

MATERIAL SAFETY DATA SHEET

Sheet Nr. 0031

Review, 29/01/2009

1. PRODUCT IDENTIFICATION

Commercial name(s): **Dicalite® 341, Speedplus, 375, Speedex, 2500, 4200, 4500, 5000, 6000, 7000, WB-6** (all flux-calcined diatomite products).

REACH: Submission number: JE289463-36
Submission date: 28/10/2008

Use: Flux-calcined diatomite is mainly used in the industrial filtration as filter aid and also as a filler.

Supplier: **DICALITE TRADING** Tel.: +32-9-250.95.50
Scheepzatestraat 100 Fax: +32-9-250.95.59
9000 GENT e-mail: sales@dicalite-europe.com
BELGIUM

Manufacturer: Dicalite Minerals Inc.
1 Bala Avenue, Suite 310
BALA CYNWYD, PA 19004
U.S.A.

Emergency number: During office hours: Tel.: +32-9 250 95 51
Outside office hours: Tel.: +32-477 798 138

2. HAZARD INFORMATION

Health risks: The product contains crystalline silica. Long term inhalation of crystalline silica dusts may cause lung disease (silicosis). Crystalline silica has been classified as a human carcinogen (Group 1) by IARC, a unit of the World Health Organisation.

Safety risks: N/A

Environmental risks: N/A

3. CHEMICAL COMPOSITION

Product definition: Dicalite® 341, Speedplus, 375, Speedex, 2500, 4200, 4500, 5000, 6000, 7000 and/or WB-6 is a flux-calcined diatomaceous earth (diatomite).
The chemical name is siliciumdioxide (silica, or SiO₂).

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Dangerous components: The product, flux-calcined diatomite, contains crystalline silica:
- Quartz up to 5% (m/m)
- Cristobalite up to 70% (m/m)

These are substances for which there are Community workplace exposure limits.

Ingredient Name	CAS Nr.	EINECS Nr.
Flux-Calcined Diatomaceous Earth	68855-54-9	272-489-0
Quartz	14808-60-7	238-878-4
Cristobalite	14464-46-1	238-455-4

Symbols		
X_n	R48/20	Harmful: Danger of serious damage to health by prolonged exposure through inhalation.
	S22	Do not breathe dust.

4. FIRST AID PROCEDURES

Symptoms and effects:	Inhalation: Coughing, irritation of nose and throat; congestion may occur upon overexposure. Eyes: Temporary irritation and/or inflammation. Medical conditions which may be aggravated: Pre-existing upper respiratory and lung disease (such a bronchitis, emphysema, asthma, or others).
Inhalation:	Remove from dusty area; drink water to clear throat; blow nose to evacuate dust.
Skin:	Not hazardous. Rinse or wash with water and soap.
Eyes:	Do not rub eyes! Flush eyes with copious amounts of water to remove any dust particles. Consult a physician if irritation persists.
Ingestion:	Not hazardous. Rinse mouth and drink water.

5. FIRE AND EXPLOSION HAZARDS

None. Product is non-flammable.

6. PROVIDE AGAINST ESCAPE OF DUST

Personal prevention:	Avoid creating dust. Adequate ventilation and appropriate local exhaust where needed to keep dust levels below PEL. Use NIOSH (National Institute of Occupational Safety & Health) approved respirators to protect against silicosis producing dusts.
Ecology prevention:	None
Spill and leak procedure:	Vacuum clean or wet sweep; avoid dusting use a dust suppressant when sweeping.

7. HANDLING AND STORAGE PRECAUTIONS

Handling:	Avoid creating dust. Use adequate exhaust ventilation and/or dust collection to keep dust levels below PEL. If possible use product in a closed system.
Storage:	Store in dry place far from odoriferous chemicals. Repair all broken bags immediately. Avoid creating dust. Maintain good housekeeping practice.

