



Rheological Additives for Cosmetic Applications

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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	Viscosity/ Stabilization	Application field/ Properties	Packages
PURE THIX-1442	020631 020632	Polyether-1	+ / -	honey-like texture	10 kg 100 kg

+ 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	Viscosity/ Stabilization	Application field/ Properties	Packages
LAPONITE-XLG XR*	021196	Lithium Magnesium Sodium Silicate (nano)	+ / +	gel forming grade for products formulated at pH 6.5 and higher	25 kg
LAPONITE-XL 21 XR*	021769	Sodium Magnesium Fluorosilicate (nano)	+ / +	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	+ / + (after gel formation)	sol forming grade, dela- yed 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	Viscosity/ Stabilization	Application field/ Properties	Packages
GELWHITE-H XR**	020628	Bentonite	o / +	purified grade with good swell ability	25 kg
OPTIGEL-CL*	020623	Magnesium Aluminum Silicate	o / +	white grade with medium swell ability	25 kg
OPTIGEL-CL XR**	020622	Magnesium Aluminum Silicate	o / +	white grade with medium swell ability	25 kg
OPTIGEL-CK*	020624	Bentonite	o / +	best swell ability and most efficient grade	25 kg
OPTIGEL-CK XR**	020625	Bentonite	o / +	best swell ability and most efficient grade	25 kg
OPTIGEL-WX	020621	Bentonite (and) Xanthan Gum	+ / +	modified grade with high viscosity	25 kg

+ high | o medium | - no

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

**XR products are sterilized by gamma-irradiation.

Application Guide

Applications		Aqueous Phase						
		PURE THIX -	LAPONITE -			OPTIGEL -		
		1442	XLG XR	XL 21 XR	XLS XR	CL	CL XR	CK
Personal Care								
Skin and Sun Care	Creams	●	●	●	●	●	●	●
	Lotions	●	●	●	●	●	●	●
	Masks					●	●	●
	Sunscreens	●	●	●	●	●	●	●
Hair Care	Shampoos	●	○	○	○	●	●	●
	Conditioners	●						
	Hair Styling Products	●	○	○	○	●	●	●
Cleansing	Face Cleanser	●	○	○	○	●	●	●
	Bath and Shower Gels	●	○	○	○	●	●	●
Antiperspirant	AP Roll-on							
	AP Stick							
	AP Aerosol							
Color Cosmetics								
Eye	Eye Pencil	●	●	●	●	●	●	●
	Eye Shadow	●	●	●	●	●	●	●
	Mascara		●	●	●	●	●	●
Lip	Lipstick							
	Lip Tint					●	●	●
	Lip Gloss	●						
Make-up	Foundation/ Liquid Make-up	●	●	●	●	●	●	●
	Blusher		●	●	●	●	●	●
	Pressed Powder							
Nail	Nail Polish		●	●	●			

- ● recommended
- commonly used in synergistic combinations with polymeric co-thickeners
- used e.g for improved pressability, skin feel or sebum adsorption

Please note: Suitability of each rheological additive has to be checked depending on the final formulation.

			Oil / Solvent Phase								
			GELWHITE -	TIXOGEL -						GARAMITE -	RHEOCIN
CK XR	WX	H XR	MP 250	VP V XR	VZ V	CCT 6030	VSP 1438	IDD 1538	7308 XR		
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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	Product Characteristics	Viscosity/ Stabilization	Application field / Properties	Packages
TIXOGEL-VZ V	020615	Stearalkonium Bentonite	standard grade, vegetable based	+ / +	polar to medium polar systems	20 kg
TIXOGEL-MP 250	020610	Stearalkonium Bentonite	easy dispersible grade, vegetable based			20 kg
TIXOGEL-VP V XR*	020617	Quaternium-90 Bentonite	standard grade, vegetable based		medium polar to unpolar systems	22,7 kg

+ high | o medium | - no

*XR products are sterilized by gamma-irradiation.

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	Packages
TIXOGEL-CCT 6030	021002	Caprylic/Capric Triglyceride (and) Stearalkonium Bentonite (and) Propylene Carbonate	16 kg
TIXOGEL-IDD 1538	020999 021011	Isododecane (and) Quaternium-90 Bentonite (and) Propylene Carbonate	15 kg 154 kg
TIXOGEL-VSP 1438	20747 20750	Cyclopentasiloxane (and) Cyclohexasiloxane (and) Quaternium-90 Bentonite (and) Propylene Carbonate	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	Viscosity/ Stabilization	Application Field/ Properties	Packages
RHEOCIN*	020634	Trihydroxystearin	+ / o	medium polar to unpolar systems	20 kg

+ high | o medium | - no

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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-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	Bentonite (and) Xanthan Gum	020621	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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