



Technical Data Sheet  
for Europe, Middle East, Africa and India

## ACRYSOL™ ASE-60 ER

### ASE Rheology Modifier

**Product Description** ACRYSOL™ ASE-60 ER Rheology Modifier is anionic ASE (alkali swellable emulsion) rheology modifier.

**Application** ACRYSOL™ ASE-60 ER Rheology Modifier is designed to adjust the viscosity of interior and exterior coatings. Its primary use is to increase low-shear viscosity to add structure to roller applied coatings. ACRYSOL ASE-60 ER Rheology Modifier can be used in most coating formulations where it provides a balance of sag and syneresis resistance, and a creamy in-can appearance. Used at low levels, ACRYSOL ASE-60 ER Rheology Modifier can improve anti-settling properties of coatings without affecting other application properties. Delivered as a low viscosity liquid, ACRYSOL ASE-60 ER Rheology Modifier is very easy to handle and incorporate into the coating. For viscosity build-up pH of the coating must be at least neutral or in the alkaline region. It is resistant to microbiological or enzymatic degradation, thereby avoiding viscosity loss in the coating.

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

Appearance	Milky white liquid
Solids content	27.5 ... 28.5 %
pH	2.1 ... 3.5
Density	1.06 g/cm <sup>3</sup>
Viscosity Neutralized (Brookfield LV, spindle 3 @ 12 rpm, 25°C)	3000 ... 6000 mPa·s

<sup>1)</sup> 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.

#### Formulation Guidelines<sup>2)</sup>

ACRYSOL™ ASE-60 ER Rheology Modifier can be added to the mill-base, to the letdown, or as a post addition without affecting performance properties, as long as the medium is sufficiently alkaline during the incorporation and sufficient mixing is available. Supplied as a low viscosity emulsion, ACRYSOL ASE-60 ER Rheology Modifier is easy to pump or pour and therefore very suitable for bulk handling and/or automatic metering equipment.

<sup>2)</sup> The formulation guidelines are given to help formulators: see disclaimers and notice on the last page.

## **Formulation Guidelines<sup>2)</sup>**

As mentioned above, ACRY SOL™ ASE-60 ER Rheology Modifier can be incorporated at different stages of formulation, provided that enough base is available to neutralise the thickener and additional base is used to adjust pH. In all cases it is recommended to add ACRY SOL ASE60 ER Rheology Modifier diluted 1:1 with water. Adding ACRY SOL ASE-60 ER Rheology Modifier as one of the final ingredients in the letdown is convenient in the laboratory to determine the approximate amount of thickener that will be needed to achieve the desired viscosity, or in the plant to make final viscosity adjustments. The addition of ACRY SOL ASE-60 ER Rheology Modifier in this manner assumes reasonably good agitation in the vessel. Less than ideal mixing can be compensated for, in many cases, by adding the thickener emulsion more slowly.

In any case the addition of the appropriate amount of base prior to the ACRY SOL ASE-60 ER Rheology Modifier is essential in order to avoid reduction in pH and subsequent pigment flocculation.

<sup>2)</sup> The formulation guidelines are given to help formulators : see disclaimers and notice on the last page

## **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**

ACRY SOL™ ASE-60 ER Rheology Modifier should be stored at temperatures between 5°C and 40°C in tightly sealed containers. Avoid freezing of the material! Upon purchase, applicable legislation on storage must be maintained/ 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 corrosion-resistance equipment should be used for processing. Low shear pumps like diaphragm pumps should be used.

## **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.

**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**

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.