according to Regulation (EC) No. 1907/2006



# Kalkstein/Aluminium Mischung Type RO 260

Version Revision Date: SDS Number: Print Date: 02.12.2024

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

1.1 Product identifier

Trade name : Kalkstein/Aluminium Mischung Type RO 260

Product code : 040534E50

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

Use of the : Colouring agents, pigments

Substance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : ECKART GmbH

Guentersthal 4 91235 Hartenstein

Telephone : +499152770

Telefax : +499152777008

E-mail address of person

responsible for the SDS

: msds.eckart@altana.com

# 1.4 Emergency telephone number

NCEC: +44 1235 239670 (Europe)

Call and response in your language is possible.

Contract no.: ECKART29003-NCEC.

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

# Classification (REGULATION (EC) No 1272/2008)

Not a dangerous substance according to GHS.

# 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

### 2.3 Other hazards

Combustible Solids

according to Regulation (EC) No. 1907/2006



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This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

### Components

Chemical name	CAS-No. EC-No. Index-No.	ClassificationREGUL ATION (EC) No 1272/2008	Concentration (% w/w)
	Registration number		
aluminium powder (stabilised)	7429-90-5	Flam. Sol. 1; H228	>= 1 - < 10
	231-072-3 013-002-00-1 01-2119529243-45		

For explanation of abbreviations see section 16.

### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice : Move the victim to fresh air.

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with soap and plenty of water.

In case of eye contact : Remove contact lenses.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

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

None known.

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

### **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

according to Regulation (EC) No. 1907/2006



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Suitable extinguishing media : Dry sand

Special powder against metal fire

Unsuitable extinguishing

media

ABC powder

Carbon dioxide (CO2)

Water Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

Contact with water liberates extremely flammable gas

(hydrogen).

5.3 Advice for firefighters

Special protective equipment:

for firefighters

Wear self-contained breathing apparatus for firefighting if

necessary.

Further information : Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Evacuate personnel to safe areas.

Avoid dust formation.

6.2 Environmental precautions

Environmental precautions : The product should not be allowed to enter drains, water

courses or the soil.

# 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

Do not use a vacuum cleaner.

Pick up and arrange disposal without creating dust.

Sweep up and shovel. Do not flush with water.

Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For personal protection see section 8.

according to Regulation (EC) No. 1907/2006



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# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Advice on safe handling : Avoid dust formation.

Routine housekeeping should be instituted to ensure that

dusts do not accumulate on surfaces.

Store away from heat.

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

Hygiene measures : General industrial hygiene practice.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

: Electrical installations / working materials must comply with

the technological safety standards.

Further information on storage conditions

Protect from humidity and water.

Advice on common storage : Do not store together with oxidizing and self-igniting products.

Never allow product to get in contact with water during

storage.

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on

storage stability

Keep in a dry place.

No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

### **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form	Control parameters	Basis
		of exposure)		
Limestone	1317-65-3	TWA (inhalable	10 mg/m3	GB EH40
		dust)	-	
	Further information: For the purposes of these limits, respirable dust and			
	inhalable dust are those fractions of airborne dust which will be collected			
	when sampling is undertaken in accordance with the methods described in			
	MDHS14/4 General methods for sampling and gravimetric analysis or			
	respirable, thoracic and inhalable aerosols., The COSHH definition of a			
	substance hazardous to health includes dust of any kind when present at a			
	concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of			
	inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that			

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	levels. Some of must comply of particles of a varicular part response that distinguishes and 'respirable material that e available for doto the fraction definitions and contain composhould be con	dusts have been asswith the appropriate wide range of sizes. icle after entry into the it elicits, depend on two size fractions foeld, inhalable dust apenters the nose and reposition in the respentat penetrates to the explanatory material onents that have the applied with., Where respect that penetrates to the explanatory material onents that have the applied with., Where respect is size.	if people are exposed to dusigned specific WELs and explimits., Most industrial dusts of the behaviour, deposition are human respiratory system the nature and size of the partimit-setting purposes termed proximates to the fraction of mouth during breathing and is iratory tract. Respirable dust be gas exchange region of the lare given in MDHS14/4., Wir own assigned WEL, all the mospecific short-term exposure limit should be use	consure to these contain and fate of any , and the body urticle. HSE ed 'inhalable' airborne s therefore approximates e lung. Fuller Where dusts relevant limits ure limit is listed,
		` .	4 mg/m3	GB EH40
	Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols., The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.			
ninium powder pilised)	7429-90-5	TWA (Inhalable)	10 mg/m3	GB EH40
		TWA (Respirable fraction)	4 mg/m3	GB EH40
		TWA (inhalable dust)	10 mg/m3	GB EH40
	Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols., The COSHH definition of a			

