

Material Safety Data Sheet complying with Regulation (EU) n. 1907/2006

Trade name: test dusts made of corundum
Created on: 20.09.2017 Version: 1272-1 Replaces: 1272-0
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SECTION 1: Identification of the substance or mixture and of the company

1.1 Product identifier

Name of substance / Name of company: **escor**
ARIZ-KSL A1, A2, A3, A4 quarzfrei
KSL 12050
Brasil M10, M8
TE KSL 220

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

Relevant identified uses: Test substance
Uses advised against: -

1.3 Details of the supplier of the material safety data sheet

Manufacturer / supplier: KSL staubtechnik gmbh
Street / Address: Westendstrasse 11
Country / Municipality / Post Code: DE - 89415 Lauingen
Telephone / Fax / Email: +49 (0) 9072 / 95 00-0 / Fax: -50 / info@ksl-staubtechnik.de

1.4 Emergency telephone number

Office KSL staubtechnik gmbh: +49 (0) 9072 / 95 00-0 (Hours: Mon-Thurs 8 AM - 4 PM, Fri 8 AM - 12)

SECTION 2: Hazards identification

2.1 Classification of substance or mixture

2.1.1 Classification according to criteria of (EC) Regulation No. 1272/2008:
Not a hazardous substance or mixture according to (EC) Regulation No. 1272/2008

2.2 Label elements

2.2.1 Label elements according to (EC) Regulation no. 1272/2008
No labelling requirements pursuant to EC Regulation No. 1272/2008

2.3 Other hazards

The product is an inorganic substance that does not meet the criteria for PBT and vPvB substances according to Annex XIII of the REACH Regulation 1907/2006/EC.
Based on the available data, the product does not represent a hazard under normal use neither for humans nor for the environment.

SECTION 3: Composition/information on ingredients

3.1 Substances

Description of the substance: Aluminium oxide
Chemical formula: Al_2O_3
Hazardous ingredients: none

Name / chem. Composition	CAS-No.	EG-No.	Concentration range [M.-%]	Classification pursuant to VO (EG) Nr. 1272/2008
Aluminium oxide Al_2O_3	1344-28-1	215-691-6	>95 %	None

3.2 Mixtures

This product is a substance.

SECTION 4: First aid measures

4.1 Description of first aid measures

General instructions:

If symptoms persist, it is advised to consult a doctor. Please specify substance/ product and measures taken to the doctor.

In case of Inhalation:

Ensure supply of fresh air. Any dust in the throat and nasal passages should be cleared promptly. Consult a doctor in case of symptoms such as discomfort, cough or persistent irritation. In general, inhalation is to be avoided.

In case of skin contact:

Wash with water and soap.

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In case of eye contact:

If necessary, remove contact lenses and, holding the eyelid open, rinse the eye under running water to remove all particles. If possible, use an isotonic eye rinsing solution (0.9 % NaCl). Do not rub eyes when dry, since additional cornea damage could occur due to mechanical stress.

if swallowed:

Rinse mouth abundantly with water. Give abundant water to drink.

4.2 Most important symptoms and effects, both acute and delayed

It may cause irritation of the eyes and respiratory tract (caused by foreign bodies).

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Compatible with:

Not combustible. Firefighting measures as per surrounding conditions.

Not suitable:

none

5.2 Special hazard arising from the substance or mixture

None. Not combustible.

5.3 Advice for firefighters

none

5.4 Legal notices

No action is required because the substance is not combustible.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Avoid formation of dust. Wear protective clothing as described in Section 8. Follow instructions for safe handling as described in Section 7.

6.1.2. Usage Methodology

Emergency plans are not required. With high dust levels respiratory protection is required.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

6.3.1 Instructions for Containment

Avoid the formation of dust.

6.3.2 Cleaning Instructions

Avoid inhalation. Use tested spraying and vacuum cleaning systems. Use protective equipment.

6.3.3 Advice on inappropriate containment and cleaning methods

Air blowing method of cleaning is not permitted.

