# <a>Vantage</a>





#### **HISTORY and ABOUT US**

Vantage Specialties manufactures a wide array of functional ingredients and oleochemical derivatives including esters, alkoxylates, antifoam, specialty blends and encapsulated products. Vantage was founded in 1952 as Hodag Chemical. Today, we are proud to offer a diverse range of specialty chemicals for oilfield, industrial and consumer applications. Our state-of-the art facility in Gurnee, IL is the primary manufacturing site and headquarters for Vantage Specialties. We also have a manufacturing facility in Englewood, OH where we manufacture encapsulated products for a variety of markets.

#### **INNOVATION**

The evolving preferences of today's consumer and our customers drive Vantage's development of groundbreaking products. We eagerly tackle new challenges utilizing our application capabilities to design new technologies for the markets that we serve.

#### **OUALITY POLICY**

We are committed to providing products and services that meet or exceed our customer's expectations. With the full participation of every employee, we will foster continuous improvement of our quality management processes to ensure that these expectations are realized in an innovative and cost effective manner.

#### **PROCESS CAPABILITIES**

Our Gurnee production facility is ideal for the manufacture of esters and alkoxylates, Vantage's two largest volume processes, along with silicone emulsions and derivatives. In addition to 25 reactors, the facility boasts 3 rail spurs with 7 unloading spots, 9 loading docks and over 900,000 gallons of storage capacity for increased materials handling.

Esterification	Alkoxylation	Silicones/Silanes	Antifoams	Vegetable Oils
Fatty Esters	Ethoxylated Alcohols	Silicone Emulsions	Silicone	Canola Oil
Glycerol Esters	Ethoxylated Amines	Silicone Fluids	Non-silicone	High Oleic Canola Oils
Methyl Esters	Ethoxylated Esters	Functionalized Silicones		HEAR Oil
PEG Esters	Ethoxylated Glycerine			
Phosphate Esters	Ethoxylated Sorbitol			
Polyglycerol Esters	EO/PO Copolymers			
Propoxylated Esters	PEGs			
Sorbitan Esters	Polysorbates			
Sorbitan Esters				

#### **CUSTOM AND CONTRACT CHEMICAL MANUFACTURING**

Vantage currently engages in custom and contract manufacturing for customers requiring specific specialty chemical needs. Our business team and research staff work with our customers to execute the best total solution. These business transactions are conducted under terms of strict confidentiality.

### **CUSTOMER CENTRIC APPROACH**

Vantage customizes our services to maximize each and every customer experience. This is achieved by our dedicated customer service staff, attentive and knowledgeable sales and technical teams as well as timely delivery of our products.

TRADE NAME	PRIMARY DESCRIPTION	ATTRIBUTE							TYPICAL PROPERTIES			
		Lubricity Additive	Emulsifier	Wetting Agent	Corrosion Inhibitor	Surface Tension Reducer	Dispersant	Foamers	нгв	Pour Point, °C	Form @ 25 °C	
LUMISORB® PSML-20 K	Polysorbate 20		•	•		•			16.7	-10	clear liquid	
LUMISORB PSMO-20 FGK	Polysorbate 80	•	•	•		•			15	-14	clear liquid	
LUMISORB PSTO-20 MO	Polysorbate 85		•	•		•			10.3	-20	clear liquid	
LUMISORB PSMO-5 K	Polysorbate 81	•	•	•		•			10	-17	clear liquid	
LUMISORB SML V	Sorbitan monolaurate	•	•						8.6	13	amber liquid	
LUMISORB SMO I	Sorbitan monooleate	•	•						4.3	-22	yellow liquid	
LUMISORB GMO K	Glycerol monooleate	•	•						3.8	13.5	yellow liquid	
LUMISORB SSO	Sorbitan sesquioleate	•	•				•		3.7	-12	yellow liquid	
LUMULSE® GMT-40	Glycerol monotallate	•	•						2.8	-18	amber liquid	
LUMISORB STO MO	Sorbitan trioleate	•	•						1.8	-37	amber liquid	
LAMCHEM® 1218	Modified cocoamide DEA	•	•	•						-6	amber liquid	
LUMULSE 1061-L	EO/PO block copolymer	•	•						3	-30	clear liquid	
LUMULSE 1062-L	EO/PO block copolymer	•	•						7	-4	clear liquid	
LUMULSE 2017-R	EO/PO block copolymer	•	•						8	-25	clear liquid	
LUMULSE 2025-R	EO/PO block copolymer	•	•						6.3	-5	clear liquid	
LUMULSE 4017-R	EO/PO block copolymer	•	•						9	10	clear liquid	
LUMULSE CO-25	Ethoxylated castor oil	•	•	•					10.8	5	yellow liquid	
LUMULSE CO-30	Ethoxylated castor oil	•	•	•					11.5	9	yellow liquid	
LUMULSE CO-40	Ethoxylated castor oil	•	•	•					13	14	yellow liquid	
LUMULSE EST-300	High erucic acid rapeseed alkoxylate	•	•	•					16	-5	yellow liquid	
LUMULSE EST-500 LF	Alkoxylated linear alcohol		•	•			•		10	-9	clear liquid	
LUMULSE EST-520	Alkoxylated lauryl alcohol		•	•							clear liquid	
LUMULSE EST-610	EO/PO block copolymer dioleate	•	•	•					5	0	yellow liquid	