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substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

TWA (Respirable 4 mg/m3 GB EH40 dust)

Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols., The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
aluminium powder (stabilised)	Workers	Inhalation	Long-term systemic effects	3.72 mg/m3
	Workers	Inhalation	Long-term local effects	3.72 mg/m3
	Consumers	Oral	Long-term systemic	3.95 mg/kg

according to Regulation (EC) No. 1907/2006



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effects

# Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l

### 8.2 Exposure controls

Personal protective equipment

Eye/face protection

Safety glasses

Hand protection

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to

be observed.

Skin and body protection

Long sleeved clothing

Respiratory protection : Use suitable breathing protection if workplace concentration

requires.

Breathing apparatus with filter.

P1 filter

### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Physical state : powder

Colour : grey

Odour : odourless

Odour Threshold : No data available

Freezing point : No data available

Boiling point/boiling range : No data available

Flammability : Combustible Solids

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : Not applicable

according to Regulation (EC) No. 1907/2006



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Auto-ignition temperature : Not relevant

Decomposition temperature : No data available

pH : substance/mixture is non-soluble (in water)

Viscosity, kinematic : No data available

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : No data available

Relative density : No data available

Density : No data available

Relative vapour density : No data available

Particle Size Distribution

# 9.2 Other information

No data available

### **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No decomposition if stored and applied as directed.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

# 10.3 Possibility of hazardous reactions

Hazardous reactions : Contact with acids and alkalis may release hydrogen.

Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : Acids

Bases

Oxidizing agents

according to Regulation (EC) No. 1907/2006



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Water

# 10.6 Hazardous decomposition products

Thermal decomposition : No data available

### **SECTION 11: Toxicological information**

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

### **Acute toxicity**

Not classified based on available information.

### **Components:**

### aluminium powder (stabilised):

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

### Skin corrosion/irritation

Not classified based on available information.

### Serious eye damage/eye irritation

Not classified based on available information.

#### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

### Respiratory sensitisation

Not classified based on available information.

# Germ cell mutagenicity

Not classified based on available information.

### Carcinogenicity

Not classified based on available information.

### Reproductive toxicity

Not classified based on available information.

### STOT - single exposure

Not classified based on available information.

# STOT - repeated exposure

Not classified based on available information.

# Aspiration toxicity

Not classified based on available information.

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#### 11.2 Information on other hazards

#### **Further information**

**Product:** 

Remarks : No data available

### **SECTION 12: Ecological information**

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

# 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

### **Product:**

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

# 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

**Product:** 

Additional ecological

information

: No data available

### **SECTION 13: Disposal considerations**

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

European Waste Catalogue : 10 03 21 - other particulates and dust (including ball-mill dust)

containing hazardous substances

13.1 Waste treatment methods

Product : In accordance with local and national regulations.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

according to Regulation (EC) No. 1907/2006



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In accordance with local and national regulations.

# **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

IATA (Passenger) : Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport

regulations.

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

### **SECTION 15: Regulatory information**

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on : Conditions of restriction for the

according to Regulation (EC) No. 1907/2006



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the market and use of certain dangerous substances,

mixtures and articles (Annex XVII)

following entries should be

considered:

aluminium powder (stabilised)

(Number on list 40)

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer

UK REACH List of substances subject to authorisation : Not applicable

(Annex XIV)

: Not applicable

15.2 Chemical safety assessment

No data available

**SECTION 16: Other information** 

Full text of H-Statements

H228 : Flammable solid.

Full text of other abbreviations

Flam. Sol. : Flammable solids

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road: AllC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -

according to Regulation (EC) No. 1907/2006



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Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GB / EN