

019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

Kieselguhr Dicalite Speedplus

Safety Data Sheet according to COMMISSION REGULATION (EU) No 453/2010

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Substance

Substance name: Kieselguhr soda ash flux calcined

INDEX No: Not applicable

ID No of the C & L inventory:

Not available yet **Authorisation No:** Not available yet

EC No: 272-489-0 REACH No:

01-2119488518-22-0006

CAS No: 68855-54-9

1.2 Relevant identified uses of the substance and uses advised against Use of the substance / preparation:

Fillers, Processing aid, not otherwise listed, filtration material, Laboratory chemicals, pH- regulating agents, Plating agents and metal surface treating agents, Solvents, filter-aid, functional filler, functional additive.

1.2.1 Relevant identified uses

Industrial, professional and private use

1.2.2 Uses advised against

None

1.3 Details of the supplier of the safety data sheet

Distributor:

Korspelsesteenweg 86 B-3581 Beverlo - Belgium Tel. +32-(0)11-40.14.08 Fax. +32-(0)11-34.73.59 sales@brouwland.com

Information contact:

Tel.: +32-11 40 14 08

1.4 Emergency Telephone Number: +32-9 250 95 50 or +32-473 54 06 53 (Dicalite Trading NV)



019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance

2.1.1 Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Kieselguhr, soda ash flux-calcined (respirable cristobalite fraction < 1% w/w) This substance is not classified as hazardous according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

2.1.2 Classification according to Directive 67/548/EEC

Kieselguhr, soda ash flux-calcined (respirable cristobalite fraction < 1% w/w)

This substance is not classified as hazardous according to Directive 67/548 EEC

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP] Kieselguhr, soda ash flux-calcined (respirable cristobalite fraction < 1% w/w) No labelling required

2.3 Other hazards

No special remarkable hazards.

Please observe the information given in this safety data sheet.

Depending on the type of handling and use (eg grinding, drying), airborne respirable crystalline silica may be generated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Substance name: Kieselguhr soda ash flux calcined

CAS No: 68855-54-9 **EC No:** 272-489-0

REACH No: 01-2119488518-22-0006

Purity: 100%

Synonyms: Diatomaceous earth soda ash flux calcined

Stabilisers: None

Hazard impurities: None Additional information: None

4. FIRST AID MEASURES

4.1 Description of first aid measures

General notes: No adverse effects are expected during normal use of the substance, however if any effects do appear the following recommendations apply.

Following inhalation:

Move patient from contaminated area to fresh air. In case of persistent problems consult a physician. If dust inhalation is severe move operator to fresh air.

Following skin contact:

Wash the skin with soap and water.



019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

4.1 Description of first aid measures (cont.)

Following eye contact:

Wash immediately, abundantly and thoroughly with water. If irritation persists, consult a physician **Following ingestion:**

Rinse mouth with plenty of water. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Breathing dust containing crystalline silica over a prolonged period of time may cause lung damage. Crystalline silica (Cristobalite) is a known cause of silicosis, a progressive, sometimes fatal lung disease

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

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

The product is not flammable. Fire prevention measures should be chosen according to the environment.

Unsuitable extinguishing media: None

5.2 Special hazards arising from the substance

None

5.3 Advice for fire-fighters

In the event of a fire, wear self-contained breathing apparatus. The self contained breathing apparatus may be required due to other agents, but is not required due to potential Kieselguhr exposure.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment Avoid breathing dust Ensure adequate ventilation Do not crush, avoid the formation and spread of dust in the air

6.2 Environmental precautions Avoid generating airbourne dust

Prevent product from entering drains

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust Keep in suitable, closed containers for disposal Broken bags should be taped over or covered with recuperage (slipover) bags

6.4 Reference to other sections

Refer to sections 8 and 13



019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures:

Avoid dust formation and dust accumulation in enclosed space.

Use personal protective equipment when handling the substance.

Advice on general occupational hygiene:

Do not to eat, drink and smoke in work areas.

Wash hands after use.

Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place protected from moisture. Inspect all shipments upon arrival. Powder spills should be removed by vacuum cleaning or wet sweeping. Avoid dry sweeping if possible.

