

# SUPERABSORBENT AQUEOUS BASED POLYMERS

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The superabsorbent polymers by JRM Chemical are used in several types of applications for absorbing aqueous solutions. The polymers can be used for solidifying any water based material or absorbing body fluids. In industrial settings the product is used in a variety of applications from solidifying water in the drilling and mining industry to the construction industry. The polymers can be used in any application where aqueous solidification and spill management is of concern.

Five standard grade sizes with different absorption capacities and absorption times are available for a wide variety of applications.

The H-600 polymer is the fastest absorbing polymer in this series. The polymer immediately begins to absorb any aqueous solution on contact. Within twenty seconds the product achieves over 70% of its absorption capacity. In tap water the product will absorb up to 350 times its weight (based on a weight to weight basis). This product is used where rapid absorption is required from absorbing body fluid spills to water solidification.

The H-200 polymer is slightly slower in absorbing aqueous solutions (<5 minutes to achieved 70% absorption capacity) but can achieve an absorption capacity of 300 on tap water.



The H-400 and H-500 series polymer is slower in absorption time, but easy to apply and dispose of in its granular form.

#### **BENEFITS:**

- Cost effective; High absorption rates, less product required per application
- Lower disposal costs; less by-product to dispose
- Lower labor costs
- Rapid and high absorption capacities
- Environmentally safe, non-toxic
- Can be blended with other compounds to achieve specific results

### **APPLICATIONS:**

Depending upon the type of application, spread the polymer as a very thin layer on the aqueous solution. Spread the product on the outer edges of the area and work towards the center. The absorbed solution can be picked up by manual or mechanical means.

#### **SPECIFICATIONS:**

	H-200	H-300	H-400	H-500	H-600
Grade Size (microns)	50-300	100-500	1000-2000	2000-4000	50-800
Density	1	1	1	1	.65
Absorption capacity (1)	200	300	245	215	350
Absorption capacity (2)	300	400	350	300	500
Absorption time*	<5	<20	<40	<80	<1
Appearance	powder	powder	granular	granular	powder

(1) Absorption based on tap water rated at 160 mg/l of NaCl

(2) Absorption based on deionized water

\* (to achieve 70% of capacity, expressed in minutes)

The presence of minerals and salts in the aqueous solution will reduce the absorption capacity. For applications in high salt solutions, contact the factory for low ionicity polymers and crosslinked bisacrylamide polymers.

Custom grade sizes and packaging requirements are available; minimum quantities apply.

For information on our Hydrocarbon Encapsulant polymers, please refer to form 510.

#### JRM Chemical, Inc.

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