

DELABOLE SLATE - PRODUCT SAFETY INFORMATION
MATERIAL SAFETY DATA SHEET
SLATE POWDER

1. <u>PRODUCT IDENTIFICATION</u>	
Product Name - Delafila	
Description - A relatively inert, odourless, off white to grey powder, used as a bulk filler.	
This data sheet applies to all slate powder products produced and supplied by Delabole Slate and currently recognised as:- F20, 99/350, 99/300, 95/300, 99/240, 99/200, 95/200, 90/200, 85/200, 70/200 and S36.	
2. <u>SUPPLIER/MANUFACTURER</u>	
Supplier and Manufacturer -	The Delabole Slate Company Ltd Pengelly, Delabole, Cornwall PL33 9AZ
Health, Safety and Customer Service -	Telephone - 01840 212242 Fax - 01840 212948
3. <u>COMPOSITION/INFORMATION ON INGREDIENTS</u>	
3.1	DELAFLA - is made from naturally occurring Delabole Slate mineral and contains Mica, Chlorite and Quartz mainly in the form of silicates of alumina, iron and magnesia.
3.2	INGREDIENTS CONSIDERED HARMFUL TO HEALTH :-
	a) <u>Substances classified under the Classification labelling & Packaging - CLP REGULATIONS.</u>
	- None.
	b) <u>Substance subject to recognised exposure limit</u>
	- Slate powder contains traces of respirable free crystalline silica.
	c) <u>Hazard Classification : Note - There is no requirement under CLP Regs. to label this product</u>
	• Safety phrases appropriate to the hazard OUR ADVICE - AVOID BREATHING DUST.
	• Risk phrases appropriate to the hazard CAN BE HARMFUL BY INHALATION. POSSIBILITY OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE THROUGH INHALATION.
4. <u>HAZARD IDENTIFICATION</u>	
4.1	TO HEALTH
	- During normal handling and use where adequate dust control measures are observed, there is no risk to health.
	- Risk to health arises from dust released into the air. The dust will contain some respirable free crystalline silica that may enter and remain lodged in the alveoli areas of the lungs. Lodged particles can cause irritation of the lungs. The long term effect of prolonged exposure can be silicosis.
4.2	TO ENVIRONMENT
	- There are no known environmental hazards related to this naturally occurring material.
	- The effect of product release on plant and wildlife will be the same as that of dust normally present in the atmosphere with the significance dependant on the concentration. Dust coating on plant life will have a detrimental effect on photosynthesis.
5. <u>FIRST-AID MEASURES</u>	
5.1	EYE CONTACT
	<u>Effect/Symptoms</u>
	- discomfort as with "dirt in eye".
	<u>Action</u>
	- wash eyes with plenty of clean water to clear particles from the eye.
	- seek medical advice if discomfort persists.
5.2	SKIN CONTACT
	<u>Effect/Symptoms</u>
	- prolonged contact may cause dryness of the skin.
	<u>Action</u>
	- wash thoroughly with soap and water.
5.3	INGESTION
	<u>Effect/Symptoms</u>
	- not harmful by ingestion.
	<u>Action</u>
	- wash out mouth with water. Give patient water to drink.
5.4	INHALATION
	<u>Effect/Symptoms</u>
	- short of breath.
	<u>Action</u>
	- remove patient to fresh air.
	- seek medical advice if required.
6. <u>FIRE FIGHTING MEASURES</u>	
<i>Slate powder is not flammable. It will not support combustion or facilitate combustion with other materials.</i>	
7. <u>ACCIDENTAL RELEASE MEASURES</u>	
7.1	PERSONAL PRECAUTIONS
	Respiratory Protection - Suitable respiratory protection should be worn to ensure that personal exposure is below the O.E.S. for dust and the W.E.L. for respirable free crystalline silica.
7.2	CLEANING UP
	Minimise generation of airborne dust by damping down. The product can be slurried by adding water and then removed to a suitable waste receptacle.
8. <u>STORAGE AND HANDLING</u>	
8.1	STORAGE
	Bags should be stored in a safe and stable manner and in a dry place.
8.2	SHELF LIFE
	If stored under normal temperature and humidity conditions and kept dry, shelf life is unlimited.
8.3	HANDLING
	- When handling bags, due regard should be paid to the risks outlined in the Manual Handling Operation Regulations 1992.
	- Avoid the generation of dust.
	- Where dust occurs use suitable respiratory protection.

