



CELLOSIZETM QP 10000H Polymer

CELLOSIZETM QP 10000H Polymer is a hydroxyethyl cellulose (HEC), nonionic, water-soluble polymer that can thicken, suspend, and disperse in many household products. It is readily soluble in hot or cold water and has moderate thickening efficiency in cleaning formulations. It has outstanding tolerance for dissolved electrolytes.

CELLOSIZETM QP 10000H Polymer finds utility in many household products as a thickener, stabilizer, and binder. For example, in liquid detergents and cleaners, it acts as a rheology modifier and as a moderately efficient thickener, imparting good body structure and pseudoplastic rheology to products.

Features & Benefits

- Compatible with a wide range of surfactants
- Moderate thickening efficiency for homecare formulations
- Excellent salt / electrolytes tolerance
- Helps to enable clear formulations
- Inherent primary biodegradability
- Derived from natural raw materials
- Sustainable option

Composition

- Hydroxyethyl cellulose

Applications

- Liquid cleaning and detergent formulations

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
Appearance		White to cream-colored, freely flowing powder
pH (2% Aqueous Solution @25°C)		6.0–7.0
Volatile Content	%	6 (max)
Viscosity ¹ (2% Aqueous Solution @25°C)	cP	6000–7000
Charge		Non-ionic
Bulk Density	g/cm ³	0.3–0.6

1. LVF Brookfield mPa.s, Spindle #4 at 60 rpm.

Typical Properties (Cont.)

Property	Unit	Result
Specific Gravity @20/20°C		1.3–1.4
Average Molecular Weight (Mw)	g/mol	1,100,000
Water Insolubles	%	1.0 (max)
Particle Size, Thru 20 Mesh, < 841 Micron	%	98 (min)
Hydration Time	minutes	5–15
Ash, as Sodium Carbonate	%	3 (max)

Preparation of Solutions

Dispersing of CELLOSIZETM QP 10000H Polymer – Agitation of solutions at a pH of 7.0 or lower is recommended to make dispersions. After the CELLOSIZETM QP 10000H Polymer is well dispersed and with agitation maintained, the hydration rate may be accelerated by adjusting the pH to alkaline ranges and/or by increasing the temperature. Below pH 7.0 the hydration is decreased. Above pH 7.0, the hydration rate is increased.

Important Steps to Optimum Performance

1. Agitate continuously while adding thickener. Do not stop the mixer until solution is clear and smooth.
2. Quickly sift the thickener into the solution. Do not dump or shovel it into the formulation vessel.
3. Do not add anything that will raise the pH of the water until the thickener particles have been wetted out. Two- or three-minutes mixing will usually be enough. Raising the pH thereafter markedly increases the rate of solubility.
4. Add an effective preservative at the earliest convenient point in the process.

Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

CELLOSIZETM QP 10000H Polymer is a water-soluble solid that is normally supplied as a powder. Moisture and heat can cause CELLOSIZETM QP 10000H Polymer to form lumps, so CELLOSIZETM QP 10000H Polymer should be stored in a dry location at a temperature less than 40°C. Good housekeeping should be used when handling CELLOSIZETM QP 10000H Polymer to reduce the risk of slipping hazards. If CELLOSIZETM QP 10000H Polymer is spilled, as much as possible should be swept before it becomes wet. Washing with water, solvents, or most cleaning products will probably not be effective and may increase the slipping hazard. High pressure water blasting can be used to remove buildup of material.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

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.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

dow.com

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