6.4 Reference to other sections

See also Sections 8 and 13. Personal protective equipment is specified in section 8 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

7.1.1 Instructions for safe handling

Avoid dust formation and deposits. Handle packaged products carefully in order to prevent the packaging from bursting open. Areas subject to dust generation must be equipped with suitable ventilation systems. In case of inadequate dust removal in the workplace, wear suitable respiratory protection (in compliance with the EN 143 standard). Gloves compliant to the EN 374 standard are recommended.

Measures to protect against fire and explosions

No special measures required.

Measures to prevent aerosol and dust generation

Only use suitable sweeping methods for chips. Use suitable methods that are as dry as possible such as vacuum aspiration for cleaning which does not cause dust.

Environmental Protection Methods

No special measures required.

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7.1.2 Notes on general hygiene measures

Do not eat, drink or smoke when using this product. After use / contact wash hands. Wear respirator and goggles in dusty environments.

7.2 Conditions for safe storage, including any incompatibilities

Information about storage conditions

Store in dry and sealed containers, possibly original ones. Keep away from foodstuffs, drinks and tobacco.

Requirements for storage areas and containers

No special measures required.

Storage class

VCI: 13 (non-flammable solids)

7.3 Specific end use(s)

Industry and sector specific guidance

Convenient and economical application with suitable testing equipment depending on the intended purpose. For specific uses (see Section 1.2), no additional information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with specific control parameters:

Chem. Identity	CAS-No.	EG-No.	National Limit	Exposure	Notes / Statutes
General Particulate limits	-	-	1,25 (A) mg/m ³ (common grade)	Inhalation	Workplace Exposure Limit TRGS 900
General Particulate limits	-	-	10 (E) mg/m ³ (breathable)	Inhalation	Workplace Exposure Limit TRGS 900

The international limit values for aluminium oxide can be found at the following link: <http://limitvalue.ifa.dguv.de/>

8.2 Exposure controls

To comply with the occupational exposure limits, a combination of technical and personal protective measures are normally necessary. For identified uses (Section 1.2), engineering controls and personal protective equipment are recommended. Technical measures and the selection of appropriate processes have priority over the use of personal protective equipment.

8.2.1 Appropriate engineering controls

Avoid or minimise dust formation. Closed processes and local extraction devices are to be used in order to keep airborne dust concentrations below the permissible exposure limit value. With high dust content use an air ventilation system. If dust formation cannot be avoided, the air must remain below exposure limit values through ventilation of the dust content. Organisational measures are to be applied, for example keeping people away from dusty areas.

Recommended measuring procedures for workplace measurements: See trade association series.

8.2.2 Individual protection measures, such as personal protective equipment

General information

When the product is used as intended, no personal protective equipment is necessary. Treat the product according to safety instructions.

Face / eye protection

When dust present, wear safety glasses according to EN 166.

Skin / Hand Protection

People suffering from dermatitis or with very sensitive skin should take appropriate precautions (e.g. wear gloves or use protective cream). Wash hands after working. The use of gloves compliant to the EN 374 standard is recommended.

Respiratory protection

Install effective exhaust ventilation and/ or sufficient ventilation. In case the permissible exposure limit values in the workplace are exceeded, a breathing mask must be worn in accordance with the regulations applied in the EU or current national regulations (e.g. particle filter P2 according to the EN 143 standard).

Hygiene measures

Do not eat, drink or smoke when using this product. Before breaks and after work wash your hands and consider taking a shower. Avoid contact with eyes and skin. After work, workers should wash or shower or use skin care products. Contaminated clothing, footwear, watches etc. should be cleaned before re-using.

8.2.3 Exposure Limitations and Monitoring

See also Sections 6 and 7.

Air

Prevent wind-blown dispersal. Compliance with dust emission limit values according to the Technical Instructions on Air Quality Control.

Water

Wastewater and groundwater regulations must be observed.

