

Van Mannekus & Co. B.V.

Safety Data Sheet

according to EC regulations 453/2010 and 1272/2008 (GHS system)

Revision date: 12-2016

Version number: 6 (replaces version 5 of 1-3-2014)

Valid from: 1-12-2016

SECTION 1 – Identification of the substance and the company / undertaking:

1.1. Product identifier:

Chemical name: The product is a natural rock mainly consisting of minerals corundum (aluminium oxide) and hematite (iron oxide).

Trade names: **Mandurax**

Synonyms: corundum, emery

EINECS No / CAS No:

	aluminum oxide	Iron oxide
CAS No:	1344-28-1	1309-37-1
EINECS No:	215-691-6	215-168-2

Molecular Weight: not applicable

Chemical Formula: main substances are Al_2O_3 and Fe_2O_3

Registration number: none

1.2. Identified Uses:

- Hard aggregate for floors, roads and surface coating
- Abrasive agent

Uses advised against (if any, by the supplier)

None

1.3. Details of the supplier:

Van Mannekus & Co. B.V.
Nieuwe Waterwegstraat 45
3115 HE Schiedam
Netherlands

Tel: +31-(0)10-4091500
Fax: +31-(0)10-4730880
Email: info@mannekus.com

1.4. *Emergency Telephone number:*

Contact person: C. Maul
Tel: +31-(0)10-4091509
Email: c.maul@mannekus.com

SECTION 2 – Hazards Identification

2.1. *Classification of the substance:*

Not classified as dangerous according to Council Directive 67/548/EEC
Not classified as dangerous according to Council Regulation 1272/2008/EC

2.2. *Label elements:*

None

2.3. *Other hazards:*

Formation of dust is possible.

SECTION 3 – Composition / Information on ingredients

Emery is a natural rock that consists of the following main minerals: corundum (aluminium oxide) and hematite (iron oxide).

Other miner phases and traces are mica, carbonate, rutile and silicates.

The main minerals corundum and hematite are equivalent to the chemical substances aluminium oxide and iron oxide.

Substance Name	CAS No	Concentration	Product identifier according to 1272/2008/EC	R-phrases
Aluminium oxide	1344-28-1	60 %	none	none
Iron oxide	1309-37-1	20 %	none	none

SECTION 4 – First aid measures

4.1. *Description of first aid measures (by route of exposure):*

Seek medical assistance if feeling unwell.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact: Wash with water. Wash contaminated clothing.

Eye contact: Rinse out with plenty of water. Do not rub eyes.

Ingestion: Rinse out mouth with plenty of water and spit out the fluid. After swallowing large amounts: induce vomiting.

4.2. *Most important symptoms and effects, both acute and delayed:*

Inhalation: Dust can cause physical irritation of respiratory tract. Risk of lung disease when

exposed to fine dust for a long time.

Skin contact: No effect known.

Eye contact: Can cause physical irritation.

Ingestion: In large quantities causes irritation, nausea and gastrointestinal upset.

4.3. *Indication of any immediate medical attention and special treatment needed:*
not applicable

SECTION 5 – Fire fighting measures

5.1. *Extinguishing Media:*

Suitable extinguishing media: No limitations. Adjust extinguishing media to the surrounding fire.

5.2. *Special Hazards arising from the substance:*

The substance is not combustible, not explosive and not flammable.

5.3. *Advice for firefighters:*

Use extinguishing media most appropriate for the surrounding fire.
Firefighters should wear the usual protective clothing and self-contained breathing apparatus.

SECTION 6 – Accidental release measures

6.1. *Personal precautions:*

Do not inhale dust. Avoid generation of dust and eye contact.

6.2. *Environmental precautions:* No special measures required.

6.3. *Methods and material for containment and cleaning up:*

Collect spillage with a shovel and put into a closed container. Clean affected surface with dry method (or flush with water). Avoid generation of dust.

6.4. *Reference to other sections:*

not applicable

SECTION 7 – Handling and storage

7.1. *Precautions for safe handling:*

Avoid any operation leading to the formation of excess of dust.

Observe the exposure limit values in accordance with regulation.

Avoid inhaling dust and fumes when in their presence or ingestion of the product.

Wash hands and body surface with water after handling.

Do not eat, drink or smoke when using the product.

Clean area frequently to avoid buildup of dust.

7.2. Conditions for safe storage:

No special requirements (The product is not affected by moisture.)
Generally keep containers closed.
Storage temperature: no restrictions.

7.3. Specific end use(s):

No information available

SECTION 8 – Exposure controls / Personal protection

8.1. Control parameters:

Germany (Allgemeiner Staubgrenzwert):

10 mg/m³ einatembare Staubfraktion, E-Staub (inhalable dust)
3 mg/m³ alveolengängige Staubfraktion, A-Staub (respirable dust)

Netherlands (MAC):

10 mg/m³ inhaleerbaar stof (inhalable dust)
5 mg/m³ respirabel stof (respirable dust)

USA:	ACGIH (TLV-TWA)	10 mg/m ³	total dust
		5 mg/m ³	respirable dust
	OSHA (PEL-TWA)	15 mg/m ³	total dust
		5 mg/m ³	respirable dust

United Kingdom:		10 mg/m ³	inhalable dust
		4 mg/m ³	respirable dust

Finland, Spain, Italy, Zwitserland:		10 mg/m ³	inhalable dust
		3 mg/m ³	respirable dust

Australia, Austria, Sweden, France, Denmark:		10 mg/m ³	inhalable dust
		5 mg/m ³	respirable dust

Other countries: Please inform at your national authorities.

