

Material Safety Data Sheet according to 91/155 EEC (EEC 93/112; EEC 2001/58)

1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

- 1.1 Identification of the substance or preparation:
Commercial product name: Normalkorund Grade „A“
Normalkorund Grade „A“
- 1.2 Company/manufacturer: iepco ag
Manufacturer/distributor: iepco ag
PB No./street: Hofstrasse 21
State/postal code/city: CH - 8181 Höri
Country: Switzerland
Telephone: +41 (0)44 861 16 16
Telefax: +41 (0)44 860 63 86
Email: info@iepco.ch
Emergency information: Reto Furrer +41 (0)79 706 25 06

2 HAZARDS IDENTIFICATION

Critical hazards to man and environment
EC/R: Not applicable

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization (substance):
Definition according to EC directive: Aluminium oxide (Al₂O₃)
CAS No.: 1344 - 28 - 1
EINECS No.: 215 - 691 - 6

4 FIRST AID MEASURES

- 4.1 Inhalation: No special action required
4.2 Skin contact : No special action required
4.3 Eye contact: Flush with plenty of water.
Seek medical advice if irritation persists
4.4 Ingestion: No special action required

5 FIRE FIGHTING MEASURES

- 5.1 General information: Not inflammable
5.2 Suitable extinguishing media: Use extinguishing measures
appropriate to the source of the fire
5.3 Extinguishing media which must not be
used for safety reasons: None know
5.4 Special exposure hazards arising from
the substance itself, combustion products,
resulting gases: None known
5.5 Special protective equipment: Not applicable

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6 ACCIDENTAL RELEASE MEASURES

- | | | |
|-----|----------------------------------|--|
| 6.1 | Personal precautions: | Avoid dust formation. Wear personal protective equipment (see also item 8.3) |
| 6.2 | Environmental precautions: | No special measures required |
| 6.3 | Methods for cleaning up: | Pick up mechanically and dispose of in accordance to regulations |

7 HANDLING AND STORAGE

- | | | |
|-----|---|--------------------------------------|
| 7.1 | Handling:
Precautions for safe handling: | Avoid dust formation |
| | Precautions against fire and explosion: | No danger of fire and dust explosion |
| 7.2 | Storage:
Conditions of storage rooms and vessels: .. | No special precautionary measures |
| | Advice of storage of incompatible materials: .. | None |
| | Further information for storage: | None |

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- | | | |
|-----|---|--|
| 8.1 | Further information for system design and engineering measures: | Not applicable |
| 8.2 | Components with specific control parameters as limit values: | Observe the local bylaws in terms of fine dust (e.g.: TWA value 10 mg/m ³ ; MAK value 6 mg /m ³ , see also item 16) |
| 8.3 | Personal protection equipment:
General protection and hygiene measures: .. | Observe standard industrial hygiene practice |
| | Respiratory protection: | Avoid inhaling the dust
Fine-dust mask with category P1 filter must be used if fine dust limits are exceeded. |
| | Hand protection: | Protective gloves are recommended |
| | Eye protection: | Safety glasses are recommended |

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9 PHYSICAL AND CHEMICAL PROPERTIES

9.1	Appearance:	
	Form:	Grains, powder
	Colour:	Brown
	Odour:	Odourless
9.2	Safety parameters:	
	Change in physical state:	melting point aprox. 2000°C
	Flash point:	Not applicable
	Flammability:	Not applicable
	Ignition temperature:	Not applicable
	Autoflammability:	Not applicable
	Oxidizing properties:	Not applicable
	Explosive properties:	Not applicable
	Explosive limits:	Not applicable
	Vapour pressure:	Not applicable
	Specific gravity:	(3,7 – 4,5) g/cm ³
	Bulk density:	(500 - 2500) kg/m ³
	Solubility in water:	Practically insoluble
	pH value:	Not applicable
	Partition coefficient n-octanol/water:	Not applicable

10 STABILITY AND REACTIVITY

10.1	General information:	The material is stable, no hazardous reactions known
10.2	Conditions to avoid:	Not applicable
10.3	Materials to avoid:	Not applicable
10.4	Hazardous decomposition products:	Non known

11 TOXICOLOGICAL INFORMATION

11.1	General information:	No hazardous effects known, if used properly. No free silica included (see also item 16)
11.2	Acute toxicity:	Not known

12 ECOLOGICAL INFORMATION

12.1	Information on elimination (persistence and degradability):	Chemically inert and insoluble in water. Separation by mechanical processes (sedimentation, filtration etc.)
12.2	Behaviour in environmental compartments:	No environmental problems known
12.3	Ecotoxicity:	No harmful effects on water organisms anticipated
12.4	Further ecological Information:	No environmental problems expected, if handled and treated in accordance with standard industrial practice

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13 DISPOSAL CONSIDERATIONS

- 13.1 Material:..... Can be stored with domestic waste.
Observe local bye-laws
- 13.2 Contaminated packaging:..... Packaging has to be emptied entirely.
Recycling of used packaging is recommended. Local bye-laws must be observed

14 TRANSPORT INFORMATION

- 14.1 Land transport:
GGVS / ADR - classification:..... Non hazardous material
GGVE / RID:..... Non hazardous material
- 14.2 Inland waterways:
GGVBisch / ADNR - classification:..... Non hazardous material
- 14.3 Maritime transport:
GGVSee / IMDG - classification:..... Non hazardous material
- 14.4 Air transport:
ICAO-TI / IATA - classification: Non hazardous material

15 REGULATORY INFORMATION

- 15.1 Classification according to EC guidelines:
Danger symbol and danger-text of the product:..... None
EC / R:..... None
EC / S:..... None
- 15.2 National regulations:
e.g.: (Germany) Classification according VbF: Not subjected to VbF
Water Pollution Category: Not water poluting (VwVwS (Germany) dated 27.07.2005, enclosure 1)

16 FURTHER INFORMATION

Studies by the Institute for Hygiene and Industrial Medicine of the University of Essen showed that fused aluminium oxide (corundum) is inert and possesses no toxic or carcinogenic properties.

This information covers the safety requirements of the product(s) exclusively and is based on current knowledge and experience. It does not represent a guarantee for properties of the described product(s) in terms of the legal warranty regulations.

The product specification is contained in a separate product data sheet.