

SAFETY DATA SHEET

1. Identification of the product and of the company/undertaking

1.1 Product identifier

Polishing Wheel 127x22mm

1.2 Use of the product

Abrasive material for mechanical industry

1.3 Details of the supplier of the voluntary product information:

Company: KWH Mirka Ltd

Address: Pensalavägen 210
FI-66850 Jeppo, Finland

Phone: +358 20 760 2111 Fax: +358 20 760 2290

National contact: sales@mirka.com

1.4 Emergency telephone number:

+358 20 760 2111

Opening hours: Monday – Friday at 08:00 a.m. – 04:00p.m. (UTC/GMT +2:00/+3:00)

2. Hazards identification

2.1. Classification

The product is classified not hazardous according to Reg. 1272/2008/CE and to Dir 67/548/EC

2.2. Hazards for Human

No relevant hazards.

2.3. Hazards for Environment

No relevant hazards.

2.4 Physical or Chemical Hazards

No relevant hazards.

3. Composition/information on ingredients

Material is composed of abrasive powders supported on an inert matrix of nylon by a polymerized synthetic binder.

Matrix	Substance	Hazard Symbol	Classification	CAS N.	EC N.	% by Weight **
Abrasive material						
Abrasive powders	Corundum* (Al ₂ O ₃)			1344-28-1	215-691-6	20 - 60
	Silicon carbide (SiC)			409-21-2	206-991-8	
Structural support						
Matrix	Structural Component	Hazard Symbol	Classification	CAS N.	EC N.	% by Weight **
Support	Nylon fiber	none		n.a.	n.a.	20 - 60
Binder	Polimerized Synthetic Resin	none		n.a.	n.a.	10 - 50
Support plate	Fiberglass layers (crystalline silica £ 2%)	none		65997-17-3	266-146-0	10 - 40

*: Corundum is a natural form of aluminium oxide; it contains small impurities of iron, magnesium and silica

** : any uncertain range concerning % amount of any component does not influence the hazard classification of the material, according to Reference Regulation

4. First aid measures

Preamble: Following statements must be taken as base-rules concerning abrasive materials and has to be completed according to safety data sheets of processed materials and process cooling liquid used

General information: In case of eyes and skin contact, give priority to eyes first aid measures

Eye contact: Rinse opened eye for several minutes under running water and seek immediate medical advice, showing this MSDS

Skin contact: Remove contaminated clothes. Immediately wash with water and soap and rinse thoroughly.

Inhalation: Supply fresh air; consult doctor in case of complaints

Swallowing: No negative effects in case of swallowing. Drink water and seek immediate medical advice, showing this MSDS

5. Fire fighting measures

Suitable extinguishing agents: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam

Protective equipment: Ordinary protective equipment in case of fire-fighting

Specific risks: None

6. Accidental release measures

Not applicable.

7. Handling and storage

Handling: Avoid direct contact using recommended handling safety equipment (see § 8). According to normal use conditions, product does not contain volatile components.

Storage: Keep in cool, dry, ventilated storage in closed original containers. Do not drink or eat near the storage place.

8. Exposure controls/Personal protection

Risk scenario: Any risk concerning the use in mechanical industry
Experimental toxicological data are not available concerning specific exposure scenarios. Hazard classification of this product was done according to Reg. 1272/2008/EC and other available information

Information about design of technical facilities:
Ensure good ventilation/exhaustion at the workplace. Safety washing water must be available for skin and eyes

Exposure limit values:

Substance	OSHA 201 TWA (mg/m ³)		ACGIH 2010 TWA (mg/m ³)	
	Total	Respirable fraction	Inhalable fraction	Respirable fraction
Silicon carbide	15	5	10	3
Corundum	15	5		
Synthetic vitreous fibers – glass wool fibers (ACGIH carcinogenicity A3)	TLW – TWA = 1 f/cc (ACGIH) respirable fibers: length > 5 µm aspect ratio ≥ 3:1			
Cristalline silica (a quartz, cristobalite)	0,025 mg/m ³ respirable fraction, (TWA 8 hours, ACGIH 2010)			
Particles not otherwise classified	10 mg/m ³ inhalable fraction (TWA 8 h, ACGIH 2010) 3 mg/m ³ respirable fraction (TWA 8 h, ACGIH 2010)			

Respiratory protection: In case of brief exposure use respiratory filter device. Protection factor: P3

