



**AQUASET™ 110 Acrylic Binder**  
**Thermosetting, Acrylic Binder for Industrial Nonwovens**

**Regional Product Availability**

North America

**Description**

AQUASET™ 110 Acrylic Binder is an acrylic solution polymer designed as a replacement for aminoplast resins such as melamine, phenol, and urea formaldehyde. The higher viscosity of AQUASET 110 acrylic binder makes it an excellent thermosetting polymer for glass fiber processes that require more resin viscosity.

At conventional use levels on fiberglass webs, the tensile properties, durability performance, and flame response characteristics of AQUASET™ 110 are comparable to those of industry standard aminoplast resins. This binder also has excellent runnability and is low foaming.

Another advantage of AQUASET™ 110 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™ 110 does not have to be stored under refrigeration and can be kept at room temperature without increasing instability.

AQUASET™ 110 is manufactured without added formaldehyde or formaldehyde generators (no formaldehyde or formaldehyde generators intentionally added). As a waterborne solution polymer it may reduce environmental impact, and volatile organic solvent emissions are notably 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, %	46.5-49.5%
pH	2.1-2.9
Viscosity Brookfield (mPa.s); (LV. Spindle#2 @ 30 rpm, 25°C)	200 - 525
Weight per U.S. Gallon (wet, lbs/gal)	9.6 – 10

**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**

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

**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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