Ground

Compliance with the Federal Soil Protection Ordinance. No special control measures required.

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SECTION 9: Physical and chemical properties

9.1 Information on fundamental physical and chemical properties

(a)	State of aggregation	solid (powder)
(b)	Colour	whitish, greyish, brownish
(c)	Odour	odourless
(d)	Melting point/freezing point	approx. 2050° C / not applicable
(e)	Boiling point or initial boiling point and boiling range	not determined
(f)	Flammability	non-flammable
(g)	Lower and upper explosion limit	not applicable to solids according to Regulation (EU) 2020/878.
(h)	Flash point	not applicable to gases, aerosols and solids according to Regulation (EU) 2020/878.
(i)	Ignition temperature	applies only to gases and liquids according to Regulation (EU) 2020/878.
(j)	Decomposition temperature	not determined
(k)	pH value	+/- 9 (10 % in H2O)
(l)	Kinematic viscosity	applies only to liquids according to Regulation (EU) 2020/878.
(m)	Solubility	not soluble
(n)	Partition coefficient n-octanol/water (log value)	not applicable
(o)	Vapour pressure	not applicable
(p)	Density and/or specific gravity	- / 3.95 g/cm ³
(q)	Relative vapour density	only applicable to gases and liquids according to Regulation (EU) 2020/878.
(r)	Particle properties	The X ₅₀ value is between 1µm and 2mm.

9.2 Other information

Not applicable

9.2.1 Information on physical properties

Not applicable

9.2.2 Other safety characteristics

Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

In case of appropriate storage and handling, no hazardous reactions are known.

10.2 Chemical stability

The substance is stable.

10.3 Possibility of hazardous reactions

none

10.4 Conditions to avoid

Moisture and water during storage may cause lump formation and loss of product quality.

10.5 Incompatible materials

none

10.6 Hazardous decomposition products

none

SECTION 11: Toxicological information

11.1 Information on hazard classes within the meaning of Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

a) Acute toxicity

Rats oral LD50: > 5000 mg/kg

b) Corrosive/irritant effect on skin

No information available / not a hazardous substance

c) Serious eye damage/irritation

May cause eye irritation (due to foreign body exposure).

d) Respiratory sensitisation/ skin sensitisation

No information available / no hazardous substance

e) Germ cell mutagenicity

No information available / no hazardous substance

f) Carcinogenicity

No information available / no hazardous substance

g) Reproductive toxicity

No information available / no hazardous substance

h) specific target organ toxicity after a single exposure

No information available / no hazardous substance

i) specific target organ toxicity in repeated exposure

No information available / no hazardous substance

j) Aspiration hazard

No information available / no hazardous substance

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Delayed and immediate effects and chronic effects from short-term and long-lasting

Exposure

Immediate effects

Irritation of the eyes caused by exposure to foreign bodies may occur

Chronic effects with long-term exposure

No information available / not a hazardous substance

11.2 Information on other hazards

No endocrine disrupting properties or other adverse effects are known.

SECTION 12: Ecological information

For the product, no ecotoxicological information is available.

12.1 Toxicity

No data available, as no data are available from the raw material supplier.

12.2 Persistence and degradability

No data available, as no data are available from the raw material supplier.

12.3 Bioaccumulative potential

No data available, as no data are available from the raw material supplier.

12.4 Mobility in soil

No data available, as no data are available from the raw material supplier.

12.5 Results of PBT and vPvB assessment

No data available, as no data are available from the raw material supplier.

12.6 Endocrine disrupting properties

No data available, as no data are available from the raw material supplier.

12.7 Other adverse effects

No data available, as no data are available from the raw material supplier.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Collect product while dry. Avoid formation of dust in general.

It can be disposed of together with household waste in compliance with local regulations. If necessary, coordinate disposal with the local competent authority.

Recommendation

Arrange according to the exact waste code with the disposer.

