

### Description and Application

This vermiculite product is manufactured using the highest quality materials available and it is micronized down to a controlled particle size distribution. A certain amount of inter-laminar water still remains bound in this product and this will give rise to some intumescent characteristics.

DM440 is used as an additive to formulations which require improved resistance to fire whilst retaining the base mechanical properties of the plastic/polymer system.

### Typical Properties (Non-specified)

#### Chemical Analysis

Silicon as SiO <sub>2</sub> .....	37.93%
Magnesium as MgO .....	21.55%
Aluminium as Al <sub>2</sub> O <sub>3</sub> .....	8.58%
Potassium as K <sub>2</sub> O .....	5.06%
Iron as Fe <sub>2</sub> O <sub>3</sub> .....	8.26%
Calcium as CaO .....	5.10%
Titanium as TiO <sub>2</sub> .....	0.96%
Fluorine as F .....	0.62%

#### Physical Properties

Melting Point (°C) .....	1330
Specific Heat (1kJ/kg.K) .....	1.08
Specific Gravity (Crude) .....	2.5
Moh's Hardness (Crude) .....	1-2
pH (ISO 787-9) .....	7 - 8
% Loss at 105°C (Product) .....	<0.5
% Loss at 1000°C (Product) .....	<6

### Typical Properties (Specified)

#### Particle Size Analysis by Laser Diffraction

d(0.1) .....	3-6µm
d(0.5) .....	15-30µm
d(0.9) .....	65-80µm

#### Packaging

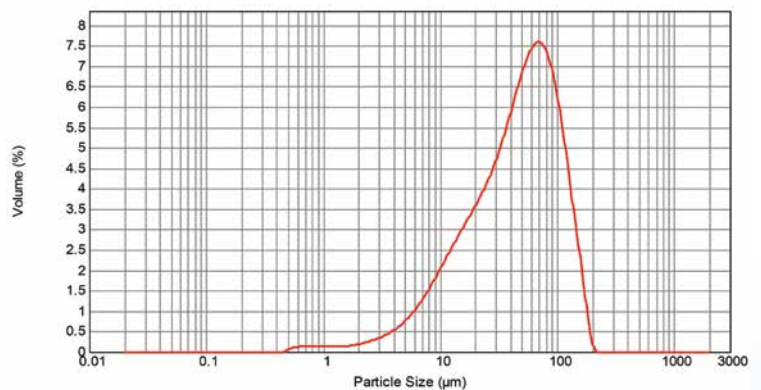
DM440 is packaged in 20kg sacks and supplied on 500kg pallets

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Information presented above is given in good faith as accurate and reliable but is not to be taken as a guarantee. The figures provided are intended to be a guide to expected average values and should not be interpreted as a specification. Any potential applications referred to are not to be construed as recommendations. It is the responsibility of the user to determine suitability for any specific purpose.



#### Particle Size Distribution



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