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

1.1. Product identifier

eskal, eskal plus

Further trade names

eskal, eskal plus

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

Use of the substance/mixture

Separation and test dust

1.3. Details of the supplier of the safety data sheet

Company name:	KSL staubtechnik gmbh	
Street:	Westendstraße 11	
Place:	D-89415 Lauingen	
Telephone:	+49 (0) 9072 95 00-0	Telefax: +49 (0) 9072 95 00-50
E-mail:	info@ksl-staubtechnik.de	
Contact person:	Dr. R. Stadler	Telephone: +49 (0) 9072 95 00-0
E-mail:	info@ksl-staubtechnik.de	
Internet:	www.ksl-staubtechnik.de	

1.4. Emergency telephone number:

+49 (0) 9072 / 95 00-0 (Availability: Mon-Thu 08:00-16:00, Fri 08:00-12:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

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

2.2. Label elements

Additional advice on labelling

Label elements: none.

2.3. Other hazards

Based on the available data on natural calcium carbonate, the product does not pose a hazard to humans or the environment when used as intended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
1317-65-3	Limestone (calcium carbonate)			>=99 %
	215-279-6			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If symptoms persist, it is advisable to consult a doctor. Tell the doctor what substance/product was involved and what measures were taken.

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. Wash off with soap and water.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink 1 glass of of water. Rinse mouth thoroughly with water.

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

Dust can cause irritation to the eyes and respiratory tract (due to foreign bodies).

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Water spray jet, alcohol resistant foam

Unsuitable extinguishing media

Powder and water jet: risk of dust cloud mixture

5.2. Special hazards arising from the substance or mixture

Non-flammable. none

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. none

Additional information

No measures are necessary as the mixture is non-flammable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid dust formation. Do not breathe dust.

For non-emergency personnel

Wear protective clothing as described in Section 8. Follow the instructions for safe handling as described in Section 7.

For emergency responders

Emergency plans are not required. However, respiratory protection is necessary in case of high dust exposure.

6.2. Environmental precautions

No special environmental measures are necessary. Clean contaminated articles and floor according to the environmental legislation.

6.3. Methods and material for containment and cleaning up

For containment

Avoid generating dust.

For cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Pick up or vacuum the mixture mechanically and collect it in the designated container for disposal in accordance with local regulations.

Other information

Blowing off for cleaning purposes is not permitted.

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

Avoid dust formation and accumulation.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Wear a dust mask and safety goggles in dusty atmospheres.

Further information on handling

Measures to prevent aerosol and dust generation: Only sweep with a suitable broom. For cleaning, use suitable methods such as vacuum suction that are as dry as possible and do not cause dust to form.
Measures to protect the environment: Do not allow to enter waterways, sewage systems or the ground. Avoid contact with acids.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Store containers in a dry place. Do not store together with acids. Store in a dry place, tightly sealed, preferably in the original container.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

No decomposition if stored and used as intended.

7.3. Specific end use(s)

No additional information is available for the specific end uses (see section 1.2).

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

The GESTIS database for international limit values can be found at the following link: http://limitvalue.ifa.dguv.de

8.2. Exposure controls

Appropriate engineering controls

A combination of technical and individual protective measures is often necessary to comply with occupational exposure limits. Recommended measurement methods for workplace measurements: See the series of publications by the employers' liability insurance association. Technical control measures and individual protective measures are recommended for the identified uses (section 1.2). Ventilate as needed to control dust in the air. Use a ventilation system if there is a high concentration of dust in the air.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye protection/face protection. No personal protective equipment is necessary when used as intended. Handle the product in accordance with the safety instructions. Wear closed safety goggles in accordance with EN 166 if dust is generated.

Hand protection

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. May cause slight irritation to sensitive individuals due to mechanical friction on the skin. If necessary, wear protective gloves in accordance with standard EN 374.

Skin protection

Use of protective clothing.
Hygiene measures: Do not eat, drink or smoke at work. Wash hands and shower if necessary before breaks and at the end of work. Avoid contact with eyes and skin. After work, workers should wash or shower and use skin care products. Clean contaminated clothing, shoes, watches, etc. before reuse.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. If exposure limits are exceeded (e.g. when handling powdered products in the open), a suitable respiratory mask with a P1 particle filter in accordance with standard 143 must be worn.

