



SAFETY DATA SHEET

KaVo. Dental Excellence.

Section 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name or designation of the mixture KaVo RONDOflex 2013 - 27µm powder
Registration number -
Product code 1.000.5955, 1.000.5957
Date of first issue 22-February-2012
Version number 1.0
Product use professional use
Revision date 27-February-2012
Supersedes date 23-February-2012

Relevant identified uses of the substance or mixture and uses advised against

Identified uses Not available.
Uses advised against None known.

Details of the supplier of the safety data sheet

Company name Kaltenbach & Voigt GmbH
Address Bismarckring 39
D-88400 Biberach
Germany
Telephone number +49 (0) 7351 56-0
Fax +49 (0) 7351 1488
Contact person Peter Fischer
Telephone number +49 (0) 175 30 57725
e-mail peter.fischer@bayer.com
Emergency telephone number +49 (0) 7351 56 4000

Section 2: Hazards identification

Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This preparation does not meet the criteria for classification according to Directive 1999/45/EC as amended.

Hazard summary

Physical hazards Not classified for physical hazards.
Health hazards Not classified for health hazards.
Environmental hazards Not classified for hazards to the environment.
Specific hazards For additional information on inhalation hazards, see Section 11 of this safety data sheet.
Main symptoms Not available.

Label elements

Label according to Directive 67/548/EEC or 1999/45/EC as amended

Contains: Aluminiumoxid, Siliciumdioxid, Sodium oxide

Supplemental label information Not applicable.

Other hazards Not assigned.

Section 3: Composition/information on ingredients

Mixture

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Aluminiumoxid	<= 99.5	1344-28-1 215-691-6	-	-	
Classification:	-				
Siliciumdioxid	<= 0.2	7631-86-9 231-545-4	-	-	
Classification:	-				
Sodium oxide	<= 0.2	12401-86-4 235-641-7	-	-	
Classification:	Xi;R36/37/38				

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

#: This substance has been assigned Community workplace exposure limit(s).

Composition comments The full text for all R-phrases is displayed in Section 16.

Section 4: First aid measures

General information Not available.

Description of first aid measures

Inhalation	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control centre immediately.

Most important symptoms and effects, both acute and delayed Not available.

Indication of any immediate medical attention and special treatment needed Not available.

Section 5: Firefighting measures

General fire hazards

Extinguishing media

Suitable extinguishing media	Water spray, dry powder or carbon dioxide.
Unsuitable extinguishing media	Do not use water jet.

Special hazards arising from the substance or mixture

Advice for firefighters

Special protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Special firefighting procedures	No specific fire fighting procedure given. Avoid dust formation.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits.
For emergency responders	Not available.

Environmental precautions No special environmental precautions required.

Methods and material for containment and cleaning up The product is immiscible with water and will spread on the water surface. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water.

Reference to other sections For personal protection, see section 8. For waste disposal, see section 13.

Section 7: Handling and storage

Precautions for safe handling Avoid dust formation. Do not breathe dust from this material. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with skin and eyes. Avoid prolonged exposure. Practice good housekeeping. Avoid eating, drinking and smoking when using the product.

Conditions for safe storage, including any incompatibilities Store in a well-ventilated place. Keep container tightly closed. Avoid dust formation. Guard against dust accumulation of this material.

Specific end use(s)

Section 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Aluminiumoxid (1344-28-1)	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Inhalable dust.
Siliciumdioxid (7631-86-9)	TWA	6 mg/m ³	Inhalable dust.
		2.4 mg/m ³	Respirable dust.

EU

No exposure limits noted for the ingredient(s).

Biological limit values

EU

No biological exposure limits noted for the ingredient(s).

United Kingdom

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

DNEL Not available.

PNEC Not available.

Exposure controls

Appropriate engineering controls Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL (occupational exposure limit), suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

General information Not available.

Eye/face protection Use tight fitting goggles if dust is generated.

Skin protection

- Hand protection Wear protective gloves. Nitrile gloves are recommended.

- Other Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Dust filter P3 (for especially fine dust/powder).

Thermal hazards Not available.

Hygiene measures Do not breathe dust. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practices.

Environmental exposure controls Not available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Not available.

Form Powder.

Colour White

Odour Odourless.

Odour threshold Not available.

pH Not applicable.

Melting point/freezing point 2040 °C (3704 °F)

Boiling point, initial boiling point, and boiling range	2980 °C (5396 °F)
Flash point	Not applicable.
Auto-ignition temperature	Not applicable.
Flammability (solid, gas)	Not available.
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Oxidizing properties	Not applicable.
Explosive properties	Not applicable.
Explosive limit	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Relative density	4 g/cm ³ @ 20°C
Solubility (water)	insoluble
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Bulk density	1.54 - 1.6 g/cm ³
Pour point	Not applicable.
Viscosity	Not available.
Viscosity temperature	Not available.
VOC (Weight %)	Not available.
Percent volatile	Not available.
Other data	
Particle size	27 µm
Other information	No relevant additional information available.

Section 10: Stability and reactivity

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Avoid spread of dust.
Incompatible materials	Not established.
Hazardous decomposition products	No dangerous reaction known under conditions of normal use.

Section 11: Toxicological information

General information	Not available.
Information on likely routes of exposure	
Ingestion	Not available.
Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	Not available.
Eye contact	Not available.
Symptoms	Not available.
Information on toxicological effects	
Acute toxicity	Not available.

Components

Aluminiumoxid (1344-28-1)

Test results

Acute Dermal LD50 >= 5000 mg/kg
Acute Inhalation LC50 >= 1000 mg/l 4 hours
Acute Oral LD50 >= 5000 mg/kg

Skin corrosion/irritation	Not available.
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.

Respiratory sensitization	Not available.
Skin sensitization	Not available.
Germ cell mutagenicity	Not available.
Carcinogenicity	Not available.
Reproductive toxicity	Not available.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not available.
Mixture versus substance information	Not available.
Other information	Not available.

Section 12: Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms.

Toxicity

Components	Test results
Aluminiumoxid (1344-28-1)	NOEC Algae: >= 100 mg/l 72 hours NOEC Daphnia: >= 100 mg/l 48 hours NOEC Trout family (Salmonidae): >= 100 mg/l 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential Not available.

Mobility Not available.

Environmental fate - Partition coefficient Not available.

Mobility in soil Not available.

Results of PBT and vPvB assessment Not available.

Other adverse effects Not available.

Section 13: Disposal considerations

Waste treatment methods

Residual waste Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Section 14: Transport information

ADR

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.

Section 15: Regulatory information

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

EU regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Commission Decision 2000/479/EC on the implementation of a European pollutant emission register (EPER)

Not listed.

Regulation (EC) No. 1907/2006, Article 59(1). Candidate List

Not listed.

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product does not need to be labelled in accordance with EC directives or respective national laws.

National regulations

Not available.

Chemical safety assessment

No Chemical Safety Assessment has been carried out.

Section 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

Not available.

Wording of the R-phrases in sections 2 and 3

R36/37/38 Irritating to eyes, respiratory system and skin.

Revision information

Product and company identification: Product and company identification
Physical & Chemical Properties: Multiple Properties
HazReg Data: Europe - EU

Training information

Not available.

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.

Issue date

Not available.

Revision date

27-February-2012

Print date

27-February-2012