

1 Identification of the Product and Supplier

Product name:	GroutAid®
Product application:	For rock and soil injection in combination with hydraulic cements or lime.
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REACH and CLP helpdesk:	REACH Website: http://echa.europa.eu/help/nationalhelp_contact_en.asp CLP Website: http://echa.europa.eu/clp/clp_help_en.asp
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2. Hazards Identification

Classification of the product	The product does not meet the criteria for hazard classification in accordance with Directive 1999/45/EC (DPD) and Regulation (EC) No1272/2008 (CLP).
Hazard symbol/Hazard pictogram:	N/A (not applicable)
Symbol letter/Indication of danger:	N/A (not applicable)
Signal word:	N/A (not applicable)
R-/H-phrases:	N/A (not applicable)
S-/P-phrases:	N/A (not applicable)

The product may contain small amounts of crystalline quartz (< 0.5 %). The amount of respirable crystalline silica in the product is below 0.1 % and does not trigger a hazard-classification.

3. Composition/Information on Ingredients

Synonyms:	Processed Microsilica slurry, Aqueous slurry of amorphous silicon dioxide (H ₂ O + SiO ₂). Silica slurry. Silica fume.
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Constituents (analysis):

CHEMICAL NAME	CAS #	EINECS #	% w/w
Silicon Dioxide (amorphous silica fume)	69012-64-2	273-767-1	48-52
Water	7732-18-5	231-791-2	balance

4. First Aid Measures

Inhalation: Not applicable. The product is an aqueous slurry.
Skin contact: Wash contaminated skin with water and/or a mild detergent.
Eye contact: Rinse eyes with water/saline solution. If discomfort persists, obtain medical attention.
Ingestion: Not applicable.

5. Fire Fighting Measures

The product is not combustible. If the slurry becomes dry, the dust poses no risk of explosion.

Extinguishing media: Not applicable. Depending on surrounding fire.

6. Accidental Release Measures

Material should be collected in suitable containers.

7. Handling and Storage

Handling: If the slurry becomes dry, avoid generating airborne dust. See section 8.
Storage: Keep away from hydrofluoric acid (HF).
Not to be stored at temperatures near to or below 0 °C

8. Exposure Controls/Personal Protection

A. Occupational exposure controls:

Use protective gloves and eye protection. Facilities for eye flushing should be available.
If the slurry becomes dry: Avoid inhalation of dust. Ensure good dust ventilation during use. Wear a particulate respirator according to EN 149 FFP 2S/3S in areas of inadequate ventilation.



Occupational Exposure Limits (ACGIH¹, 2012):

Substance	[CAS No.]	8hr TWA		ACGIH TLV 15 minute STEL		Notations
		ppm	mg/m ³	ppm	mg/m ³	
PNOS ²	-	-	10 ^(I) /3 ^(R)	-	-	-
Silica, crystalline (SiO ₂)	Quarz [*] [14808-60-7]	-	0,025 ^(R)	-	-	A2
	Cristobalite [*] [14464-46-1]	-	0,025 ^(R)	-	-	-

¹) American Conference of Governmental Industrial Hygienists

²) Particulates (insoluble or poorly soluble) Not Otherwise Specified. Amorphous silica fume is considered to be PNOS. Specific TLVs for the individual substances have not been established or have been withdrawn, respectively.

^(I) Inhalable fraction

^(R) Respirable fraction

B. Environmental exposure controls: (see also section 6, 7, 12)

Target value and limit value for PM₁₀ and PM_{2.5} (Directive 2008/50/EC):

	Averaging period	Limit value	By date
PM ₁₀	One day	50 µg/m ³ ★	1 January 2005
PM ₁₀	Calendar year	40 µg/m ³	1 January 2005
		Target value	
PM _{2.5}	Calendar year	25 µg/m ³	1 January 2010
		Limit value	
PM _{2.5}	Calendar year	25 µg/m ³	1 January 2015

★ Not to be exceeded more than 35 times a calendar year.

