Occupational Exposure Limits.

BS EN ISO 10882-1:2001 – health and safety in welding and allied processes – sampling of Airborne particles and gases in the operator's breathing zone – part 1: sampling of airborne

particles

16. - OTHER INFORMATION

Amendments in documentation:

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Requirements for this safety data sheet (SDS) are laid down in Annex II to REACH Regulation (EC) No 1907/2006, in compliance with the Annex to Regulation (EU) 2015/830 (applicable 1 June 2017), and in accordance with the CLP Regulation, 1272/2008.

Declarations of this data sheet are the actual eruditions of our product. It serves as product's description concerning handling and safety exigencies. It is no product's specification. As the conditions or methods of use are beyond our control, we do not assume any responsibilty and expressly disclaim any liability for any use of this material.

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Department issuing data sheet: Health, Safety and Quality Department Grafitbergbau Kaisersberg Ges.m.b.H. A-8713 St. Stefan Contact: Ing. Günther Twrdy

Latest revision 14.08.2019 – acc. to Regulation (EC) no. 1272/2008 CLP Regulation

This security sheet is set up by typewriting and therefore it is not signed.

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