



Technical Data Sheet
Europe, Middle East, Africa and India

PRIMAL™ E-337 ER

Acrylic Emulsion Polymer

Product Description

PRIMAL™ E-337 ER Acrylic Emulsion Polymer is an APEO-free* hydrophobic acrylic emulsion polymer for interior and exterior high performance coatings.

*APEO is not intentionally added and is not knowingly introduced from another raw material

Application and Advantages

The composition of PRIMAL™ AC-337 ER Acrylic Emulsion Polymer provides very hydrophobic film, leading to excellent water resistance and reduced liquid water permeability. PRIMAL™ AC-337 ER Acrylic Emulsion Polymer also shows improved colour acceptance and alkyd compatibility. The polymer interacts efficiently with associative thickeners, leading potentially to lower formulation cost.

The pure acrylic backbone of PRIMAL™ AC-337 ER Acrylic Emulsion Polymer ensures the high standard of gloss and tint retention, as well as crack, chalk and alkali resistance. Coatings based on PRIMAL™ AC-337 ER Acrylic Emulsion Polymer show very good wet and dry adhesion and a good dirt pick-up resistance.

Typical Properties

Appearance	Milky, white liquid
Solids content	45 - 46%
Density	1.06 g/cm ³
Viscosity (Brookfield LV, spindle 3 @ 60 rpm, 25°C)	< 1500 mPa·s
pH	7.7 - 8.7
MFFT	14 °C

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.

Formulation Guidelines

PRIMAL™ AC-337 ER Acrylic Emulsion Polymer demonstrates wide formulation latitude for interior and exterior applications. Below are some guidelines to help formulators:

Dispersants: OROTAN™ 1124 product was found to give good performance in semi-gloss coating formulations based on PRIMAL™ AC-337 ER Acrylic Emulsion Polymer. The versatile and effective dispersant OROTAN™ 731A ER product is also an excellent choice.

Formulation Guidelines

Defoamers: In all systems, the best results were achieved by using BYK-022 or BYK-018 in the grind and BYK-024 or BYK-1660 as letdown defoamer. We suggest using 0,3% BYK-022 in grind and 0,2% BYK-024 in letdown.

Rheology Modifiers: PRIMAL™ AC-337 ER Acrylic Emulsion Polymer has been designed to give good response to associative thickeners. HEUR thickeners, like ACRY SOL™ RM-5000 or ACRY SOL™ RM-2020, were found to be the most suitable to achieve remarkable flow properties. If higher low shear viscosity is required, the addition of low level of ACRY SOL™ RM-8W product can be done without affecting flow and application performance. When more in-can structure is desired, the rheological profile may be modified by adding small amounts of ACRY SOL™ SCT-275 product or ACRY SOL™ RM-12W product. PRIMAL™ AC-337 ER Acrylic Emulsion Polymer in combination with ACRY SOL™ RM-12W product offers the opportunity to formulate “thixotropic like” coatings.

Coalescent and co-solvents: A water immiscible coalescent like Texanol at a level of 8% on binder solids is highly suggested, ensuring good film formation, acceptable block resistance and enhanced exterior durability. We recommend only low levels of cosolvent like propylene glycol in the formulations, because this is sufficient to provide good flow and open-time.

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

PRIMAL™ E-337 ER 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.

PRIMAL™ E-337 ER is protected against microbial attack during transportation and storage in not opened original packaging. To avoid problems with microbial attack during processing and in opened packaging attention should be paid on hygiene.

Disposal

Typically, PRIMAL™ E-337 ER products can be disposed of by industrial incineration or in an approved landfill, providing regulations are observed. Customers are advised to review their local, state, provincial, or national regulations governing the disposal of waste materials to confirm the appropriate means of disposal in their area.

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.

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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.

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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