



ACRYSOL™ RM-55 Rheology Modifier

Hydrophobically-modified Alkali Swellable Emulsion (HASE)

Regional Product Availability

- Europe, Middle East and Africa

Description

ACRYSOL™ RM-55 Rheology Modifier is the APEO*-free analogue of ACRYSOL™ RM-5 Rheology Modifier. It is a hydrophobically modified anionic thickener.

ACRYSOL™ RM-55 Rheology Modifier is most effective at high shear rates and has a nearly Newtonian rheology curve.

Delivered as a low viscosity liquid, ACRYSOL™ RM-55 Rheology Modifier is very easy to handle and incorporate into the ink. It can be used in combination with other thickeners.

*APEOs (Alkyl Phenol Ethoxylates) are not intentionally added to Dow adhesive products. Therefore, to the best of Dow's present knowledge, APEOs are not present in the final product composition, unless at trace levels, as an unknown impurity from the raw materials

Typical Applications

Water-based inks and over-print varnishes

Key Features

- Good high shear viscosity build
- Excellent gloss development
- Excellent flow and levelling
- Easy to incorporate

Typical Physical Properties

(These properties are typical but do not constitute specifications.)

Property	Value
Appearance	Off white milky liquid
pH	3.2
Solids content (%)	30
Brookfield Viscosity (mPa.s), LV, Spindle #1, 60 rpm, 25°C	< 30
Specific gravity (wet polymer)	1.06
Solvent	Water
Chemistry	HASE (Hydrophobically modified alkali swellable emulsion)

Recommended Operating Conditions

Order of Addition

ACRYSOL™ RM-55 Rheology Modifier can be incorporated at different stages of formulation:

- as the final letdown ingredient
- after dispersion but prior to letdown
- prior to pigment dispersion

In all cases,

- there must be enough base available to neutralize the thickener. Additional base may be used to adjust pH if needed.
- it is recommended to add ACRYSOL™ RM-55 Rheology Modifier diluted 1:1 with water.

Alternative - pre-neutralization

In order to avoid reduction in pH and subsequent pigment flocculation, ACRYSOL™ RM-55 Rheology Modifier can also be added during the let down stage in a pre-neutralized form:

Solution Preparation	Weight (%)
Water	63.4
Ammonia 28%	3.3
ACRYSOL™ RM-55 Rheology Modifier	33.3
Total	100
Final pH adjustment	8.0 - 8.5

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.

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- c. use as a critical component in medical devices that support or sustain human life; or
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Additional Information

North America		Europe/Middle East	+800-3694-6367
U.S. & Canada:	1-800-441-4369		+31-11567-2626
	1-989-832-1426	Italy:	+800-783-825
Mexico:	+1-800-441-4369		
Latin America		South Africa	+800-99-5078
Argentina:	+54-11-4319-0100		
Brazil:	+55-11-5188-9000		
Colombia:	+57-1-219-6000	Asia Pacific	+800-7776-7776
Mexico:	+52-55-5201-4700		+603-7965-5392

www.dowplastics.com

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