

Date of last revision: 2022-07-08
Version 3

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

1.1. Product identifier

CORUNDUM

Further trade names

Substance name: Aluminium oxide, Al₂O₃

White/Pink Corundum EK/EKW/EKR

Brown Corundum NK

Mixed Corundum M/MX

Platelet Corundum PLK

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

Use of the substance/mixture

Heat-resistant and ceramic applications. Production of filling material. Production of wear-resistant materials. Surface treatment. Production of abrasives for use in grinding, polishing, blasting.

1.3. Manufacturer contact information

Company name:	Rønvig Dental Mfg. A/S
	Gl. Vejlevej 59
	DK-8721 Daugaard
Tel.:	+45 70 23 34 11
e-mail:	export@ronvig.com
Information will be provided by:	Quality Assurance Department
Emergency telephone no. (Poison Center):	+45 82 12 12 12

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This substance is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Classification according to directive in 1999 / 45 / the EC (DPD).

2.2. Label elements

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: none

2.3. Other hazards

Inhalation of dust may cause irritation of the respiratory system. Dust/mist: Causes mild skin irritation. Causes eye irritation.

A repeated, excessive dust exposure can cause pneumoconiosis.

Special danger of slipping by leaking/spilling product.

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SECTION 3 : Composition / information on ingredients

3.1. Substances

Chemical characterization

Aluminium oxide
CAS No.: 1344-28-1
EC No.: 215-691-6

Sum formula: Al₂O₃

SECTION 4: First-aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. If experiencing respiratory symptoms: Call a doctor.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not subject to friction. In case of eye irritation consult an ophthalmologist.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Never give anything by mouth to an unconscious person or a person with cramps.

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

Lung irritation, Local erythema (redness), Coughing.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Filtering Half-face mask (DIN EN 149) P3

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Additional information

Knock down with water spray jet. Collect contaminated fire extinguishing water separately. This must not be discharged into drains

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Special danger of slipping by leaking/spilling product. Wear personal protection equipment.

6.2. Environmental precautions

Knock down dust with water spray jet.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Avoid dust formation. Dampen dust and place it in a properly closed receptacle and dispose of it safely. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep container dry. Avoid dust formation.

Hints on joint storage

No information available.

7.3. Specific end use(s)

See section 1.2.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS no	Substance	ppm	Mg/m ³	fibres/ml	Category	Origin
1344-28-1	Aluminium oxides, inhalable dust	-	10		TWA (8h)	WEL
1344-28-1	Aluminium oxides, respirable dust	-	4		TWA (8h)	WEL

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations. Use approved industrial vacuum cleaner for removal. (High efficiency particulate air filter (HEPA filter))

Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Avoid dust formation. Do not breathe dust. Protect skin by using skin protective cream.

Eye/face protection

Wear eye protection/face protection.

Hand protection

Wear suitable gloves.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Filtering device (full mask or mouthpiece) with filter: FFP2

Environmental exposure controls

Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	white
Odor:	odourless
pH-Value:	not determined

Changes in the physical state

Melting point:	approx. 2000 °C.
Initial boiling point and boiling range:	not applicable
Flash point:	not applicable

Flammability

Solid:	not determined
Gas:	not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined

Auto-ignition temperature

Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidizing.

Vapor pressure:	not determined
Density:	3,9 g/cm ³
Bulk density:	0,5 – 2 kg/m ³
Water solubility:	Immiscible

Solubility in other solvents:

Not determined	
Partition coefficient:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Odor threshold: not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

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10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PTB and vPvB assessment

The product has not been tested.

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12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

The allocation of waste identity numbers/waste descriptions must be carried out according to the ECC, specific to the industry and process.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

- | | |
|---|--|
| 14.1. <u>UN number:</u> | No dangerous good in sense of this transport regulation. |
| 14.2. <u>UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| 14.3. <u>Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| 14.4. <u>Packing group:</u> | No dangerous good in sense of this transport regulation. |

Inland waterways transport (ADN)

- | | |
|---|--|
| 14.1. <u>UN number:</u> | No dangerous good in sense of this transport regulation. |
| 14.2. <u>UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| 14.3. <u>Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| 14.4. <u>Packing group:</u> | No dangerous good in sense of this transport regulation. |

Marine transport (IMDG)

- | | |
|---|--|
| 14.1. <u>UN number:</u> | No dangerous good in sense of this transport regulation. |
| 14.2. <u>UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| 14.3. <u>Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| 14.4. <u>Packing group:</u> | No dangerous good in sense of this transport regulation. |

Air transport (ICAO-TI/ATA-DGR)

- | | |
|---|--|
| 14.1. <u>UN number:</u> | No dangerous good in sense of this transport regulation. |
| 14.2. <u>UN proper shipping name:</u> | No dangerous good in sense of this transport regulation. |
| 14.3. <u>Transport hazard class(es):</u> | No dangerous good in sense of this transport regulation. |
| 14.4. <u>Packing group:</u> | No dangerous good in sense of this transport regulation. |

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

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SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): 0 %
Information according to 2012/18/EU(SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water contaminating class (D): - - not water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.