Issued. 30.05.2007 Print date: 4 May 2022 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 <u>CLP</u> Regulation, 1272/2008

<u>1 – IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY</u>

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 agains	st:
	Uses of the substance:	material, lubricant, colour, etc. details upon demand
	Not recommandes uses:	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

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.

<u>3 – COMPOSITION/INFORMATION ON INGREDIENTS</u>

3.1	Substance Characterization: Hazardous ingredients:	Natural graphite 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: Risks:	C 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 a	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
mixtu	res	
		is very low due to a very high minimum ignition energy.

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Clothing conforming to EN 469.

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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

5.4 Additional information: Avoid generating dust.

<u>6. – ACCIDENTAL RELEASE MEASURES</u>

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,
6.4	Waste disposal method:	keep attention to the danger of sliding. 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.

	afety data sheet Version 2.2 Tersion 3.2.	Issued. 30.05.2007 Print date: 4 May 2022	Revised: 14.08.2019 Applicable: 01.06.2015
		advice on protection	
	against fire and explosion:	dust can form an explosive mixt precautionary measures against from sources of heat and ignitio Dust explosion class ST1 (slight	static charges. Keep away n.
	Environmental protection measures:	treat material as prescribed unde	er heading 6.2.
7.	2 Conditions for safe storage:	Store in a dry place away from a incompatible materials (Oxidizi Halogenated Solvents, Potassiu All usual kinds of packing can b	ng Agents, Fluorine, n and Potassium Oxides).
7.	Advice on storage assembly: Specific end use(s):	none known no data available	

8. – EXPOSURE CONTROLS AND PERSONAL PROTECTION

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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:	
		ols: 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.
	Hand protection:	Workers with dry skin an use a grease paste. Sufficient protection is given wearing suitable protective gloves, appropriate material rubber
	Skin protection:	PVC gloves with impervious boots, apron or coveralls. Employees should wash their hands and face before eating, drinking or using tobacco products.
	Eyes' protection:	During extreme pollution safety glasses or goggles.

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9. - PYSICAL AND CHEMICAL PROPERTIES

9.1 General informationPhysical form:Color:Odor:

powder gray to black odourless

9.2	Others Melting point: Boiling point: Flash point: Flammability:	approx. 3500 °C not available not available under practical conditions probability of ignition of dust- air mixtures is very low due to a very high minimum ignition energy
	Danger of explosion: Fire supp. properties: Specific gravity: Solubility in water:	dust explosion class St1 no one 2,26 g/cm ³ < 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

<u>11. – TOXICOLOGICAL INFORMATION</u>

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

12. – ECOLOGICAL INFORMATION

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)).

<u>13. – DISPOSAL CONSIDERATIONS</u>

 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.

14. – TRANSPORT INFORMATION

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

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yet available.

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: 2

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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 <u>CLP</u> 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 responsibility 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

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

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