



# Ingredients for Household, Industrial, and Institutional Products

Vantage

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Vantage Specialties is a manufacturer of high-quality, specialty chemicals designed for use in a broad range of industrial and consumer applications. These specialty chemicals include methyl esters, silicone derivatives, emulsions, PEGs, and a variety of plant-derived surfactants and emulsifiers for Household, Industrial, and Institutional products. Vantage serves its customers with select ingredients for many applications, including:

- Low VOC and NPE-free cleaners
- Hard surface cleaners and degreasers
- Polishes for floors, furniture, and vehicles
- Automotive appearance products
- Conditioners and protectants for leather, vinyl, and rubber
- Odor neutralizers
- Laundry products

Vantage's multi-functional manufacturing facility, complete with state-of-the-art process and lab equipment, has many widely recognized quality certifications including: ISO 9001-2008, Kosher and Kosher for Passover (OU), Halal, USP/NF, and cGMP for food grade certified production.

### Specialty Emulsifiers

Vantage has developed specialty surfactants for unique formulations. A select group of these products is listed below with a brief description of their primary applications.

Product	Description	Appearance	Applications	USA	CAN		EU	JPN	KOR	CHN	AUS	PHL
				TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS
LUMULSE EP-EF	d-Limonene microemulsifier	Yellow liquid	Emulsifier for clear, microemulsions for hard surface cleaners and degreasers	•	•		•	•	•	•	•	•
LUMULSE EST-300	High erucic acid rapeseed alkoxylate	Yellow liquid	Emulsifier with lubricity; emulsifies methyl soyate	•			•					
LUMULSE EST-500 LF	Alcohol alkoxylate	Straw-colored liquid	Low foaming surfactant, detergent, wetting agent for hard surface cleaners	•	•		•		•	•	•	•

### Silicone Derivatives and Emulsions

Vantage produces a variety of specialty silicone derivatives that serve as performance-enhancing additives, including nonionic, anionic, and cationic silicone copolyol esters. Vantage also manufactures emulsions that are used in many types of applications, including mold releases, lubricants, polishes, and surface protectants. The emulsions are water-dispersible and can be used as bases for formulations or dilutable concentrates.

Product	Description	Appearance	Applications	USA	CAN		EU	JPN	KOR	CHN	AUS	PHL
				TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS
LAMBENT 703	Silicone copolyol ester blend	Straw-colored liquid	Wetting agent, rinse aid for car washes, gloss enhancer	PE	L							
LAMBENT MFF 159-100	Silicone copolymer blend	Straw-colored liquid	Wetting agent, rinse aid for car washes, gloss enhancer	•	•		•	•	•	•	•	•
LAMBENT MFF-199 SW	Silicone polyether	Amber liquid	Excellent wetting and spreading agent for aqueous solutions, including water-based cleaners	•	•		•		•	•	•	•
LAMBENT QUAT 400 M	Silicone quaternary compound	Yellow liquid	Rinse aid for car wash detergents, textile softener, anti-stat	•								
LAMBENT WAX WS	Silicone copolyol wax	White solid	Water-soluble wax, leaves hydrophilic film for sheeting, gloss enhancer	•	•		•	•	•	•	•	•
SYNGARD CPI	Silicone copolyol carboxylate	Light yellow liquid	Laundry care additive for softening	•								
SYNGARD CS WAX	Carnauba wax and silicone copolyol ester blend	Yellow liquid	Wetting agent, rinse aid for car washes, gloss enhancer	PE	L							
SYNGARD WD-A	Siliconized zinc compound	Light yellow liquid	Water-soluble odor neutralizer	•								
LAMBENT E-2140	60% Silicone	Milky white liquid	Lubricant, mold release, polish	•	•							
LAMBENT E-2140 35% FG	35% Silicone emulsion	Milky white liquid	Lubricant, mold release, polish; may be used as an additive as described in 21 CFR 175.300, 176.170, 176.180, and 177.2800	•	•		•	•	•	•	•	•
LAMBENT E-2145 HG	60% Silicone emulsion	Milky white liquid	Lubricant, mold release, surface treatment for rubber and vinyl; tire dressings for rich black finish (restores "new tire" look)	•	•							
SYNGARD WFA	38% Silicone emulsion	Milky white liquid	Lubricant, mold release, polish, additive for wind-shield wiper fluids for easy glide of wipers and water beading	•								

PE = Polymer Exempt

L = Import quantity may be limited

## Methyl Esters

Canola and soybean oil are the basis for Vantage's methyl esters. These plant-derived methyl esters can be used in environmentally-friendly cleaning products, including those requiring reduced VOC content.

