



AQUASET™ 100 Acrylic Binder

Thermosetting, Acrylic Binder for Industrial Nonwovens

Regional Product Availability

North America

Description

AQUASET™ 100 Acrylic Binder is an acrylic solution polymer designed as a replacement for aminoplast resins such as melamine, phenol, and urea formaldehyde. This thermosetting polymer is recommended as a binder for industrial nonwovens such as fiberglass webs used in roofing, flooring, insulation, and filters. Other applications for AQUASET™ 100 include pressure laminates, as well as cellulosic, carbon, ceramic, and high-temperature polyester fibers.

At conventional use levels on fiberglass webs, the tensile properties, durability performance, and flame response characteristics of AQUASET™ 100 are comparable to those of industry standard aminoplast resins. This binder also has excellent runnability and is low foaming.

Another advantage of AQUASET™ 100 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. Even after being subjected to the high temperatures often encountered in use, this polymer retains its strength characteristics. In contrast to aminoplast resins, even at the high temperature needed for curing, this acrylic binder will impart very little color to the substrate. Also, unlike aminoplast resins, AQUASET™ 100 does not have to be stored under refrigeration and can be kept at room temperature without increasing instability.

The AQUASET™ 100 formulation process does not use, nor will it create, formaldehyde during normal processing. As a waterborne solution polymer it may reduce environmental impact, and volatile organic solvent emissions are significantly reduced.

Features & Benefits

- Waterborne
- Excellent strength properties
- Low flame response
- 'B' stageability
- Ease of storage and handling
- Low foaming
- Excellent runnability
- Thermal stability
- Minimal color contribution after cure

Typical Physical Properties

Typical properties, not to be construed as specifications.

Property	Typical Values
Appearance	Clear, light amber liquid
Solids Content, %	52 - 54%
Density (lb/gal)	10.1
pH	3.5 – 4.5
Viscosity Brookfield (mPa.s); (LV. Spindle#2 @12 rpm, 25°C)	200 - 800

**Handling
Precautions**

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

Storage

Store products in tightly closed original containers at temperatures recommended on the product label.

**Disposal
Considerations**

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

**Chemical
Registration**

Many countries require the registration of chemicals, either imported or produced locally, prior to their commercial use. Violation of these regulations may lead to substantial penalties imposed upon the user, the importer or manufacturer, and/or cessation of supply. It is in your interests to ensure that all chemicals used by you are registered. The Dow Chemical Company does not supply unregistered products unless permitted under limited sampling procedures as a precursor to registration.

**Product
Stewardship**

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Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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