




## Rheological Additives for Cosmetic Applications

A clear glass bottle is tilted, pouring a thick, clear liquid into a glass dish. The liquid is captured in mid-pour, creating a smooth, continuous stream. The background is a soft, light blue gradient.

## Rheological Additives for Cosmetic Applications

# Water phase

## PURE THIX

### Non-ionic associative thickener

#### Product Description

PURE THIX-1442 is a non-ionic hydrophobic modified polymer flake. It forms clear aqueous solutions and is designed especially for personal care formulations. PURE THIX-1442 provides pseudoplastic flow behavior by associative thickening with other formulation ingredients.

#### Benefits

- Form crystal clear gels
- Pseudoplastic flow behavior
- Very good salt tolerance
- Compatible with non-ionic, anionic and cationic surfactants
- Does not require neutralization
- Viscosity is pH-independent in the range from pH 5.5 and higher
- "Associative" thickening with other formulation ingredients

#### Applications

- Bath and Shower Gels
- Color Cosmetic Products
- Creams and Lotions
- Hair Care and Styling Products
- Sunscreen Products

#### Delivery form

- Flakes

Product	Article No.	INCI Name	CAS- No.	EINECS/ ELINCS	Viscosity/ Stabilization	Application field/ Properties	Packages
PURE THIX-1442	020631 020632	Polyether-1	415696-59-2	Polymer	+ / -	honey-like texture	10kg 100kg

+ high | o medium | - no



# Water phase

## LAPONITE

### Synthetic hydrophilic layered silicates

#### Product Description

LAPONITE products are synthetic layered silicates with low heavy metal content. They are insoluble in water but hydrate and swell to give clear and colorless colloidal dispersions in water or aqueous solutions of alcohols. At concentrations of 2 % or higher in water, highly thixotropic gels are obtained. The unique shear thinning and thixotropic rheology of LAPONITE products improve the skin feel of personal care products. Formulations will have a light, non-sticky texture. LAPONITE products enhance stability of formulations and keep particles, pigments or solid actives suspended.

#### Benefits

- Stabilizer
- Form clear gels
- Prevent sedimentation of beads, pigments, and other suspended particles
- Atomize well in aerosols or pump sprays
- Stabilize O/W emulsions
- Compatible with water-miscible solvents
- Application range pH 5.5 and higher
- Work over a wide temperature range

#### Applications

- Bath and Shower Gels
- Creams and Lotions
- Depilatory Creams
- Liquid Make-Ups
- Shampoos
- Sunscreen Products
- Toothpaste

#### Delivery form

- Powder

Product	Article No.	INCI Names	CAS- No.	EINECS/ ELINCS	Viscosity/ Stabilization	Application field/ Properties	Packages
LAPONITE-XLG XR*	021196	Lithium Magnesium Sodium Silicate (nano)	53320-86-8	258-476-2	+ / +	gel forming grade for products formulated at pH 6.5 and higher	25 kg
LAPONITE-XL 21 XR*	021769	Sodium Magnesium Fluorosilicate (nano)	85085-18-3	285-349-9	+ / +	gel forming grade for products formulated at pH 4.5 and higher	25 kg
LAPONITE-XLS XR*	021035	Lithium Magnesium Sodium Silicate (nano) (and) Tetrasodium Pyrophosphate	53320-86-8 7722-88-5	258-476-2 231-767-1	+ / + (after gel formation)	sol forming grade, delayed gel formation	25 kg

+ high | o medium | - no

\*XR products are sterilized by gamma-irradiation.



# Water phase

## GELWHITE and OPTIGEL

### Natural hydrophilic layered silicates

#### Product Description

GELWHITE and OPTIGEL products are activated bentonite products. They are used as a thixotropic agent in water-based systems with excellent anti-settling and stabilizing properties.

#### Benefits

- Form thixotropic gels in water
- Stabilize suspensions and O/W emulsions
- Depending on grade medium or high thickening
- Heat resistant thickening effect
- Add smoothness to product
- Adsorb sebum

#### Applications

- Anti-Wrinkle Lotions (e.g. with Fruit Acids)
- Bath and Shower Gels
- Creams and Lotions
- Facial Masks
- Liquid Make-Ups
- Sunscreen Products