Product	Description	Appearance	VOC	Applications	USA	CAN			EU	JPN	KOR	CHN	AUS	PHL
					TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS	
OLEOCAL ME-112	Methyl canolate	Yellow liquid	1.90%	Cleaners, degreasers; removes soils such as adhesives, resins, waxes, and graffiti	•	•			•	•	•	•	•	•
OLEOCAL ME-130	Methyl soyate	Yellow liquid	2.30%	Cleaners, degreasers; removes soils such as adhesives, resins, waxes, and graffiti	•	•			•		•	•	•	•

## Nonionic Surfactants

Vantage offers a variety of surfactant families, each with wide HLB ranges and various cloud points. Our core product chemistries include castor oil ethoxylates, alcohol and glycerine ethoxylates, EO/PO block copolymers, glycerol esters, PEGs, PEG esters, polysorbates, and sorbitan esters.

### Castor Oil Ethoxylates

Castor oil ethoxylates are resistant to hydrolysis and can be used in a wide pH range. They are commonly used as solubilizers and may be used to enhance the gelling properties of other surfactants in water-in-oil emulsions.

Product	Chemical Name	Appearance	HLB <sup>1</sup>	Cloud Point, °C (1% aq) <sup>2</sup>	USA	CAN			EU	JPN	KOR	CHN	AUS	PHL
					TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS	
LUMULSE CO-25	POE (25) Castor oil	Yellow liquid	10.8	>100	•	•			•	•	•	•	•	•
LUMULSE CO-40	POE (40) Castor oil	Yellow liquid	13	82	•	•			•	•	•	•	•	•
LUMULSE HCO-25	POE (25) Hydrogenated castor oil	Yellow liquid	10.8	88	•	•			•	•	•	•	•	•
LUMULSE HCO-40	POE (40) Hydrogenated castor oil	Soft yellow paste	14	100	•	•			•	•	•	•	•	•

### Ethoxylated Alcohols and Ethoxylated Glycerine

Ethoxylated alcohols and ethoxylated glycerine are compatible with anionic, cationic, and amphoteric surfactants to aid in formulating complex emulsions. They are resistant to hydrolysis and can be used in a wide pH range. Ethoxylated alcohols are emulsifiers and detergents, and are often used in hard surface cleaners and laundry products. They are also commonly used as NPE replacements. Ethoxylated glycerine products are excellent humectants, foam stabilizers, and pigment dispersants.

Product	Chemical Name	Appearance	HLB <sup>1</sup>	Cloud Point, °C (1% aq) <sup>2</sup>	USA	CAN			EU	JPN	KOR	CHN	AUS	PHL
					TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS	
LUMULSE 1804	Oleth-4	Opaque liquid	8	D	•	•			•	•	•	•	•	•
LUMULSE 1820	Oleth-20	White solid	15	>100	•	•			•	•	•	•	•	•
LUMULSE CS-20	Ceteareth-20	White flakes	15.2	>100	•	•			•		•	•	•	•
LUMULSE L-4	Laureth-4	Pale yellow liquid	9.5	D	•	•			•	•	•	•	•	•
LUMULSE L-7	Laureth-7	Pale yellow liquid	12.6	50	•	•			•	•	•	•	•	•
LUMULSE L-23	Laureth-23	White solid	16.7	>100	•	•			•	•	•	•	•	•
LUMULSE POE (12) Glycerine	Glycereth-12	Pale yellow liquid	17	>100	•	•			•		•	•	•	•
LUMULSE POE (26) Glycerine	Glycereth-26	Pale yellow liquid	18.4	>100	•	•			•		•	•	•	•

### EO/PO Block Copolymers

The following EO/PO block copolymers are used as rinse aids and in applications requiring low foam, such as automatic dishwashing detergents and hard surface cleaners.

Product	Chemical Name	Appearance	HLB <sup>1</sup>	Cloud Point, °C (1% aq) <sup>2</sup>	USA	CAN			EU	JPN	KOR	CHN	AUS	PHL
					TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS	
LUMULSE 1061-L	Poloxamer 181	Clear liquid	3	24	•	•			•	•	•	•	•	
LUMULSE 1062-L	Poloxamer 182	Clear liquid	7	32	•	•			•	•	•	•	•	

### Glycerol Esters

Glycerol esters are low HLB emulsifiers that will form water-in-oil emulsions when used alone. They may also be used to modify viscosity and stabilize emulsions.

Product	Chemical Name	Appearance	HLB <sup>1</sup>	Cloud Point, °C (1% aq) <sup>2</sup>	USA	CAN			EU	JPN	KOR	CHN	AUS	PHL
					TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS	
LUMULSE GMO K	Glycerol Monooleate	Yellow liquid	2.8	I	•	•			•	•	•	•	•	•
LUMULSE GMS K	Glycerol Monostearate	White flakes	3.9	I	•	•			•	•	•	•	•	•
LUMULSE PGO-3 K	Triglycerol Monooleate	Amber liquid	6.2	D	•	•			•	•	•	•	•	•

<sup>1</sup> Calculated HLB   <sup>2</sup> I = Insoluble in water, D = Dispersible in water

## Polyethylene Glycols (PEGs)

Polyethylene glycols, also known as PEGs, are water-soluble polymers which Vantage manufactures in molecular weights ranging from 200 to 8000. They are odorless with low color, irritation, and toxicity, and are commonly used in skin care and pharmaceutical applications. Due to their resistance to hydrolysis, PEGs may be used in a wide pH range making them suitable ingredients for cleaners.