8.2. Exposure controls:

Appropriate Engineering Controls: Use process enclosures, local exhaust ventilation or other engineering controls to keep air-borne levels below recommended exposure limits (see section 8.1).

Individual Protection Measures:

Eye / face protection: Use safety goggles with side protection.

Hand protection: Safety gloves are recommended.

Skin protection: Wear skin covering clothes and safety shoes.

Respiratory protection: Wear dust mask.

Thermal hazards: not identified

Environmental exposure controls: not applicable

SECTION 9 – Physical and chemical parameters

9.1. Information on basic physical and chemical properties:

Appearance:	solid, granules or powder
Colour:	dark grey
Odour:	odourless
pH:	ca. 7 (10 % suspension in water)
Melting point:	above 1400 °C
Boiling point:	above 1800 °C
Flash point:	not applicable
Evaporation rate:	not applicable
Flammability:	not flammable
Flammability limits:	not applicable
Explosive limits:	not applicable
Vapour pressure:	not applicable (not volatile)
Vapour density:	not applicable (not volatile)
Specific gravity:	ca. 3,85 g/cm ³
Relative density:	Bulk (loose) density: ca. 1700 g/l (depending on the grade and grain-size distribution)
Solubility:	
in water (20 °C):	insoluble
in alcohol:	insoluble
Partition coefficient n-Octanol/water:	not applicable
Auto-ignition temperature:	not applicable
Decomposition temperature:	not applicable
Viscosity:	not applicable (solid)
Explosive properties:	not explosive
Oxidizing properties:	not applicable

9.2. Other information: none

SECTION 10 – Stability and reactivity

10.1. Reactivity:

No information available.

10.2. Chemical Stability:

Chemically very stable under normal conditions.

10.3. Possibility of hazardous Reactions:

Hazardous reactions are not known.

10.4. Conditions to avoid:

No information available

10.5. Incompatible materials:

No information available

10.6. Hazardous decomposition products:

No hazardous decomposition products known.

SECTION 11 – Toxicological information

General information:

Classification: The product is not classified according to Council Directive 67/548/EEC or Council Regulation 1272/2008/EC.

11.1. Information on toxicological effects:

LD₅₀, LC₅₀: Not known

Acute toxicity: Not toxic

Skin corrosion / irritation:

Not absorbed by intact skin.

Serious eye damage / irritation: Can cause physical eye irritation.

Respiratory or skin sensitisation:

Short-term inhalation of dust can cause temporary irritation of the respiratory tract with pain in chest and shortness of breath. Sensitisation of the skin is not known.

Germ cell mutagenicity:

No known studies. Not considered to be mutagenic in general.

Carcinogenicity:

The product is not classified as carcinogenic under ACGIH, NIOSH, IARC, NTP or OSHA.

Reproductive toxicity: Not known

Aspiration hazard:

Inhalation of dust can cause irritation of the respiratory tract with pain in chest and shortness of breath.

Other information: no information available

SECTION 12 – Ecological information

12.1. Toxicity:

As naturally occurring substance the product is not hazardous to the environment.

12.2. Persistence and degradability:

The product is insoluble in water. No further information available.

12.3. Bioaccumulative potential:

The product is not a candidate for bioaccumulation.

12.4. Mobility in soil:

Low because of the structure and physicochemical characteristics.

12.5. Results of PBT and vPvB assessment:

No information available

12.6. Other adverse effects:

Not identified

SECTION 13 – Disposal considerations

Chemical residues generally are considered as chemical waste. Therefore we recommend to contact the authorities in charge or approved waste disposal companies how to dispose of the waste. The disposal has to be done in compliance with national and regional regulations.

13.1 Waste treatment methods:

Landfill is recommended. The product is a natural rock respectively a mixture of natural minerals.

SECTION 14 – Transport information

14.1. UN number:

Not listed

14.2. UN proper shipping name:

Not listed

14.3. Transport Hazard Class:

None

14.4. Packing group:

Not applicable

14.5. Environmental hazards:

None

14.6. Special precautions for user:

None

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

not known

SECTION 15 – Regulatory information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

Not classified as dangerous according to Council Directive 67/548/EEC

Not classified as dangerous according to Council Regulation 1272/2008/EC

The substance is a mixture of natural minerals and therefore exempted from the obligation to register according to Regulation 1907/2006 (REACH): See Regulation 987/2008 Annex V, paragraph 7.

15.2. Chemical safety assessment

Not available

SECTION 16 – Other information

Key literature references and sources for data:

- Chemiekaarten, Gegevens voor veilig werken met chemicaliën, TNO Arbeid, VNCI, ISBN 90-4400-831-5

- GESTIS-Stoffdatenbank: Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung

R-phrases, hazard statements, safety phrases and / or precautionary statements:

None

Please note:

The information in this Safety Data Sheet is based on our present knowledge and experience. The Safety Data Sheet characterizes the product with regard to the appropriate safety precautions. The information does not represent a guarantee of the properties of the product.

Van Mannekus & Co. B.V.