7.3 Specific end uses

Worse case exposure scenarios for humans and the environment are attached in Annex I of this safety data sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Components with occupational exposure limits rsp. biological occupational exposure limits requiring monitoring

8.1.1.1 Occupational exposure limits

Substance: Quartz CAS No: 14808-60-7	
Country of origin	Occuptational expsoure limit value
Belgium, Denmark, US, France, Portugal,	0.10 (RD)
Italy, Sweden, Norway, Greece	
Netherlands	0.075 (RD)
Germany, Switzerland, Austria	0.15 (FD)
Finland	0.20 (FD)
Bulgaria	0.07
CIS	1.0
Czech	0.5
Slovakia	1
Ireland	0.40 (RD)
United Kingdom	0.30 (RD)

RD: Respirable dust

FD: Fine dust



019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

Substance: Cristobalite	
CAS No: 14464-46-1	
Country of origin	Occuptational expsoure limit value
Belgium, Denmark, US, France, Portugal,	0.05 (RD)
Italy, Sweden, Norway, Greece	
Netherlands	0.075 (RD)
Germany, Switzerland, Austria	0.15 (FD)
Finland	0.10 (FD)
Bulgaria	0.07
CIS	1.0
Czech	0.5
Slovakia	1
Ireland	0.40 (RD)
United Kingdom	0.30 (RD)

RD: Respirable dust

FD: Fine dust

Biological limit values: None

8.1.2 Recommended monitoring procedures

None

8.1.3 Occupational exposure limits and/or biological limits for air contaminants Not applicable

8.1.4 Additional exposure limits under the conditions of use

DNEL/DMEL

Exposure route	Exposure pattern	DNEL (workers)
Inhalation	Long term systemic	0.33 mg/m ³

Exposure route	Exposure pattern	DNEL (general population)
Inhalation	Long term systemic	0.08 mg/m ³
Oral	Long term systemic	3.5 mg/kg/bw/day



019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

PNECS:

Compartment	PNEC Remarks			
Aquatic (surface water)	n/a	LC50 values for fish, daphnia and algae study >100% v/v saturated solution (ie greater than the maximum solubility of the substance) .		
STP micro- organisms	100	NOAEL value AF = 100		
Terrestrial	n/a	Naturally occurring inert substance		
Sediment	n/a	Naturally occurring inert substance		

8.2 Exposure controls

Refer to exposure scenarios in Annex I and Section 7.

8.2.1 Appropriate engineering controls

Refer to the engineering controls discussed in the exposure scenrios in Annex I.

8.2.2 Indiviudal protection measures such as personal protective equipment

Respiratory protection: If dust is raised a respirator is recommended

Hand protection: Wear suitable hand protection depending on nature of the task.

Eye protection: Use safety goggles.

Skin and body protection: Wear suitable work clothing

8.2.3 Environmental exposure controls

Dispose of waste in accordance with local and national regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical state: Solid Colour: White to beige Odour: Odourless

Material Safety Datasheet

019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

	Value	Method	Remark
pH (20 °C):	7-9		
Melting point/range (°C):	> 450°C	EU Method A1	-
Boiling point/range (°C):	Not applicable based on melting point		
Flash point (°C):	Not applicable for inorganic substances		
Flammability (auto-ignition temperature):	Not flammable	Method N1 (flammability)	
		Method N4 (autoflammability)	
Upper/ lower flammability or explosive limits:	Not applicable		-
Vapour pressure (Pa):	Not applicable based on melting point		
Relative density:	2.36	OECD 109	-
Water solubility (20°C in g/L):	Insoluble	EU Method A6	-
Partition coefficient n-Octanol/Water (log Po/w):	Not applicable		Inorganic
Viscosity (cps):	Not applicable for solids		-
Decomposition temperature:	Not applicable		-
Explosive properties:	No explosive properties predicted from the structure		Prediction
Oxidising properties:	No oxidising properties predicted from the structure		Prediction

9.2 Other information

None

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

May react violently with Hydrofluoric acid.

10.4 Conditions to avoid

None

Material Safety Datasheet

019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

10.5 Incompatible materials

Hydrofluoric acid- products.

10.6 Hazardous decomposition products

None

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Relevant hazard class	Effect dose	Species	Method	Remark
Acute oral toxicity	LD50	Rat.	OECD 401	
	> 2000 mg/kg bw			
Acute dermal toxicity	n/a			No dermal toxicity envisaged due
				to low potential for absorption
Acute inhalative toxicity	LC50 > 2.6 mg/L	Rat	OECD 403	Maximum attainable dose
Skin corrosion/irritation	n/a	Rabbit	OECD 404	Not irritating
Serious eye damage/irritation	n/a	Rabbit	OECD 405	Not irritating
Respiratory or skin	n/a	Guinea	OECD 429	Not a skin sensitizer
sensitization		pig		
Germ cell mutagenicity	n/a	In vitro	OECD 471	Not mutagenic
		tests	OECD 473	
			OECD 476	
Carcinogenicity	n/a			
Reproductive toxicity	n/a			No effect reported
STOT single exposure	n/a			No effect reported
STOT repeated exposure	n/a	n/a	n/a	STOT RE 1 (If RCS content
				>10%)
				STOT RE 2 (If RCS content >1
				% - < 10 %.)
Aspiration hazard	n/a			No aspiration hazard envisaged

Specific symptoms in animal studies (likely route of exposure):

In case of ingestion:

No acute or long term effects were seen in animal studies following oral exposure.

