

Verdi VM A5000 AE

Technical data sheet

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Flame retardant - HBCD-free - Does not contain CFC and HCFC - Fast cycles - Improved thermal conductivity

Extir® Verdi VM A5000 AE is a white expandable polystyrene with flame retardant properties and improved thermal conductivity. The beads have spherical shape and contain pentane as a blowing agent. Extir® Verdi VM A5000 AE is used for the production of medium/low density blocks for thermal insulation. Extir® Verdi VM A5000 AE is HBCD-free and does not contain CFCs or HCFCs. The product is not suitable for food contact.

Applications

Extir® Verdi VM A5000 AE is mainly used in building applications such as:

- Thermal insulation blocks and plates
- Elastified blocks for acoustic insulation
- Road foundations and construction components
- Cavity wall insulation

Technical Informations

Beads size	mm	0,9-1,6
Bulk density	kg/m ³	590-630
Typical pentane content	%	<6,5
Minimum apparent density		
on a continuous pre-expander after one expansion	kg/m ³	15
on a continuous pre-expander after two expansions	kg/m ³	10
on a discontinuous pre-expander	kg/m ³	13
Usual density range	kg/m ³	11-20

For more information, please refer to the "Extir® for building" brochure

Processing

Extir® AM range products can be processed in three steps.

Pre-expansion Extir® Verdi VM A5000 AE can be pre-expanded to the densities indicated above with common continuous or discontinuous expanders. The lower densities are reached with a second expansion.

Aging The aging time of the expanded beads is between 6 and 72 hours. It may vary according to the desired density and climate conditions.

Molding Extir® Verdi VM A5000 AE can be processed in common molds and block machines.

The material has excellent vapor reaction, ensuring fast cycles with excellent final properties.

Certifications

✓Euroclass E ✓LNE, on demand ✓B1 nach DIN4102, on demand

Extir® Verdi VM A5000 AE raw material are officially certified Euroclass E EN 13501-1, compliant with EN 13163 Annex E. For the products bearing French certification (LNE) or German certification (B1 nach DIN 4102), certificates are provided on request. The flame retardant properties of the finished product are effective only after blowing agent removal and after a proper aging time.

Storage

-  Keep the product in a dry well ventilated store between 15- 20°C.
-  For product packaged in octabins and stored correctly, the guaranteed shelf-life is one month from delivery
-  The boards and molded parts made of Verdi VM A5000 AE should not be exposed to solar radiation and packed in transparent film. The use of an opaque or white film is strongly recommended.

Safety

During the processing of Expandable Polystyrene, an explosive atmosphere could be created due to air / pentane mixtures. For this reason, all possible causes of ignition such as naked flames or sparks must be avoided, it is necessary to work in adequately ventilated places and a smoking should be forbidden. Adequate electrical grounding of machinery and of pneumatic conveyance lines is recommended. For further information relating to storage, packaging and processing precautions, please refer to the Technical Bulletin "Styrenics - Technical data sheets" and to the "Extir Safety Data Sheets".