Product	Chemical Name	Appearance	HLB <sup>1</sup>	USA			CAN		EU		JPN		KOR	CHN	AUS	PHL
				TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS				
LUMULSE PEG 200	Polyethylene glycol 200	Clear liquid	20	•	•			•	•	•	•	•				
LUMULSE PEG 300	Polyethylene glycol 300	Clear liquid	20	•	•			•	•	•	•	•				
LUMULSE PEG 400	Polyethylene glycol 400	Clear liquid	20	•	•			•	•	•	•	•				
LUMULSE PEG 600	Polyethylene glycol 600	Clear liquid	20	•	•			•	•	•	•	•				
LUMULSE PEG 1450	Polyethylene glycol 1450	White flakes	20	•	•			•	•	•	•	•				
LUMULSE PEG 3350	Polyethylene glycol 3350	White flakes	20	•	•			•	•	•	•	•				
LUMULSE PEG 8000	Polyethylene glycol 8000	White flakes	20	•	•			•	•	•	•	•				

## Polyethylene Glycol (PEG) Esters

PEG esters are mild fatty esters that offer emulsification, emolliency, and viscosity modification.

Product	Chemical Name	Appearance	HLB <sup>1</sup>	Cloud Point, °C (1% aq) <sup>2</sup>	USA			CAN		EU		JPN	KOR	CHN	AUS	PHL
					TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS			
LUMULSE 40-L V	PEG 400 Monolaurate	Yellow liquid	12.8	32	•	•			•	•	•	•	•	•	•	•
LUMULSE 40-O K	PEG 400 Monooleate	Yellow liquid	11.8	D	•	•			•	•	•	•	•	•	•	•
LUMULSE 40-S K	PEG 400 Monostearate	White solid	11.1	D	•	•			•	•	•	•	•	•	•	•
LUMULSE 42-O K	PEG 400 Dioleate	Yellow liquid	8.5	D	•	•			•	•	•	•	•	•	•	•
LUMULSE 62-O K	PEG 600 Dioleate	Yellow liquid	10.3	D	•	•			•	•	•	•	•	•	•	•
LUMULSE 602-S K	PEG 6000 Distearate	White flakes	18.4	57	•	•			•	•	•	•	•	•	•	•
LUMULSE POE (40) MS KP	PEG-40 Stearate	White flakes	17.2	97	•	•			•	•	•	•	•	•	•	•

## Sorbitan Esters and Polysorbates

Sorbitan esters and their ethoxylated counterparts, polysorbates, are used as emulsifiers, solubilizers, stabilizers, and suspension agents. Polysorbates are commonly used to solubilize oils and fragrances.

Product	Chemical Name	Appearance	HLB <sup>1</sup>	Cloud Point, °C (1% aq) <sup>2</sup>	USA			CAN		EU		JPN	KOR	CHN	AUS	PHL
					TSCA	DSL	NDSL	EINECS	ENCS	ECS	IECSC	AICS	PICCS			
LUMISORB SML K	Sorbitan monolaurate	Amber liquid	8.6	D	•	•			•	•	•	•	•	•	•	•
LUMISORB SMO K, LUMISORB SMO I	Sorbitan monooleate	Amber liquid	4.3	I	•	•			•	•	•	•	•	•	•	•
LUMISORB SMS KP	Sorbitan monostearate	Off-white flakes	4.7	D	•	•			•	•	•	•	•	•	•	•
LUMISORB SSO	Sorbitan sesquioleate	Amber liquid	3.7	I	•	•			•	•						•
LUMISORB STO	Sorbitan trioleate	Amber liquid	1.8	I	•	•			•	•	•	•	•	•	•	•
LUMISORB PSML-20 K	POE (20) Sorbitan monolaurate (Polysorbate 20)	Yellow liquid	16.7	97	•	•			•	•	•	•	•	•	•	•
LUMISORB PSML-80	POE (80) Sorbitan monolaurate	Yellow liquid	19.4	>100	•	•			•	•	•	•	•	•	•	•
LUMISORB PSMO-5 K	POE (5) Sorbitan monooleate (Polysorbate 81)	Yellow liquid	10	D	•	•			•	•	•	•	•	•	•	•
LUMISORB PSMO-20 K	POE (20) Sorbitan monooleate (Polysorbate 80)	Yellow liquid	15	>100	•	•			•	•	•	•	•	•	•	•
LUMISORB PSMS-20 K	POE (20) Sorbitan monostearate (Polysorbate 60)	Soft yellow solid	14.9	>100	•	•	•		•	•	•	•	•	•	•	•
LUMISORB PSTO-20 MO	POE (20) Sorbitan trioleate (Polysorbate 85)	Yellow liquid	11	D	•	•			•	•	•	•	•	•	•	•
LUMISORB PSTT-20 LM	POE (20) Sorbitan tritallate	Yellow liquid	11	D	•	•					•			•	•	•

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<sup>1</sup> Calculated HLB <sup>2</sup> I = Insoluble in water, D = Dispersible in water