



Technical Data Sheet  
Europe, Middle East, Africa and India

## AQUASET™ BI-700

### THERMOSETTING ACRYLIC BINDER FOR MINERAL WOOL INSULATION

#### Product Description

AQUASET™ BI-700 is a thermosetting acrylic binder made without formaldehyde or formaldehyde generating materials and that does not release formaldehyde under normal operating conditions. It is designed as a replacement for amino/phenol plast resins such as melamine, phenol, and urea formaldehyde. AQUASET™ BI-700 is recommended as a binder for mineral wool insulation, comprising building insulation and specialty/industrial insulation such as for ovens, pipes, automotive.

#### Application and Advantages

AQUASET™ BI-700 can be cured at comparable temperatures to those of amino plast resins. A temperature of at least 190°C is recommended to achieve maximum strength properties. At conventional use levels, the tensile properties, durability performance, and flame response characteristics of AQUASET™ BI-700 are comparable to those of industry standard amino/phenol plast resins. Even after being subjected to high temperatures often encountered in use, this polymer retains its strength characteristics. In contrast to amino/phenol plast resins, even at high temperature needed for curing, this acrylic binder will impart very little color to the substrate. An advantage of AQUASET™ BI-700 is that its cure profile allows it to be 'B' staged; i.e., it can be applied to the nonwoven web, dried but remain uncured, and subsequently cured by the fabricator of the final product. Also, unlike amino/phenol plast resins, AQUASET™ BI-700 does not have to be stored under refrigeration and can be kept at room temperature without concern about instability.

#### Typical Properties<sup>1)</sup>

Appearance	Clean amber solution
Solids content	53...55 %
Density	1.2 g/cm <sup>3</sup>
Viscosity (Brookfield LV, spindle 2 @ 60 rpm, 25°C)	50 ... 500 mPa·s
pH	2.2 ... 2.7
MFFT	-

1) Please note that the values shown are typical values for your guidance. They are not to be taken as specifications and are subject to certain variability. Please consult the sales specifications for details.

## Health and Safety Considerations

Safety Data Sheets (SDS) are available from The Dow Chemical Company. SDS are provided to help customers satisfy their own handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations. SDS are updated regularly, therefore, please request and review the most current SDS before handling or using any product. For further questions consult your Dow contact person.

## Storage and Handling

AQUASET™ BI-700 should be stored at temperatures between 5°C and 40°C in tightly sealed containers. Local legislation on storage must be followed. We recommend using the product under safety precautions as described in the SDS. Avoid contact with eyes and skin. Large quantities should be handled in a correctly ventilated area. Material can create slippery conditions As the product contains water and has low pH corrosion-resistance equipment should be used for processing.

### Additional Information

For more information you may call the following numbers:

**International Toll-Free**

**00800-3-694-6367**

International Toll-Free from:  
Austria, Belgium, Denmark, Finland (prefix 990), France,  
Germany, Hungary, Ireland, Netherlands, Norway, Portugal,  
Spain, Sweden, Switzerland, United Kingdom.

**EMEI Toll Call**

**0031-11567-2626**

**Italy Toll-Free National**

**00800-783-825**

**South Africa Toll-Free National**

**00800-99-5078**

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