



WSR-PDS-NA-Kymene 450-R2

## Kymene™ 450 wet strength resin

### Product Description

Kymene™ 450 wet strength resin is a highly efficient, neutral-curing cationic resin designed for a variety of crosslinking applications. Because of its unique performance characteristics, higher levels of crosslinking are achievable with Kymene 450 than with other commercial resins.

### Benefits

- Water-based formulation
- Contains no formaldehyde
- Extremely high efficiency
- Easy-to-handle liquid

### Product Application

Activation Procedure and Addition Sequence to Produce a 3% Resin Solution:

Before it is added to the desired system, Kymene 450 must be activated with sodium hydroxide. This converts the resin from its stabilized form into an active state for maximum crosslinking development.

The procedure for activation is as follows:

1. Add required water (3.36 gals/dry lb of Kymene 450 resin) to tank.
2. Add required amount of resin (20% solids) to make a final solution of 3% resin solids and mix for several minutes.
3. Add sodium hydroxide (0.14 dry lb/dry lb of Kymene 450) while mixing the resin solution.
4. After 15 minutes, titrate a 100-ml aliquot of activated Kymene 450 with 0.5N sulfuric acid to a methyl orange or methyl purple endpoint. This titration should be in the 1 to 3 ml range. Low titration values can result in incomplete activation. High titration values can result in reduced shelf life of the resin.

### Example Quantities:

Using 50% Aqueous Sodium Hydroxide:

- Water, gal - 303
- NaOH soln., gal - 2.05
- Kymene 450 resin, lb - 450

Using Dry Sodium Hydroxide:

- Water, gal - 307
- NaOH, lb - 12.6
- Kymene 450 resin, lb - 450

Laboratory Batch:

- Water, gal - 370
- NaOH soln., (1N), gal - 75
- Kymene 450 resin, gal - 75

The shelf life of 3% activated resin is approximately 12 hrs. Efficiency may be impaired beyond this time limit.

### Materials of Construction:

Fiberglass should be used for bulk storage of Kymene 450.

Kymene 450 is to be used in accordance with control procedures Solenis establishes for a specific application.

### Packaging

This product is available in a variety of packaging sizes. Your Solenis representative will recommend the appropriate packaging for the application.

### Important Information

**Typical Properties:** Refer to the Safety Data Sheet (SDS).

**Regulatory Information:** Refer to the SDS or contact your sales representative for any additional regulatory and environmental information.

**Safety:** Solenis maintains an SDS for all of its products. Use the health and safety information contained in the SDS to develop appropriate product handling procedures to protect your employees and customers.

Our SDS should be read and understood by all of your supervisory personnel and employees before using Solenis products in your facilities.