Environmental exposure controls

See sections 6 and 7. No further action required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	white
Odour:	odourless
Odour threshold:	not specified
Melting point/freezing point:	1340°C (102 bar) °C
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not applicable
Auto-ignition temperature:	not determined
Decomposition temperature:	> 825°C in CaO + CO2 °C
pH-Value (at 20 °C):	8,5 - 9,5 (100 g/l)
Viscosity / kinematic:	not applicable
Water solubility (at 20 °C):	in Wasser: 0,014 g/l g/l
Solubility in other solvents	
in water: 0,018 g/l (75°C)	
Partition coefficient n-octanol/water:	>1
Vapour pressure:	not determined
Density:	not determined
Relative density (at 20 °C):	2,6 - 2,8
Relative vapour density:	not determined
Particle characteristics:	X50 value: 10,5µm - 94µm

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Solid content:	100,00 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions are known if stored and handled properly.

10.2. Chemical stability

The mixture is stable under normal ambient temperature and pressure. Stable under specified storage conditions No decomposition if used as intended.

10.3. Possibility of hazardous reactions

May react dangerously with fluorine, magnesium or aluminium under the influence of heat Reactions may occur with acids, acidic ammonium compounds, acidic salts or under the influence of high heat (>825°C), resulting in the release of carbon dioxide CO2 (risk of suffocation, risk of bursting in closed containers).

10.4. Conditions to avoid

Moisture and water during storage can lead to clumping and loss of product quality. Temperatures > 100 °C

10.5. Incompatible materials

Avoid contact with acids.

10.6. Hazardous decomposition products

Thermal decomposition at temperatures above 825°C, formation of CO2 and CaO.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.
According to EU classification criteria, the product is not considered to be irritating to the skin According to EU classifications, the product is not considered to be irritating to the eyes.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: 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.

Practical experience

No toxicological data is available for this product Due to the fact that calcium carbonate is a rock found on the earth's surface and, in dissolved form, a natural and indispensable component of natural waters, chronic toxic effects and sensitising effects can be practically ruled out.

11.2. Information on other hazards

Endocrine disrupting properties

There are no known endocrine-disrupting properties or other harmful effects.

Other information

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

SECTION 12: Ecological information

12.1. Toxicity

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

No ecotoxicological data is available for this product.
In its solid state, calcium carbonate is a rock found on the Earth's surface.
In its dissolved state, the substance is a natural and indispensable component of natural waters.
Adverse effects on the environment must therefore be ruled out.

12.2. Persistence and degradability

Calcium carbonate is not biodegradable.

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 PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

In their solid state, these minerals are the main component of rocks on the Earth's surface. In their dissolved state, they are a natural and indispensable component of natural waters. These minerals are not biodegradable. Negative effects on the environment should therefore be ruled out.
It should be noted, however, that concentrated slurries of these minerals in natural waters can have an adverse effect on aquatic organisms (disruption of microflora and fauna in the sediment, thereby harming higher aquatic organisms).

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Can be disposed of with household waste in accordance with local regulations. Pick up the product dry. Can be disposed of with household waste in accordance with local regulations.
Discuss the exact waste code with the waste disposal company.
Waste code according to the Waste Catalogue Regulation (AVV) 010410 - dusty and powdery waste

Contaminated packaging

150106 - mixed packaging according to material recycling

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D): - - non-hazardous to water

Additional information

TRGS 559 TRGS 500 TRGS 900 Technische Anleitung zur Reinhaltung der Luft (TA-Luft) Regulation on occupational health care (ArbMedVV) BG principles for occupational health check-ups

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
EC/EEC: European Community/European Economic Community
EU: European Union
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
M-factor: Multiplying factor
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
DGR: Dangerous Goods Regulations
ICAO: International Civil Aviation Organization
TI: Technical Instructions
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: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Key literature references and sources for data

We refer to information provided by raw material suppliers/manufacturers and the ECHA database on classification and labelling as sources for the most important data and technical information.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The information in this safety data sheet describes the safety requirements of our product and is based on our current state of knowledge. It does not constitute a guarantee of product properties and does not establish a contractual legal relationship. This safety data sheet is intended solely as a source of information for the user. It has been compiled with the utmost care; however, no guarantee can be given for the accuracy of the data, nor can any liability be accepted for the consequences of printing, typesetting or transmission errors. Existing laws, regulations and rules, including those not mentioned in this data sheet, must be observed by the recipient of our products on their own responsibility.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)