SAFETY DATA SHEET
FESIL MICROSILICA SLURRY

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

Product name FESIL MICROSILICA SLURRY

Synonyms, trade names Condensed silica fume, Amorphous silica

Applications For industrial use.

Supplier
FESIL AS
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http://www.fesil.no/Index.asp

Emergency telephone number National Poisons Information Service (NPIS), phone 0844 892 0111.
WEB: http://www.toxbase.org

2. HAZARDS IDENTIFICATION

Not regarded as a health, fire, explosion or environmental hazard under current legislation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	EC No.	CAS No.	Content	Symbol	Classification
silica (amorphous)	273-761-1	69012-64-2	85-98 %	-	
diiron trioxide	215-168-2	1309-37-1	0,1-3 %	N	R-51/53
magnesium oxide	215-171-9	1309-48-4	2-2 %	-	
aluminium oxide	215-691-6	1344-28-1	0,1-1,5 %	-	
sodium oxide	235-641-7	12401-86-4	0,1-1 %	-	
calcium oxide	211-538-9	1305-78-8	0,1-1 %	Xi	R-37/38, R-41
potassium oxide	235-227-6	12136-45-7	0,2-3 %	-	
carbon	231-153-3	7440-44-0	0,2-3 %	-	

Section 16 contains detailed classification phrases.

Composition comments The product is mixed 50/50 with water to form a slurry, and then added sulphuric acid to pH around 6. Silicondioxide is a smoke-condense made by furnace gases from the production of ferro-silicon and/or silicon metal.

4. FIRST AID MEASURES

General Remove victim immediately from source of exposure. General first aid, rest, warmth and fresh air. Get medical attention if any discomfort continues.

Ingestion Rinse nose, mouth and throat with water. Try to induce vomiting.

Skin Wash skin with soap and water.

Eyes Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing.
Get medical attention if any discomfort continues.

5. FIRE-FIGHTING MEASURES

Extinguishing media Use extinguishing media appropriate for surrounding fire.

Special fire fighting procedures Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk.

Specific hazards The dust poses no risk of explosion.

Protective measures in fire Wear self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

6. ACCIDENTAL RELEASE MEASURES

Personal protection Wear appropriate personal protective equipment - see Section 8.

Spill cleanup methods Spillage can be collected mechanically.
Avoid generation and spreading of dust.

7. HANDLING AND STORAGE

Usage precautions Avoid handling which leads to dust formation.

Storage precautions Keep away from hydrofluoric acid.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min	Date
diiron trioxide	1309-37-1	WEL.	5 mg/m3	10 mg/m3	
magnesium oxide	1309-48-4	WEL.	10 mg/m3		
aluminium oxide	1344-28-1	WEL.	10 mg/m3		
calcium oxide	1305-78-8	WEL.	2 mg/m3		
carbon	7440-44-0	WEL.	3,5 mg/m3		

Ingredient comments WEL = Workplace exposure limits. SK= Skin absorbance, Rep= Reproduction, Carc= Carcinogenic Senz= Sensitisers, Mut= Carcinogenic

Protective equipment

Process conditions	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.
Ventilation	Well ventilated area.
Respirators	If ventilation is insufficient, suitable respiratory protection must be provided. Dust filter P2 (for fine dust).
Protective gloves	Use protective gloves made of: Rubber or plastic.
Eye protection	Use tight fitting goggles if dust is generated.
Other Protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygienic work practices	Wash at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Wet slurry.		
Colour	Greyish black.		
Odour	Odourless or no characteristic odour.		
Solubility description	Insoluble in water.		
Melting/freezing point (°C, interval)	1550 - 1570		
Density (g/cm3)	2,3 -,24	**Temperature (°C)**	20
Bulk density	1400 (slurry) kg/m3		
Particle size (micron)	0,15 - 0,5		

10. STABILITY AND REACTIVITY

Stability	Stable when used at recommended storage and handling conditions.
Hazardous polymerisation	Will not polymerise.
Materials to avoid	Reacts with hydrofluoric acid to form toxic silicon tetrafluoride.

11. TOXICOLOGICAL INFORMATION

Sensitization	No allergic reaction is known.
Genotoxicity	No known heritable or mutagenic effects.
Carcinogenicity	This substance has no evidence of carcinogenic properties.
Reproduction toxicity	No known hazardous effects on reproduction, fertility or to the unborn child.
Inhalation	Dust may irritate respiratory system or lungs.
Ingestion	Ingestion of large amounts may cause discomfort.
Skin	Dust may give mechanical irritation.
Eyes	Dust in the eyes will cause irritation.
Health warnings	Dust may irritate respiratory system. The product may contain impurities of crystalline quartz (<1%). When heating microsilica above 500°C hazardous silicon quartz modifications (cristoballite/tridymite) may be formed.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No negative effects on the aquatic environment are known. Little danger for inhibition of biosludge in sewage plants.
Mobility	Insoluble in water.
Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.
Persistence and degradability	This product mainly consists of inorganic compounds which are not biodegradable. The remaining compounds of the product are expected to be not readily

biodegradable.

13. DISPOSAL CONSIDERATIONS

General/cleaning	Product is not hazardous waste.
Disposal methods	Collect in marked containers and deliver to approved depot.
Contaminated packaging	The product packaging must be disposed of in compliance with the country specific regulations.

14. TRANSPORT INFORMATION

General	No dangerous goods (ADR/RID, IMDG, IATA/ICAO)

15. REGULATORY INFORMATION

Contains	silica (amorphous) diiron trioxide magnesium oxide aluminium oxide sodium oxide calcium oxide potassium oxide carbon
EU directives	67/548/EEC, 1999/45/EC, 2001/58/EC, 2008/58/EC (REACH), 1272/2008/EC (30ATP).

16. OTHER INFORMATION

Explanations to R-phrases in section 3	R-37/38 Irritating to respiratory system and skin. R-41 Risk of serious damage to eye. R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

*** Information revised since the previous version of the SDS**

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