Eye protection: Safety goggles or face shield

Hand protection: Protective gloves for chemical products, according to standard EN374; materials for long contact time

Skin protection: Use protective clothes and protective shoes

Other information: Abrasive materials used are inert and cannot cause risks when correctly stored and managed. During use on machineries, they request safety precautions for workers. The most part of powder particles comes from the processed material and eventually from the cooling liquid. Consequently attention and safety precautionary measures on vapours and dusts environmental removing must be applied. Follow the local Safety Management standards and instructions

9. Physical and chemical properties

Appearance: Solid abrasive material
Odour: Odourless
PH: n.a.
Charge: n.a.
Boiling point: n.a.
Melting point: n.a.
Flash point: n.a.
Vapour pressure: n.a.
Water solubility at 20°C: Not soluble
Volatile organic chemicals (VOC): No volatile chemicals (VOC) are present at detectable level
Ripartition coefficient n-octanol/water: n.a.

10. Stability and reactivity

Stability: Stable in normal handling and storage conditions
Conditions/materials to avoid: Keep away from strong oxidizers and electrostatic charges
Dangerous decomposition products: After overheating and drying, thermal decomposition at °T > 250°C can produce dangerous vapours as carbon dioxide, carbon oxide and nitrogen oxides

11. Toxicological information

Material is inert on structural matrix. Data are referring to used abrasive components
Carcinogenic effects: Glass wool is classified in group 3 of ACGIH (see § 16)
Mutagenic effects:: n.a.
Acute toxicity:
Al₂O₃ (Corundum): > 5000 mg/Kg - DL50, oral rat (IUCLID Data Sheet, European Chemical Bureau)
SiC (Silicon Carbide): not available data
Chronic toxicity: n.a.
Skin: Mechanical irritating effects
Inhalation: Irritating (superior respiratory system). Powders produced during use can cause respiratory irritating effects
Eyes: Mechanical irritating effects: symptoms can be irritating, reddening, damages of corneal surface, tearing. Powders produced during use can cause eyes irritating effects

Other negative effects: Other risks can be caused depending on the abrasion process material used

12. Ecological information

Ecological toxicity:

Al₂O₃ (Corundum): > 100 mg/l – 96 h, salmo trutta (long time acute toxicity)
> 100 mg/l – 48 h, daphnia magna (long time acute toxicity)

SiC (Silicon carbide): not available data

Mobility: n.a.

Biopersistence: n.a.

Biodegradability: n.a.

Potential of bioaccumulation: n.a.

13. Disposal considerations

Disposal recommendation: Recovery if possible.
Waste and uncleaned packages must be disposed of in accordance with state and local environmental regulations.

14. Transport information

Transport classification and regulation: ONU number: n.a.
ADR/RID: not regulated (road and railway)
ICAO/IATA: not regulated (air transport)
IMDG/IMO: not regulated (maritime transport)

15. Regulatory information

Hazard labelling symbols: None

Risk statements: None

Precautionary statements (Dir. 67/548/CE):

S 22 Do not breathe dust

S 39 Wear eye/face protection

P 260 Do not breathe dust

P 280 Wear protective gloves/eye/face protection

Other regulation references: Reg. 1272/2008/EC on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
Product does not contain substances classified carcinogenic cat. 1 or cat. 2

16. Other information

Further information and References:

Information is updated according to:

Dir. 2009/2/EC - 31° update of Dir. 67/548/EC and according to Reg. 1907/2006/EC, Dir. 2001/58/EC and 1999/45/EC and Reg. 1972/2008/EC
Reg. 1272/2008/EC (classification, labelling and packaging of substances and preparations) modifying directives 67/548/EC, 1999/45/EC and Reg. 1907/2006/EC
NIOSH: Registry of toxic effects of chemical substances
ACGIH: American Conference of Governmental Industrial Hygienists

When applicable, according to Reg. 1907/2006/EC - chapter II, all substances used in this preparation where preregistered
Product is according to Reg. 1907/2006/EC – title II requirements (registration of substances)
Dir. 42/2006/CE (machineries directive): n.a.

ABBREVIATIONS AND ACRONYMS

LD50	Average lethal dose
TLV - TWA	Threshold Limit Value - Time Weighted Average
STEL	Short Term Exposure Limit
OES	Occupational Exposure Standard
REACH	Registration, Evaluation, Authorisation of Chemicals. Regulation 1907/2008/EC
n.a.	Not applicable/Not available

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