# CMC H

**Filtration Control Agent**

## Product Description
CMC H is dispersible, sodium carboxymethyl cellulose, fluid-loss reducing additive in high viscosity.

## Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical appearance</td>
<td>White-to-off-white powder</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.59</td>
</tr>
<tr>
<td>pH</td>
<td>7–10</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
</tbody>
</table>

## Application
CMC H additive is used as a fluid-loss reducing additive in freshwater and seawater muds. It is less effective in brines and saltwater and is not generally recommended to be used if the salinity exceeds 50,000 ppm.

CMC H additives are used in low-viscosity or low-solids fluids and increase viscosity in addition to controlling fluid loss.

## Advantages
- Widely available and an economic source of polymer fluid-loss control
- Concentrated chemical, very effective at small treatment levels
- Can be used in most water-base drilling fluids

## Limitations
- Subject to bacterial degradation, a biocide should be used to prevent fermentation
- Not utilized in high-salinity fluids that exceed 50,000 ppm
- Not tolerant of high-pH and high-calcium-ion conditions in combination
- CMC H additive-treated systems should be pretreated with either sodium bicarbonate or possibly citric acid prior to drilling cement

## Recommended Treatment
1. In freshwater: 0.5 to 1.5 lb/bbl (1.4 to 4.3 kg/m³)
2. In seawater: 2.0 to 3.0 lb/bbl (5.7 to 8.6 kg/m³)
3. Add slowly through a mixing hopper at a rate of 10 to 20 min/sack

## Toxicity and Handling
Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheet (MSDS).

## Packaging and Storage
CMC H is packed in 50-lb (25-kg) sacks. Store in a dry location away from sources of heat or ignition, and minimize dust.

**Important Note:** These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and method of use of our product are beyond our control. We recommend that the prospective user determine the suitability of our material and suggestions before adopting them on a commercial scale.