9. EXPOSURE CONTROLS/PERSONAL PROTECTION	
9.1	OCCUPATIONAL EXPOSURE STANDARD (O.E.S) - DUST O.E.S 8 Hr Time Weighted Average (T.W.A) 10mg/m³ total inhalable dust. 4mg/m³ respirable dust.
9.2	WORKPLACE EXPOSURE LIMIT (W.E.L) – RESPIRABLE FREE CRYSTALLINE SILICA W.E.L. 8 Hr Time Weighted Average (T.W.A) 0.1mg/m³ respirable free crystalline silica.
9.3	ENGINEERING MEASURES - DUST CONTROL - Where reasonably practicable, dust exposures should be controlled by engineering methods using containment or local exhaust ventilation.
9.4	PERSONAL PROTECTIVE EQUIPMENT Respiratory Protection - Where dust occurs, suitable respiratory protection should be worn to ensure that personal exposure is less than the O.E.S for dust and the W.E.L. for respirable free crystalline silica.
9.5	IMPORTANT NOTE Dust Sample Analysis - Ensure the analyst is capable of identifying “Phyllosilicates” separate to Free Crystalline Silica or false high readings of F.C.S. will occur.
10. PHYSICAL/CHEMICAL PROPERTIES	
10.1	PHYSICAL DATA Physical State - Particulate Mean particle size - 2 - 450 microns (dependant on grade). Odour - Odourless pH - pH of wet slate powder is approx. 9.1 Viscosity - Not Applicable Freezing point - Not Applicable Boiling point - Not Applicable Melting point - Not Applicable Flash point - Not Applicable (not flammable) Explosive properties - Not Applicable (not explosive) Density - Approximately 2800 kg/m³ (absolute) Solubility - Not soluble. (Note: Most of the silica is locked up and present as Phyllosilicates.)
10.2	CHEMICAL ANALYSIS Silica - SiO ₂ - 55.20 Alumina - Al ₂ O ₃ - 23.52 Ferrous Oxide - FeO - 7.14 Ferric Oxide - Fe ₂ O ₃ - 0.66 Titanium Dioxide - TiO ₂ - 0.95 Manganese Oxide - MnO - 0.10 Lime - CaO - 0.36 Magnesia - MgO - 2.50 Potash - K ₂ O - 3.49 Soda - Na ₂ O - 1.23 Water - 105° c - H ₂ O - 0.23 Water +105° c - H ₂ O - 4.12 Carbon Dioxide - CO ₂ - ---- Phosphoric Anhydride - P ₂ O ₅ - 0.13 TOTAL <u>99.63</u>
11. STABILITY AND REACTIVITY	
Conditions contributing to chemical instability - None. Hazardous decomposition products - None. Special precautions - None.	
12. TOXICOLOGICAL INFORMATION	
12.1	SHORT TERM EFFECTS <i>Eye Contact</i> - Not an irritant, but exposure can cause soreness. <i>Skin</i> - Little to no effect. May cause dryness of the skin. <i>Ingestion</i> - The swallowing of small or large amounts is unlikely to cause any significant reaction. <i>Inhalation</i> - Little to no effect, although should be avoided.
12.2	CHRONIC EFFECTS <i>Inhalation</i> - Prolonged exposure to significant levels of respirable free crystalline silica has been linked with silicosis.
13. ECOLOGICAL INFORMATION	
13.1	AQUATIC TOXICITY RATING LC50 Aquatic toxicity rating not determined. The addition of slate powder to water will cause a very slight increase in pH that is not likely to be toxic to aquatic life.
13.2	BIOLOGICAL OXYGEN DEMAND (B.O.D) - Not applicable
14. DISPOSAL CONSIDERATIONS	
- Dispose of in accordance with the “Duty of Care - Control of Waste” Regulations and local authority guidelines. - Slate powder being of a naturally occurring mineral, is suitable for landfill.	
15. TRANSPORT INFORMATION	
Classification for conveyance - Not required.	
16. REGULATORY INFORMATION	
16.1	CHEMICALS Classification labelling & Packaging - CLP REGULATIONS - Not classified – No special labelling required – Respirable Free Crystalline Silica content test result < 1%
16.2	RISK/SAFETY PHRASES - NO OFFICIAL PHRASES, BUT OUR OWN ADVICE IS:- Risk Phrases:- <ul style="list-style-type: none">• Can be harmful by inhalation.• Possibility of serious damage to health by prolonged exposure through inhalation. Safety Phrases:- <ul style="list-style-type: none">• Avoid breathing dust.
17. LEGISLATION AND OTHER INFORMATION	
<ul style="list-style-type: none">• Health and Safety at Work etc. Act 1974.• Control of Substances Hazardous to Health Regs. 2002.• Classification labelling & Packaging - CLP Regulations• HSE Guidance EH40 (Occupational Exposure Limits).• HSE Guidance EH44 Dust - Gen Principles of Protection.• HSE Guidance Note EH59 (Respirable Crystalline Silica) + “Silica Essentials”.• Any authorised manual on First-Aid by St. John’s or other recognised authority.• Manual Handling Operations Regulations 1992.	

