



Product Data Sheet

KYMENE[®] 705 Wet-Strength Resin

PRODUCT DESCRIPTION AND USE

Kymene[®] 705 is a water-soluble, polyamide-epichlorohydrin, thermosetting crosslinking polymer that is reactive with amine, carboxyl, hydroxyl, and thiol functionality. Polymers having carboxyl groups are generally the most reactive and will react even at room temperature. The rate and degree of crosslinking is influenced by concentration, pH, and temperature. Crosslinking will occur from pH 4-9 with optimum results obtained under mild alkaline conditions. Optimum cure occurs from 40 to 65°C.

BENEFITS

- Water-based formulation
- No formaldehyde intentionally added
- Reactive over a wide pH range
- Low viscosity, low odor liquid

PRODUCT APPLICATION

When solutions of Kymene resin are mixed with polymers containing reactive carboxyl groups- for example, sodium carboxymethylcellulose or sodium polyacrylate-solution viscosity may rise rapidly. This can be controlled by adjusting pH of the polymer solution within the range of 8 to 9 before adding the solution of Kymene resin. Good agitation must be maintained during mixing to ensure uniformity and viscosity control.

The pot-life of various mixtures have not been completely investigated. If it is necessary in commercial practice to apply the water-soluble polymer at elevated temperatures, pot life of the application bath containing **Kymene 705** should be determined under the conditions of actual practice. The variables listed previously that influence the rate and degree of insolubilization will likewise influence pot life.

Kymene 705 is to be used in accordance with control procedures Hercules establishes for a specific application.

TYPICAL PROPERTIES^(a)

Appearance	Amber turbid liquid
Specific Gravity (25°C).....	1.09
Viscosity (25°C)	175-225cps
Freeze Point	0°C
pH	2.3-2.7
Weight%Solids.....	25-26
Shelf Life	90 days

Typical properties are measured at varying intervals and may not be representative of normal lot to lot variations. There is no warranty, expressed or implied, associated with these values.

(a) Not to be construed as specifications. Specifications are available by request.

PRODUCT SAFETY

Read and understand the Material Safety Data Sheet (MSDS) before using this product.

Contact your Hercules Representative for more information about our *Complete Solutions for Pulp and Paper[®]*.

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