In case of skin contact:

No acute effects were seen in an animal study following acute dermal exposure.

Kieselguhr soda ash flux calcined is not a skin irritant

In case of inhalation:

No acute effects were seen in an animal study following acute inhalation exposure.

A 90 day repeated dose inhalation study has been proposed.

Calcined diatomaceous earth (Kieselgur) contains crystalline silica, which is a known cause of silicosis, a progressive, sometimes fatal lung disease. In a 1997 monograph (Volume 68, "Silica, Some Silicates, Coal Dust and Para-aramid Fibrils"), the International Agency for Research on cancer (IARC) has classified "inhaled crystalline silica from occupational sources" in Group 1 as a substance "carcinogenic to humans". In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Crystalline silica has also been classified by the German MAK Commission as a human carcinogen (Category A1).

Material Safety Datasheet

019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

In case of eye contact:

Kieselguhr soda ash flux calcined is not an eye irritant

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity	Effect dose	Exposure time	Species	Method	Remark
Acute fish toxicity	>100% v/v saturated solution.	96 h	Oncorhynchus mykiss	OECD 203	Exceeds maximum solubility of substance
Acute daphnia toxicity	>100% v/v saturated solution.	48 h	Daphnia magna	OECD 202	Exceeds maximum solubility of substance
Acute algae toxicity	>100% v/v saturated solution.	72 h	Desmodesmus subspicatus	OECD 201	Exceeds maximum solubility of substance .
Toxicity to STP microoragnisms	> 1000 mg/L	3 h	Activated sludge	OECD 209	Harmless to STP microorganisms

12.2 Persistence and degradability

Abiotic Degradation:

Not applicable. The substance is inorganic and does not undergo any abiotic degradation.

12.3 Bioaccumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment:

This substance does not meet the criteria for classification as PBT or vPvB.

12.6 Other adverse effects

None

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

May be disposed of in a non-hazardous sanitary landfill when not mixed with a hazardous substance. Dispose of in accordance with local regulations.

Material Safety Datasheet

019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

14. TRANSPORT INFORMATION

Not classified as dangerous in terms of transport regulations

15. REGULATORY INFORMATION

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

The following regulations/directives should be reviewed when handling products containing crystalline silica:

Great Britain: Control of Substances Hazardous to Health, Regulations 1988, No 1857.

Germany: UBG 119 – Quartz-protection against mineral dusts injurious to health.

UBG 100 - Rule G.1.1 - Legislation concerning medical care.

Gefstoff 8.86 – specifies labeling requirements.

France: - Decree No. 50.1289 of October 16, 1950 modified by Decree No. 63.576 of June 11, 1963 establishes special medical preventive measures for occupational silicosis.

- Circular No. 11453 of July 19, 1982 establishes the levels accepted for concentrations in the air of work areas.
- Decree No. 87-200 of March 25, 1987 safety data sheets for hazardous substances.
- Code of Labour Article L 231-6 Decree of October 10, 1983 modified by Decree of November 28, 1984 lists hazardous substances and establishes packing and labeling requirements.

Spain: Royal Decree of November 27, 1985 relating to the classification and labeling of dangerous substances.

Italy: Law No. 256 of May 29, 1974 Decree No. 927 of November 24, 1981 and No. 141 of February 20, 1988 on classification and labeling for warning of hazardous materials.

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment is provided in Annex I (available on request).



019.149.4 - 019.150.2 Kieselguhr Dicalite Speedplus

16. OTHER INFORMATION

16.1 Indication of changes

Not applicable

16.2 Abbreviations and acronyms

	<u>-</u>		
AF =	Assessment factor		
BCF =	Bioconcentration factor		
CAS =	Chemical Abstracts Service		
C&L	Classification and labelling		
RCS =	Respirable crystalline silica		
DNEL =	Derived no effect level		
LC50 =	Median lethal concentration		
LD50 =	Medial lethal dose		
EC -	European Commission		
NOAEL =	No observed adverse effect level		
PBT	Persistent bioaccumulative toxic		
PEC =	Predicted effect level		
PNEC =	Predicted no effect level		
SDS =	Safety data sheet		
STOT =	Specific target organ toxicity		
STP =	Sewage treatment plant		
vPvB	Very persistent very bioaccumulative		

16.3 Training advice

According to appropriate national legislation

Third party material

Insofar as materials not manufactured or supplied by Dicalite®, are used in conjunction with, or instead of Dicalite® materials, it is the responsibility of the customer himself to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of Dicalite®, Kieselghur in conjunction with materials from another supplier.

16.4 Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Revision date: 17/06/2013