

Your best partner

ShinEtsu
SE Tylose GmbH & Co. KG

Tylose[®]

Cellulose ethers for Personal Care Products

- Thickening
- Consistency adjustment
- Stabilization
- Film forming

Tylose® thickens your creativity

The concept Personal Care Products includes all areas of nurturing and decorative cosmetics.

In the field of nurturing, one differentiates between hair care, skin care and oral hygiene, and decorative cosmetics include, among others, make-up, powder, eye shadow and mascara.

Being a physiologically harmless cosmetic additive, Tylose offers a multitude of applications in the field of personal care. Hydroxyethyl celluloses are the most widely used Tylose-grades in the cosmetics field. Besides the ultra pure cosmetics types, our standard Tylose-types can also be used.

The following INCI-designations apply to the Tylose-grades, which can also be seen in the International Cosmetic Ingredient Dictionary and Handbook of the CTFA:

Hydroxyethylcellulose	(Tylose H and HS types)
Hydroxypropyl Methylcellulose	(Tylose MO, MOB, MOBS and MOT types)
Methyl Hydroxyethylcellulose	(Tylose MH, MHB, MHS and MHBS types)



SE Tylose Research & Development for cellulose ethers has a long tradition at the Wiesbaden site. In 1935, for the first time world-wide, cellulose ethers under the registered trademark Tylose were commercially produced on the basis of the patent from O. Ernst and K. Sponzel (German patent No. 522575) in Wiesbaden.

With the help of our experienced and highly qualified staff in research & development we aim to develop individual solutions for our customers. Apart from developing new products, our research teams are continuously working on enhancing the existing production processes.

Recommended Tylose® H Grades for Personal Care Applications

Tylose grades	Applications											
	Rinses	Hair conditioner	Shampoo	Hair gel	Permanent-wave preparations	Hair colors	Toothpaste	Body lotion	Sun care products	Roll-on Deo	Mascara	Make-up (liquid)
Standard												
Tylose H 15 YG4								☐	☐			
Tylose H 20 P2						☐		☐	☐			☐
Tylose H 300 NG4						☐			☐	☐	☐	☐
Tylose H 4000 NG4					☐	☐	☐	☐	☐	☐	☐	
Tylose H 10000 NG4			☐		☐		☐	☐	☐			
Tylose H 10000 P2			☐		☐							
Tylose H 15000 YP2			☐									
Tylose H 30000 YP2			☐									
Tylose HS 30000 YP2			☐									
Tylose H 60000 YP2			☐									
Tylose H 100000 YP2	☐	☐		☐								
Tylose HS 100000 YP2	☐	☐		☐								
Tylose H 100000 NP2	☐	☐		☐								
Cosmetic												
Tylose H 27 NG4						■			■			■
Tylose H 370 NG4						■			■			■
Tylose H 4070 NG4					■	■	■	■	■	■	■	
Tylose H 30070 NP2			■									
Tylose H 100070 NP2	■	■		■								

■ highly recommended ☐ recommended

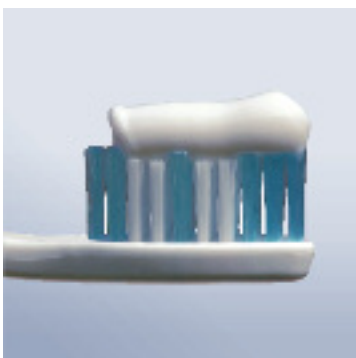
Typical Tylose® H Grades for Personal Care Applications

Tylose grades	Viscosity			Form supplied
	Viscosity grade 1) ca. [mPas]	Viscosity range 2) as specified [mPas]	Viscosity grade 3) ca. [mPas]	
Standard				
Tylose H 15 YG4	15	150 - 230 (4.75 %)	200 (5.0 %)	Granules, delayed solubility
Tylose H 20 P2	20	40 - 80 (2.85 %)	300 (5.0 %)	Powder, readily soluble
Tylose H 300 NG4	300	400 - 700 (1.90 %)	550 (2.0 %)	Granules, non delayed
Tylose H 4000 NG4	4000	4500 - 6500 (1.90 %)	4500 (2.0 %)	Granules, non delayed
Tylose H 10000 NG4	10000	8000 - 11000 (1.90 %)	7000 (2.0 %)	Granules, non delayed
Tylose H 10000 P2	10000	8000 - 11000 (1.90 %)	7000 (2.0 %)	Powder, readily soluble
Tylose H 15000 YP2	15000	11000 - 14000 (1.90 %)	1200 (1.0 %)	Powder, delayed solubility
Tylose H 30000 YP2	30000	16000 - 21000 (1.90 %)	2000 (1.0 %)	Powder, delayed solubility
Tylose HS 30000 YP2	30000	16000 - 21000 (1.90 %)	2000 (1.0 %)	Powder, delayed solubility
Tylose H 60000 YP2	60000	22000 - 27000 (1.90 %)	2800 (1.0 %)	Powder, delayed solubility
Tylose H 100000 YP2	100000	4200 - 5500 (1.00 %)	4500 (1.0 %)	Powder, delayed solubility
Tylose HS 100000 YP2	100000	4200 - 5500 (1.00 %)	4500 (1.0 %)	Powder, delayed solubility
Tylose H 100000 NP2	100000	4200 - 5500 (1.00 %)	4500 (1.0 %)	Powder, non delayed
Cosmetic				
Tylose H 27 NG4	20	40 - 80 (2.85 %)	300 (5.0 %)	Granules, non delayed
Tylose H 370 NG4	300	400 - 700 (1.90 %)	550 (2.0 %)	Granules, non delayed
Tylose H 4070 NG4	4000	4500 - 6500 (1.90 %)	4500 (2.0 %)	Granules, non delayed
Tylose H 30070 NP2	30000	16000 - 21000 (1.90 %)	2000 (1.0 %)	Powder, non delayed
Tylose H 100070 NP2	100000	4200 - 5500 (1.00 %)	4500 (1.0 %)	Powder, non delayed

1) Hoesppler falling ball viscometer, 1.9 % absolutely dry, 20°C, 20°GH

2) Brookfield RV, (concentration in %) absolutely dry, 20°C, 20°GH

3) Brookfield LV, (concentration in %) absolutely dry, 25°C, deion. water



Nomenclature of Tylose®

Example: Tylose H 4070 NG4

H		4070		NG4		
Chemical composition Type of etherification		Viscosity level and modification		Particle size distribution and chemical refinement		
M H O A	Type of ether	60000 30000 15000 10000 6000 4000 2000 200 ⋮ 70	Viscosity level The viscosity level is based on Hoesppler: 2% solution of the commercial product with 5% moisture content, 20°C, 20° German hardness (GH)	Y	Delayed solubility products	
	Methyl					
	Hydroxyethyl					
	Hydroxypropyl					
	Allyl					
B S T	Degree of etherification			N	non-delayed solubility products (only for Tylose H grades) *	
	Special higher degrees of etherification, depending on the individual type of ether					
			highly purified cosmetic quality			
					Degree of particle size	
					Types of granules:	
				G4	Granules (< 500 µm)	
				G6	Granules (< 400 µm)	
				G8	Granules (< 300 µm)	
					Powder types:	
				P2	Powder (< 180 µm)	
				P4	Fine powder (< 125 µm)	
				P6	Ultra fine powder (< 100 µm)	

* Tylose MH and MO Grades are not explicitly marked by „N“, even if these products are „non-delayed solubility products“.

Location and Contacts



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