

## DESCRIPTION

ACRYLIC THICKNER is an anionic Hydrophobically modified Alkali Swellable Emulsion (HASE). When used as a rheology modifier, Acrylic Thickener provides improved flow and levelling as well as reduced spattering during roller application. The advantage of ACRYLIC THICKNER is low sensitivity to electrolyte content of the paint, which enhances paint stability and consistency.

Acrylic Thickener is part of the DESIGNED RHEOLOGY™ Product Line which offers a liquid alternative to HEC with customized rheology and endpoint application performance. This associative thickener offers application and “in-can feel” properties that are very similar to those of higher molecular weight cellulosic thickeners.

## APPLICATIONS

Acrylic Thickener is designed for use in a wide range of latex paint formulations for excellent performance. It is particularly well suited for low-sheen interior formulations, including above CPVC low volume solids paints. In these formulations, it can be used as a cost effective alternative to cellulose.

Acrylic Thickener is supplied as a low-viscosity liquid that is easy to pour and pump. It is especially attractive to use when bulk handling and automatic metering equipment are used.

Cellulosic thickeners are traditionally used in rendering systems, such as aggregate finishes, marble stone finishes and all other kinds of trowelable products. In these textured paints applied in high thickness, the sag resistance is a key property, and formulators normally use high molecular weight HEC thickeners which deliver a high viscosity at low shear.

Thickener is an excellent alternative in these types of formulations.

## Properties :

Chemical Composition	: Anionic Acrylic copolymer
Appearance	: Bluish Translucent Liquid
(105°C - 1 1/2 hrs.)	: 30 ± 1
Brookfield Viscosity, Ps, 300C	
Sp#1, 20 rpm	: 3.0 Max.
pH	: 2 - 5

## Guideline for use:

ACRYLIC THICKNER should first be diluted with water in the proportion 1:3. Dilution of the product prevents formation of gel particles and ensures proper dissolution. For best performance, add all other ingredients before addition of alkali as the neutralizing agent. The pH range for effective thickening is 8 – 10. The dosage of ACRYLIC THICKNER varies from 0.1 to 2.0 % depending on the formulation.

## ACRYLIC THICKNER – Mode of action:

Upon addition of alkali, neutralization of carboxylic groups gives rise to anionic charge on the polymer backbone. The repulsion of like charges causes uncoiling of polymer chain. This leads to significant rise in hydrodynamic volume of the neutralized polymer, eventually causing remarkable increase in viscosity of the system at relatively low concentration of the thickener.

Paint formulations contain pigment or filler, latex binder and other additives including surfactants and dispersants. The hydrophobic groups present on the backbone of ACRYLIC THICKNER enable formation of associative network with the hydrophobic additives leading to more stable structure. This association is broken, when the shear rate is increased. However, the associative network regains when the shear is removed.

### Product Features/Applications:

- Unlike conventional thickeners, which mainly thicken the water phase in the emulsion paint, ACRYLIC THICKNER forms network of associative bonds with emulsion particles giving a more uniform thickening and better rheological properties.
- It is possible to partially replace Cellulosic Thickener (e.g. HEC) by blending with ACRYLIC THICKNER for cost effective paint formulations.
- ACRYLIC THICKNER based paints exhibit reduced tendency of spatter and impart excellent stability. When applied by rollers, they show remarkable reduction in roller splatter and improved paint deposition per coat.
- Emulsion Paints thickened with ACRYLIC THICKNER exhibit excellent sag resistance without compromising flow and levelling.

### PACKING

Packing : 50 kg. and 200 kg. HDPE Barrels

### SHELF LIFE & STORAGE

ACRYLIC THICKNER has a shelf life of 12 months from date of manufacture when kept at a temperature between 5 °C to 45°C and store in the original, unopened barrel. All material shall be stored under cover in a manner that will prevent damage preferable on pallets and protected from excessive heat and moisture. Do not freeze.

### Quality Assurance

AMBICA SPECIALITY CHEMICALS is a firm of Assessed Capability. The company's quality system conforms to ISO 9001:2015.

### HEALTH & SAFETY

ACRYLIC THICKNER is no-toxic and non-flammable. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs wash thoroughly with clean water. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice. Full health and safety data are given in Product Safety Data Sheet.