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## PRODUCT-INFORMATION

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### 1. Product Name

MECHANO-PRO<sup>®</sup> 1VP1

### 2. Product Description

MECHANO-PRO<sup>®</sup> 1VP1 is intercalated fine natural graphite also known as expandable graphite and has demonstrated to be an effective intumescent flame retardant. Expandable graphite is being used in a growing number of applications as an intumescent fire retardant additive, as an expansive agent and as a smoke suppressant. When the intercalated graphite is exposed to heat or flame, the intercalated molecules decompose and the forces apart the carbon layers and the graphite expand. The expansion volume can be 300 times higher than the original volume. The expanded graphite is a low density, non-burnable and thermal insulating material. MECHANO-PRO<sup>®</sup> 1VP1 has been designed for applications where fine particles are required. It does not contain heavy metals and halogens.

### 3. Applications

- Intumescent coatings
- Intumescent putties, caulks, and fire-stop systems to close off gaps and holes during the course of a fire.
- Sealing and packing material in close off systems to avoid smoke spreading.
- Reducing flame spread and smoke of highly combustible fiberboard panels.
- Filler in rubber, fibers, plastics.
- PU-foams and resins.

### 4. Technical datas

Purity:	min. 90% C
Free Expansion:	>60 ml/g
Start Temperature:	200°C +/- 10°C
Particle size:	<200 µm



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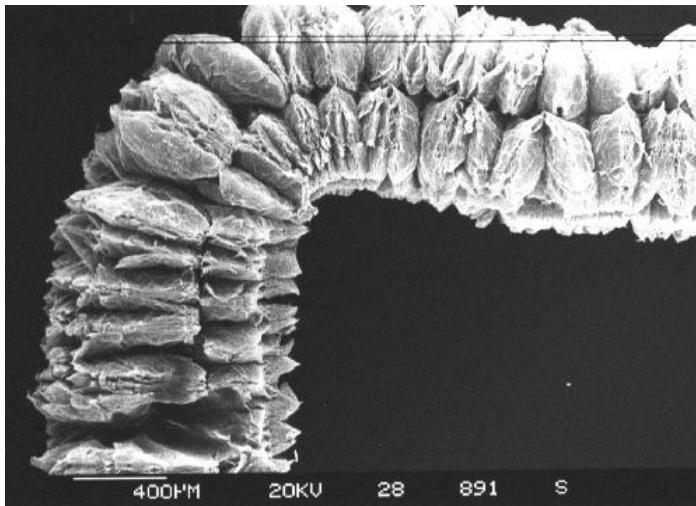
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### 5. Typical form before expansion



### 6. Typical form after expansion



Information provided on this technical data sheet indicates the approximate physical and chemical properties of the material. No warranty is made either expressed or implied regarding the accuracy or the results to be obtained from the use of such information.