8. EXPOSURE AND PERSONAL PRECAUTION

Permissible Exposure Limit:	<u>BELGIUM / IRELAND / ITALY / PORTUGAL</u> PEL quartz = 0.05 mg/m ³ PEL cristobalite = 0.05 mg/m ³ <u>FRANCE / DENMARK / SWEDEN / NORWAY / SPAIN / GREECE</u> PEL quartz = 0.10 mg/m ³ PEL cristobalite = 0.05 mg/m ³ <u>AUSTRIA / SWITZERLAND</u> PEL quartz = 0.15 mg/m ³ PEL cristobalite = 0.15 mg/m ³ <u>THE NETHERLANDS</u> PEL quartz = 0.075 mg/m ³ PEL cristobalite = 0.075 mg/m ³ <u>UK</u> Long-term MEL (8-hour TWA) crystalline silica = 0.1 mg/m ³ <u>GERMANY</u> Germany has no more OEL for quartz and cristobalite. Employers are obliged to minimize exposure as much as possible, and to follow certain protective measures.
Respiratory organs protection:	Use NIOSH approved respirators to protect against silicosis producing dusts like disposable half masks Type P3 (3M or equivalent).
Hand & skin protection:	Normally no gloves required. May use gloves to protect overly-sensitive skin.
Eye protection:	Normally no goggles required. May use safety eyewear to protect from dusts.

9. PHYSICAL-CHEMICAL PROPERTIES

Physical state:	Solid powder
Colour:	White to off white
Smell:	Odourless.
pH:	8 – 11 (10% (m/m) slurry in water)
Boiling point:	N/A
Flash Point:	N/A
Flammability:	N/A
Explosive properties:	N/A

Oxidising properties:	N/A
Vapour pressure:	N/A
Relative density:	2350 kg/m ³
Solubility:	Slight in water
Partition coefficient:	N/A
Viscosity:	N/A
Vapour density:	N/A
Evaporation rate:	N/A

10. STABILITY AND REACTIVITY

Stability:	Material is stable. Hazardous polymerisation will not occur.
Conditions to avoid:	None in designed use. Avoid contact with hydrofluoric acid.
Chemical Incompatibilities:	Hydrofluoric acid.
Hazardous Decomposition Products:	Reacts with Hydrofluoric acid to form toxic silicon tetrafluoride gas (SiF ₄).

11. TOXICOLOGY

Primary irritation	
Respiratory organs:	Coughing, irritation of nose and throat; congestion may occur upon overexposure.
Eyes:	Temporary irritation and/or inflammation.
Skin:	None
Effects on humans:	The product contains crystalline silica. Long term inhalation of crystalline silica dusts may cause lung disease (silicosis). Crystalline silica has been classified as a human carcinogen (Group 1) by IARC, a unit of the World Health Organisation (see §8). Medical conditions which may be aggravated: Pre-existing upper respiratory and lung disease (such a bronchitis, emphysema, asthma, or others).

12. ECOLOGICAL DATA

Bio degradability:	None
Aquatic toxicity:	Water hazard class 0 (self-assessment): Generally not hazardous.

13. WASTE MANAGEMENT

Precautions:	See paragraph 8.
Waste Management:	Not considered as hazardous wastes by RCRA (40 CFR Part 261). Place waste and spillage in closed containers. Dispose of in approved landfill. Comply with all Federal, State and local regulations.

14. TRANSPORT INFORMATION

Keep dry.

Above mentioned flux-calcined diatomite products are not considered as dangerous, compared to the IMO/ADR/RID/ICAO transport regulations.

15. LEGAL INFORMATION

EG Hazard Symbol: Xn Harmful
EG Risk Sentence: R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
EG Recommended sentences: S22 Do not breathe dust.

16. FURTHER INFORMATION

Application: Flux-calcined diatomite is used especially in industrial filtration. Technical information is available on demand at the same address.

This M.S.D. Sheet is based upon today's best available information, on present experiences and according to the EC directive 2001/58/EC of July 27th, 2001.