#### Delivery form

- Powder

Product	Article No.	INCI Name	CAS- No.	EINECS/ ELINCS	Viscosity/ Stabilization	Application field/ Properties	Packages
GELWHITE-L*	020627	Bentonite	1302-78-9	215-108-5	o / +	low viscous grade e.g. for masks	25 kg
GELWHITE-H XR**	020628	Bentonite	1302-78-9	215-108-5	o / +	purified grade with good swell ability	25 kg
OPTIGEL-CL*	020623	Magnesium Aluminum Silicate	1327-43-1	215-478-8	o / +	white grade with medium swell ability	25 kg
OPTIGEL-CL XR**	020622	Magnesium Aluminum Silicate	1327-43-1	215-478-8	o / +	white grade with medium swell ability	25 kg
OPTIGEL-CK*	020624	Bentonite	1302-78-9	215-108-5	o / +	best swell ability and most efficient grade	25 kg
OPTIGEL-CK XR**	020625	Bentonite	1302-78-9	215-108-5	o / +	best swell ability and most efficient grade	25 kg
OPTIGEL-WX XR**	020620	Bentonite (and) Xanthan Gum	1302-78-9 11138-66-2	215-108-5 234-394-2	+ / +	modified grade with high viscosity	25 kg
OPTIGEL-WM	020619	Bentonite (and) Cellulose Gum	1302-78-9 9004-32-4	215-108-5 Polymer	o / +	modified grade with very high viscosity	25 kg

+ high | o medium | - no

\*Certified according to the natural and organic standards of ECOCERT.

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# Oil phase, organic phase

## TIXOGEL

### Natural organophilic layered silicates

#### Product Description

TIXOGEL products are organically modified bentonites designed for use in cosmetic and personal care systems to develop thixotropic rheological control and suspension. They are designed to impart a high degree of gelling efficiency over a wide range of oils or solvents.

#### Benefits

- High and constant thixotropic thickening
- Avoid settling and phase separation
- Stabilize W/O emulsions
- Help to work over a wide temperature range
- Improve spreadability of cosmetic products
- Impart a soft, elegant feel

#### Applications

- Antiperspirants
- Creams and Lotions
- Liquid Make-Ups
- Nail Lacquers
- Sunscreen Products
- Wax Based Products (e.g. Lipstick, Cream Eye Shadow)

#### Delivery form

- Powder

Product	Article No.	INCI Names	CAS- No.	EINECS/ ELINCS	Product Characteristics	Viscosity/ Stabilization	Application field / Properties	Packages
TIXOGEL-VZ V	020615	Stearalkonium Bentonite	130501-87-0	-	standard grade, vegetable based	+ / +	polar to medium polar systems	20 kg
TIXOGEL-MP 250	020610	Stearalkonium Bentonite	130501-87-0	-	easy dispersible grade, vegetable based			20 kg
TIXOGEL-VP V XR*	020617	Quaternium-90 Bentonite	226226-22-8	436-030-1	standard grade, vegetable based		medium polar to unpolar systems	22,7 kg

+ high | o medium | - no

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## Oil phase, organic phase

# GARAMITE

## Natural organophilic mixed silicates

### Product Description

GARAMITE products were developed using the patented Mixed Mineral Thixotrope (MMT) technology. The MMT technology provides performance benefits which cannot be achieved by traditional organoclay additives. Due to the multiple particle morphologies of GARAMITE, the powder disperses very easily into oils and solvents with only moderate shear and no polar activator is needed.

### Benefits

- Very easy to disperse with moderate shear
- High and constant thixotropic thickening
- Outstanding anti-settling and anti-syneresis properties
- Improve thermal stability
- Ensure good sprayability of aerosols
- Improve spreadability of cosmetic products
- Impart a light skin feel

### Applications

- Antiperspirants
- Color Cosmetics (e.g. Mascara, Lipstick, etc.)
- Make-Up
- Powder Products
- Sunscreen Products

### Delivery form

- Powder

Product	Article No.	INCI Name	Viscosity/ Stabilization	Application field / Properties	Packages
GARAMITE-7308 XR*	20633	Quaternium-90 Sepiolite (and) Quaternium-90 Montmorillonite	o / +	low to medium polar systems	10 kg

+ high | o medium | - no

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## Oil phase, organic phase

# TIXOGEL Mastergels

## Fully activated natural organophilic layered silicates

### Product Description

TIXOGEL Mastergels are combinations of oils and organically modified bentonites already activated with Propylene Carbonate. They can provide stable, predictable, reproducible thixotropic viscosity and pigment suspension in a variety of cosmetic formulation types. TIXOGEL Mastergels can be easily incorporated into the manufacturing cycle with medium shear dispersion equipment.

### Benefits

- Ready for use gels
- Can be incorporated with simple stirrers
- Cost reduction and time-saving in production
- Eliminate use of dry powder dispersion
- Constant rheological efficiency due to optimum dispersion and activation

### Applications

- Antiperspirants
- Creams and Lotions
- Make-Up
- Sunscreen Products
- Wax Based Products (e.g. Lipstick, Cream Eye-Shadow)