9. Physical and Chemical Properties

Form:	Slurry
Colour:	Grey
Odour:	Odourless
Solubility:	The particles are insoluble in water. Soluble in alkalis.
Solubility (Organic solvents):	The particles are insoluble/slightly soluble.
Specific Gravity (water =1):	Typical 1.4
pH:	Typical 4-7
Specific surface (m ² /g) :	15-30
Particle size, mean (µm):	≈ 0.4 (≈ 80 weight % of primary particles have a diameter < 5 µm).

10. Stability and reactivity

Conditions to avoid: Not to be stored at temperatures near to or below 0 °C.

Materials to avoid: Hydrofluoric acid (HF).

Hazardous Decomposition Product(s):

The product reacts with hydrofluoric acid (HF) forming toxic gas (SiF₄).
Heating The product above 1000 °C can result in the formation of crystalline SiO₂-modifications as Cristobalite / Tridymite which may cause pulmonary fibrosis (silicosis).

11. Toxicological Information

The product does not meet the criteria for hazard classification in accordance with Directive 1999/45/EC (DPD) and Regulation (EC) No1272/2008 (CLP).

Acute effects:

INGESTION:	Dry product: Finely divided dust from the product may cause irritation and dehydration of mucous membranes.
INHALATION:	Dry product: Finely divided dust from the product may cause irritation and dehydration of mucous membranes.
SKIN CONTACT:	Dry product: Finely divided dust from the product may cause irritation and dehydration.
EYE CONTACT:	Dry product: Finely divided dust from the product may cause irritation and dehydration.

Chronic effects:

GroutAid[®] additive as slurry: Not applicable.

GroutAid[®] additive dried: Inhalation of dust from the product is considered to entail minimal risk of pulmonary fibrosis (silicosis). However, chronic obstructive lung disease is suspected following long term exposure (years) for concentrations above recommended occupational exposure limits.

12. Ecological Information

The product is not characterised as dangerous for the environment.

MOBILITY: Not mobile under normal environmental conditions.

PERSISTENCE: Not relevant for inorganic substances.

BIOACCUMULATION: Not relevant.

ECOTOXICITY: The product does not meet the classification criteria for ecotoxicological endpoints in accordance with Directive 1999/45/EC (DPD) and Regulation (EC) 1272/2008 (CLP).

13. Disposal Considerations

The material should be recovered for recycling if possible.

This material is not classified as hazardous waste according to Commission Decisions 2000/532/EC and 2001/118/EC. Prior to disposal of large quantities of this material advice should be sought from the relevant Waste Regulation Authority.

14. Transport Information

UN	-
IMDG/IMO	Not subject to classification
ADR/RID	Not subject to classification
ICAO/IATA	Not subject to classification

15. Regulatory Information

The text of this Product Safety Information is prepared in compliance with:

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and subsequent amendments.
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP), amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

16. Other Information

According to Chapter 1.5.2 of the UN Globally Harmonised System of classification and labelling of chemicals (GHS), Article 58 (2)(a), and Article 59(2)(b) of (EC) No 1272/2008 (CLP), which amends REACH article 31(1), safety data sheets (SDS) are only required for substances and mixtures that meet the harmonised criteria for physical, health or environmental hazards. Since this product does not meet these criteria, a SDS according to 453/2010/EC is not issued. In order to communicate relevant HSE-(health, safety and environmental-) information, this product safety information (PSI) is provided instead.

REACH article 31(7) requires relevant exposure scenarios from the Chemical Safety Report (CSR) to be annexed to the SDS. However, according to REACH Annex I, section 0. (Introduction), subsection 0.6. no 4 and 5, exposure scenarios are only required for hazard-classified substances or mixtures. Since this product is not hazard-classified according to CLP, there is no requirement for exposure scenarios.

Legal Disclaimer:

The Product Safety Information (PSI) given is to the best of Elkem's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use

Literature references are available upon request.

GroutAid[®] is a registered trademark owned by Elkem AS.