Waste code according to European Waste Catalogue (EWC)

010410 – dusty and powdery waste

Treatment of cleaned / uncleaned packaging

150106 – mixed packaging suitable for material recycling

SECTION 14: Transport information

The product is not classified as hazardous under transport regulations (ADR, RID, IMDG, ICAO / IATA).

14.1 UN number or ID number

None

14.2 UN proper shipping name

None

14.3 Transport hazard class(es)

None

14.4 Packing group

None

14.5 Environmental hazards

None

14.6 Special precautions for user

No special measures

14.7 Carriage in bulk by sea in accordance with IMO instruments

None

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SECTION 15: Regulatory information

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

The product is not covered by the registration requirement of EC Regulation 1907/2006 (REACH).

EU Rules

National Regulations

When handling this product, the statutory provisions in the current version must be observed, among others

AwSV Water hazard class: nwg – not hazardous for water

TRGS 500 "Protective Measures"

TRGS 559 "Mineral Dust"

TRGS 900 "Occupational Exposure Limits"

Technical Instructions on Air

Regulations on Occupational Health Care (WHS)

BG - Basic principles for occupational medical examinations

15.2 Chemical safety assessment

No chemical safety assessment is required for this substance.

SECTION 16: Other information

16.1 Changes compared to the previous version

Header adapted; paragraph 1.1: updated; paragraph 3.1: column "REACH" removed; paragraph 6.4: reference inserted; paragraph 8.1: link inserted; paragraph 9.1: paragraph adapted to information from Regulation (EU) 2020/878; paragraph 9.2.1, 9.2.2: new inserted; paragraph 11.1: heading and enumeration adapted to Regulation (EU) 2020/878, sentence inserted; paragraph 11.2: newly inserted; Paragraph 12: editorial changes; Paragraph 12.6: newly inserted; Paragraphs 14.1, 14.7: adaptation of headings to said Regulation; Paragraphs 15.1, 16.2: water hazard class was renamed from "VwVwS" to "AwSV" and reviewed; Paragraph 15.2: editorial changes; Paragraph 16.5: newly inserted.

16.2 Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OOHC	Ordinance on Occupational Health Care
PA	Professional Association
CAS	Chemical Abstracts Service
CLP	Classification, labelling and packaging (Verordnung (EG) Nr. 1272/2008)
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization (Internationale Zivilluftfahrt Organisation)
IMDG	International agreement on the Maritime transport of Dangerous Goods
PBT	Persistent, bio-accumulative and toxic
(REACH)	Registration, Evaluation and Authorisation of Chemicals (EC 1907/2006)
RID	Regulations concerning the International Carriage of Dangerous Goods
MSDS	Material Safety Data Sheet
TRHS	Technical Rules for Hazardous Substances
CIF	Chemical Industry Federation
vPvB	Very persistent, very bioaccumulative
AwSV	Ordinance on Installations for Handling Substances Hazardous to Water (Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen)

16.3 Literature and data sources

As sources of key data and the technical information we refer to the raw material supplier / manufacturer or the ECHA database for classification and labelling inventory.

16.4 Worker training

In addition to worker training programs on health, safety and the environment, companies must ensure that their workers read the safety, understand and can implement requirements.

16.5 Information on NANO

We do not use nanotechnology processes and no synthetic nano-materials are used for production. However, we cannot exclude the presence of small amounts of nanoparticles in the material. To obtain the desired particle size distribution in our product, the product is crushed and then sieved. It could be that some nanoparticles are produced in such a comminution process. By the way, the same applies to products such as flour or sugar! It is therefore not possible to exclude NANO material.

16.6 Disclaimer

The information in this materials safety data sheet describes the safety requirements of our product and is based on our present knowledge. They do not represent an assurance of product properties and establish no contract legal rights. This safety data sheet serves the user solely for information purposes. It was compiled with great care; a liability for the accuracy of the data or a liability for the consequences of printing, setting or transmission errors cannot be assumed. For these products, we have been responsible to follow existing laws, ordinances and regulations, including those that are not mentioned in this data sheet.