

## Labeling information

### INCI name(s)

Chitosan

## Registrations

### Ingredient

CASR-No.

9012-76-4

EINECS/ELINCS-No.

polymer

## Officially listed in / Quality conforms to

JCIC:

Chitosan

(Ingredient Code: 523078-42)

## Product properties

### Appearance

Hydagen® HCMF is an off-white, odourless powder.

### Example of use

HYDAGEN® HCMF is a cationic film former of marine origin. It is suitable for use as a fixative polymer in styling products, such as mousses, setting lotions and pump sprays. In addition, HYDAGEN® HCMF exhibits excellent repair effects on hair, and can be used in hair conditioning lotions to treat split ends. To obtain a clear, aqueous solution, small amounts of acid must be added; e.g. for a 1 % solution about 0.4 - 0.6% glycolic acid, benzoic acid, acetic acid or lactic acid (no citric or tartaric acid). It is recommended to produce the solution at room temperature by the following procedure: Add water to Hydagen® HCMF and stir it briefly to obtain a dispersion. Then the acid solution (e.g. pre-dissolved glycolic acid in a small amount of water) should be added gradually. Stir the mixture gently until it becomes a clear solution (within 30-60min). The pH of the resulting solution have to be adjusted to pH 4 to 5, and the pH of the final formulation have to be less than 6.0. Depending on the intended application, we recommend filtering the solution before it is incorporated into the formulation. HYDAGEN® HCMF is not compatible with anionic compounds.

It is limited compatible with isopropanol (e.g. a 2 % solution of Hydagen® HCMF with max. 40 % isopropanol) and with more than 60% ethanol (with a-Hydroxy-isobutyric acid: compatibility up to 80% ethanol). The recommended application concentration is between 0.2 and 1.5 % AS.

## Characteristic values

The specifications stated in the paragraphs 'Quality control data' and 'Additional product descriptive data' finally and conclusively describe the properties of the Product.

### Quality control data

(Data which is used for quality release and is certified for each batch.)

Appearance

conforms to standard

Odour

conforms to standard

Dry substance

min. 95 %

DGF G-III 1 mod.

Total nitrogen

7.5 - 9.0

Q-C 2037.0 (Kjeldahl)

Ash

< 0.5 %

LMBG § 35: L17.00-3 mod.

## Additional product descriptive data

(Data which is proven statistically but not determined regularly.)

Deacetylation degree	min. 80 %
Molecular weight	50.000 - 1.000.000 g/mol

## Storage and transportation

HYDAGEN® HCMF remains stable for at least one year in its original unopened container, protected from moisture and at temperatures below 30C. HYDAGEN® HCMF does not contain any preservatives.

**Revision-No.** 2-05.2001

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Cognis does not guarantee the suitability of a product for a user-specific purpose.