### Delivery form

- Paste

Product	Article No.	INCI Names	CAS- No.	EINECS/ELINCS	Packages
TIXOGEL-CCT 6030	021002	Caprylic/Capric Triglyceride (and) Stearylalkonium Bentonite (and) Propylene Carbonate	65381-09-1 130501-87-0 108-32-7	265-724-3 436-020-5 203-572-1	16 kg
TIXOGEL-IDD 1538	020999 021011	Isododecane (and) Quaternium-90 Bentonite (and) Propylene Carbonate	13475-82-6 226226-22-8 108-32-7	236-757-0 436-030-1 203-572-1	15 kg 154 kg
TIXOGEL-VSP 1438	20747 20750	Cyclopentasiloxane (and) Cyclohexasiloxane (and) Quaternium-90 Bentonite (and) Propylene Carbonate	541-02-6 540-97-6 226226-22-8 108-32-7	208-764-9 208-762-8 436-030-1 203-572-1	18 kg 200 kg

## Oil phase, organic phase

### RHEOCIN

#### Hydrogenated castor oil

##### Product Description

RHEOCIN is a hydrogenated castor oil derivative designed for use in cosmetic and personal care systems as a thixotropic gellant for oil phases. Rheological control with RHEOCIN provides excellent thickening effect and pigment suspension. The efficiency of RHEOCIN is sensitive to temperature and system polarity.

##### Benefits

- Form white gels
- Efficient thickener for silicone oils, mineral oils and vegetable oils
- Stabilize W/O emulsions
- Improve spreadability of cosmetic products
- Impart skin conditioning and water-repellent effect
- Require temperature controlled activation

##### Applications

- Creams and Lotions
- Hair Care Products
- Lipsticks
- Pressed Powders
- Sunscreen Products

##### Delivery form

- Powder

Product	Article No.	INCI Name	CAS- No.	EINECS/ELINCS	Viscosity/ Stabilization	Application Field/ Properties	Packages
RHEOCIN*	020634	Trihydroxystearin	139-44-6	205-364-6	+ / o	medium polar to unpolar systems	20 kg

+ high | o medium | - no

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# Rheological Additives for Cosmetic Applications

## Product Overview

Product	INCI Names	Article- No.	Packages
PURE THIX-1442	Polyether-1	020631 020632	10 kg 100 kg
LAPONITE-XLG XR*	Lithium Magnesium Sodium Silicate (nano)	021196	25 kg
LAPONITE-XL 21 XR*	Sodium Magnesium Fluorosilicate (nano)	021769	25 kg
LAPONITE-XLS XR*	Lithium Magnesium Sodium Silicate (nano) (and) Tetrasodium Pyrophosphate	021035	25 kg
GELWHITE-L**	Bentonite	020627	25 kg
GELWHITE-H XR*	Bentonite	020628	25 kg
OPTIGEL-CL**	Magnesium Aluminium Silicate	020623	25 kg
OPTIGEL-CL XR*	Magnesium Aluminium Silicate	020622	25 kg
OPTIGEL-CK**	Bentonite	020624	25 kg
OPTIGEL-CK XR*	Bentonite	020625	25 kg
OPTIGEL-WX XR*	Bentonite (and) Xanthan Gum	020620	25 kg
OPTIGEL-WM	Bentonite (and) Cellulose Gum	020619	25 kg
TIXOGEL-VZ V	Stearalkonium Bentonite	020615	20 kg
TIXOGEL-MP 250	Stearalkonium Bentonite	020610	20 kg
TIXOGEL-VP V XR*	Quaternium-90 Bentonite	020617	22,7 kg
GARAMITE-7308 XR*	Quaternium-90 Sepiolite (and) Quaternium-90 Montmorillonite	20633	10 kg
TIXOGEL-CCT 6030	Caprylic/Capric Triglyceride (and) Stearalkonium Bentonite (and) Propylene Carbonate	021002	16 kg
TIXOGEL-IDD 1538	Isododecane (and) Quaternium-90 Bentonite (and) Propylene Carbonate	020999 021011	15 kg 154 kg
TIXOGEL-VSP 1438	Cyclopentasiloxane (and) Cyclohexasiloxane (and) Quaternium-90 Bentonite (and) Propylene Carbonate	20747 20750	18 kg 200 kg
RHEOCIN**	Trihydroxystearin	020634	20 kg

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## ECKART globally represents and distributes BYK additives in Personal Care and Cosmetics

ECKART GmbH  
Guentersthal 4  
91235 Hartenstein, Germany  
Tel +49 9152 77-0  
Fax +49 9152 77-7008  
info.eckart@altana.com  
www.eckart.net

ECKART America Corporation  
830 East Erie Street  
Painesville, Ohio 44077  
USA  
Tel +1 440 954 7600  
Fax +1 440 354 6224  
info.eckart.cosmetics@altana.com  
www.eckart.net

ECKART Asia Ltd.  
Unit 3706-08, 37/F, Sunlight Tower  
248 Queen's Road East, Wan Chai  
Hong Kong  
Tel +852 3102 7200  
Fax +852 2882 5366  
info.eckart.asia@altana.com  
www.eckart.net

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