

**Your Best Partner** 

# **Tylose**<sup>®</sup> for Personal Care

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Tylose hydroxyethylcellulose (HEC) and hydroxypropyl methylcellulose (HPMC) are non-ionic, water soluble cellulose derived polymeric thickeners. Tylose grades are physiologically harmless, low eye irritant, cosmetic additives. These multifunctional additives can improve personal care formulations in many ways – far beyond just thickening and binding.

#### **Application Properties**

Important Functional Properties of Tylose in Personal Care:

- Thickening/adjustment of consistency
- Foam enhancement and stabilisation
- Emulsion stabilisation
- Binding power

# Why Tylose in Personal Care Formulations?

### **High Naturality**

Tylose is chemically modified cellulose and thus mainly of renewable origin. The natural origin index, according ISO 16128, dependent on the Tylose grade, is between 0.55 and 0.85.

#### Sustainability

We are committed to sustainability as a core value, using raw materials from renewable sources wherever possible and implementing sustainable manufacturing practices. We align our efforts with the United Nations Sustainable Development Goals (SDGs) to promote sustainable practices and reduce environmental impact. Our goal is to create a more sustainable future for all through our operations and products.

### **Dedicated Personal Care grades**

Tylose 70-grades are highly purified, dedicated personal care grades, available as hydroxyethyl cellulose and hydroxypropyl methylcellulose.



### High flexibility, easy to apply

Tylose is available as granules and powders with or without retarded swelling time and in different molecular weights / viscosities, which gives formulators a high degree of flexibility.

# **Typical Applications and Main Contributions of Tylose®**

## Skin Care

| Creams, lotions:         | Emulsification, film-forming                  |  |
|--------------------------|---|--|
| Liquid soaps, bath gels: | Thickening, foam boosting                     |  |
| Serums:                  | Thickening, film-forming, lubricity           |  |
| Shaving products:        | Foam enhancement                              |  |
| Make up products:        | Binding power, film-forming, suspending power |  |

### Hair Care

| Shampoo and conditioners: | Thickening, pseudoplastic rheology, foam enhancement |
|---------------------------|--|
| Hair styling products:    | Thickening, lubricity, film-forming                  |

### **Oral Care**

| Toothpaste*: | Thickening, suspending power |
|--------------|------------------------------|
| Mouthwash:   | Rheology adaptation          |

\*In particular with amine fluoride.



### **Recommended Grades**

| Tylose grades                 | Viscosity                       |  |
|-------------------------------|---------------------------------|--|
| Hydroxyethylcellulose         |                                 |  |
| Tylose H 100070 NP2           | 3800 - 5000 mPas <sup>1)</sup>  |  |
| Tylose H 30070 NP2            | 1500 – 2500 mPas <sup>1)</sup>  |  |
| Tylose H 4070 NG4             | 3500 - 5000 mPas <sup>2)</sup>  |  |
| Cetyl Hydroxyethylcellulose   |                                 |  |
| Tylose HQ 6000 YG4 Plus       | 800 – 1300 mPas <sup>1)</sup>   |  |
| Hydroxypropyl Methylcellulose |                                 |  |
| Tylose MOBS 10070 P4          | 8000 – 12000 mPas <sup>3)</sup> |  |
| Tylose MOBS 4070 P4           | 3000 - 5600 mPas <sup>3)</sup>  |  |
| Tylose MOBS 6-70 P4           | 4.8 – 7.2 mPas <sup>4)</sup>    |  |
| Tylose MO 4070 P4             | 3000 – 5600 mPas <sup>3)</sup>  |  |

 $^{1)}$  Brookfield LV, 1 %, absolute dry, 25° C

 $^{\rm 2)}$  Brookfield LV, 2 %, absolute dry, 25° C

 $^{\rm 3)}$  Brookfield LV, 2 %, absolute dry, 20° C

<sup>4)</sup> Ubbelohde, 2 %, absolute dry, 20° C

Further grades available on request, please contact us for more information.





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#### About us

SE Tylose GmbH & Co. KG is one of the major manufacturers of cellulose ethers world-wide, supplied under the brand name Tylose<sup>®</sup>. Tylose is used in a wide variety of products and applications.

### Applications

- Building Materials
- Paints
- ► Ceramics
- Polymerisation
- Personal Care
- ► Home Care
- ► Oilfield
- Others

This information is based on our present state of knowledge and is intended to provide general notes about our products and their use only. It should not therefore be construed as guaranteeing the consistence or permanency of the products or specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our General Conditions of Sale.

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