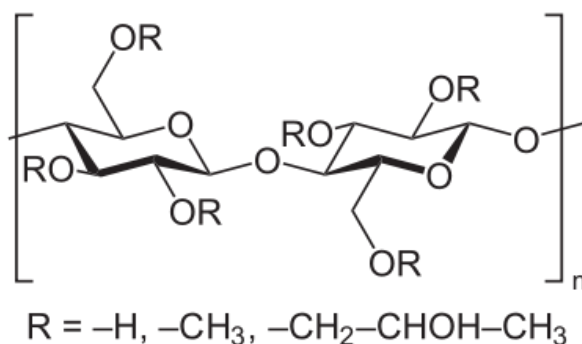
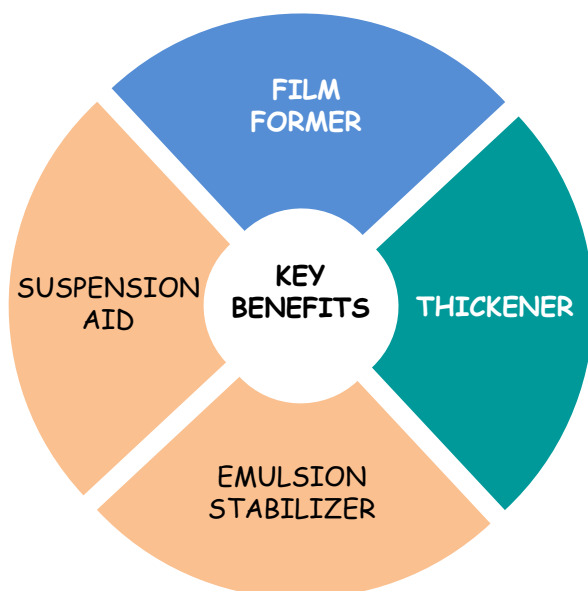


COMPOSITION	
INCI Name	HYDROXYPROPYL METHYLCELLULOSE



## Use guideline

- Predisperse in polyols before adding it to water under stirring
- No neutralisation necessary
- Cold processable
- Reversible thermal gel (T<sub>g</sub> ≥ 45°C)
- Yields clear water gels
- Thickens alcohol-based formulations
- Stabilizes and suspends pearls, glitters, beads
- **Synergistic association with Makimousse: mousse-like textures**
- Use level: 0,1-10%

## Cosmetic benefits

- Strong, flexible and transparent film on skin
- Liporesistant film - Effective barrier against oils
- **Synergistic association with DAITOSOL: Long lasting liquid textures** (liporesistant and water resistant film)

## Chemical and physical properties

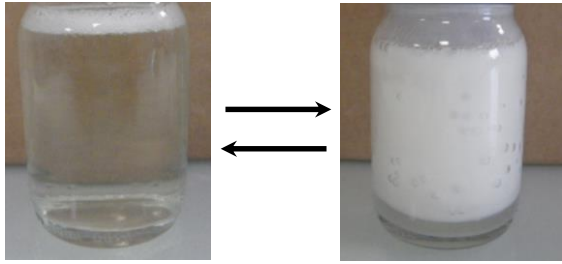
- Non ionic biopolymer (derived from cellulose)
- White to off-white powder
- Low odor
- Swells in water
- Viscosity (2% in water) ≈ 4,8-7,2mPa.s

## Formulation

- **pH** : stable over a wide range from 3 to 11
- **Alcohols**: compatible up to 90% of ethanol
- **Salts**: compatible
- **Surfactants**: stable in nonionic, anionic and cationic system, compatible with lipoaminoacids and sugar esters
- **Treated & untreated pigments**: compatible
- **Makibeads, cellulobeads and Sugarcapsules**: compatible
- **Peroxides**: incompatible
- **Film formers**: compatible with acrylic
- **Rheology**: non newtonian flow

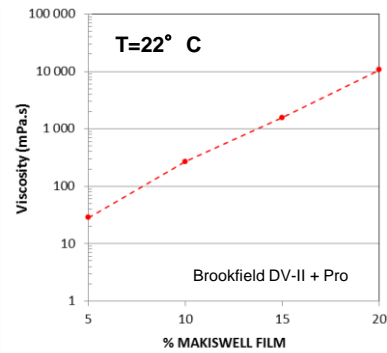
## Viscosity characteristics

Reversible thermal gelation of MAKISWELL FILM gel (15%)



T=25°C : Transparent gel    T=60°C : White hard brittle gel

Effect of MAKISWELL FILM concentration on viscosity



## Applications

### MOUSSE-LIKE TEXTURES

DKE 83B, 179

*In combination with MAKIMOUSSE 25.  
Improves mousse stability and application*

DKE 153, DKE 165

*In combination with MAKIMOUSSE 12  
Brings long lasting and maintains a good coverage  
on the skin*



### LONG LASTING FORMULATIONS

DKE 164

*In combination with DAITOSOL 4000SJT and  
MAKIMOUSSE 25.  
Suspends and stabilizes CELLULOBEADS*

### ALCOHOLIC GELS

DKE 176

*Makiswell film is very efficient to thicken  
alcoholic solutions.  
It is suitable for alcohol base perfume.  
Prevents borosilicate based pearls from settling*

## Safety and regulatory information

**Product safety:** Hydroxypropylmethylcellulose has been tested in both acute and long-term feeding studies. No evidence of mutagenicity or carcinogenicity has been found. The safety of cellulose ether has been evaluated by the CIR Expert panel. They concluded that the ingredients are safe as cosmetic ingredients.

**Material Safety Data Sheets** are available for all DAITO KASEI products.

**REACH:** Hydroxypropylmethylcellulose is exempted from registration.

Hydroxypropylmethylcellulose is listed on major chemical inventories such as CTFA, CosIng, AICS, DSL, KCID, IECIC2003 and/or IECIC2014.

### For additional information

**Please contact:**

DAITO KASEI EUROPE SAS  
62 boulevard Henri Navier  
Taverparc Bât 5.2  
95150 Taverny - FRANCE  
☎ : +33(0)1 30 40 01 01  
☎ : +33(0)1 30 40 01 11  
✉ : [dkeurope@dkeurope.fr](mailto:dkeurope@dkeurope.fr)

HEAD OFFICE  
DAITO KASEI KOGYO Co., LTD  
1-6-28 Akagawa, Asahiku  
Osaka - JAPAN  
☎ : 81 6 6922 1632  
☎ : 81 6 6921 9562

DAITO KASEI CHINA  
6F/room 612  
555 Wuding road Jing An District  
Shanghai, CHINA 200040  
☎ : +86 21 32 53 25 16

The information presented within this sheet is offered in good faith, and is based on our present state of knowledge. It is offered for informational and evaluation purposes only. Users of DAITO KASEI product should initiate their own testing to determine the suitability of this product for their intended purpose. DAITO KASEI assumes no liability or responsibility for any damage to person or property resulting from the use of this product or the incorporation of this product into any final formulation or product. Statements concerning the use of this product are not to be construed as a recommendation, suggestion or inducement to use the product in any way or within any formulation that is unlawful to create or sell, that violates any applicable regulations or that infringes upon any patent. No liability arising out of such a use is assumed.

Revised date: October 2014