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LUMULSE GML K	Glycerol monolaurate	•	•	•					5.2	26	yellow liquid
LUMULSE HCO-16T	Ethoxylated hydrogenated castor oil	•	•						9.1		yellow liquid
LUMULSE HCO-25	Ethoxylated hydrogenated castor oil	•	•						10.8	5	yellow liquid
LUMULSE HCO-40	Ethoxylated hydrogenated castor oil	•	•						14		yellow liquid
LUMULSE PEG 200	Polyethylene glycol 200		•						20		clear liquid
LUMULSE PEG 300	Polyethylene glycol 300		•						20	-11	clear liquid
LUMULSE PEG 400	Polyethylene glycol 400		•						20	6	clear liquid
LUMULSE PEG 600	Polyethylene glycol 600		•						20	20	clear liquid
OLEOCAL® C-102	Canola oil	•	•							-18	yellow liquid
OLEOCAL C-104	High oleic canola oil	•								-15	yellow liquid
OLEOCAL ME-112	Methyl canolate	•								-15	yellow liquid
OLEOCAL ME-130	Methyl soyate	•								-6	yellow liquid
OLEOCAL ME-70 V	Methyl oleate	•								7	yellow liquid
POLYCAL® TMP 18-1	TMP trioleate	•								-42	yellow liquid
ERUCICAL® H-102	High erucic acid rapeseed oil	•								12	yellow liquid
ERUCICAL H-107	Erucic acid	•								11	yellow liquid
LUMULSE POE (2) OLEYLAMINE	Ethoxylated oleylamine									1	amber liquid
LAMCHEM PE-130 K	Phosphated mono and diglycerides	•	•		•				3	-8	opaque liquid
LAMCHEM PE-108 K	Phosphated mono and diglycerides	•	•		•				3	-15	clear liquid
LUMULSE EST 916	Ethoxylated C9-C11 alcohol		•	•		•			12.4	6	clear liquid
LUMULSE EST 918	Ethoxylated C9-C11 alcohol		•	•		•			13.9	15	clear liquid
LUMULSE EST 2365	Ethoxylated C9-C11 alcohol		•	•		•			11.9	19	clear liquid
LUMULSE EST 257	Ethoxyalted C12-C13 alcohol		•	•		•			12.2	20	clear liquid

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		Lubricity Additive	Emulsifier	Wetting Agent	Corrosion Inhibitor	Surface Tension Reducer	Dispersant	Foamers	НІВ	Pour Point, °C	Form @ 25 °C	
GUARMULSE® EST 900	Ethoxylated tridecyl alcohol		•	•		•			13.2	2.8	clear liquid	
LUMULSE L-4	Ethoxylated lauryl alcohol		•	•		•			9.4	12	clear liquid	
LUMULSE L-7	Ethoxylated lauryl alcohol		•	•		•			12.3	15	clear liquid	
LAMCHEM 1230	Cocoamidopropyl betaine			•				•		-5	clear liquid	
LAMCHEM 1240	Cocoamidopropyl betaine			•				•		-5	clear liquid	
LAMCHEM 1430	Laurylamidopropyl betaine			•				•		-3	clear liquid	
LAMCHEM 1250 S	Cocoamidopropyl hydroxysultaine			•				•		4.4	yellow liquid	
LAMCHEM 1450 S	Laurylamidopropyl hydroxysultaine			•				•			yellow liquid	
LAMCHEM EST 700	Dioctylsulfosuccinate			•			•				yellow liquid	
LAMCHEM EST 40	Linear sulfonated alkylbenzene			•			•				yellow liquid	
LAMCHEM EST 98 S	Linear sulfonated alkylbenzene			•			•				yellow liquid	
LAMCHEM T-20	Tallowamine diethylene sulfate quat			•			•				yellow liquid	
LAMCHEM QT-50	C12-C14 alkyl benzylammonium chloride			•	•		•			-13	yellow liquid	
LAMCHEM QT-80	C12-C14 alkyl benzylammonium chloride			•	•		•			-13	yellow liquid	
LAMCHEM QT-85	C12-C14 alkyl benzylammonium chloride			•	•		•			-13	yellow liquid	
LAMCHEM QT-90	Polyquaternary chloride			•	•		•				yellow liquid	
LAMCHEM AP-75	Benzyl alkyl pyridene quat			•	•		•				yellow liquid	
LAMCHEM QT-60	Benzyltriethylammonium chloride			•	•						yellow liquid	
LAMCHEM 18 T	TOFA Imidazoline										amber liquid	
	EN	ICAPSUL	ATED VI	SOCITY E	BREAKER	S						
Lipoparticle™ 81490	Coated Sodium bromate										solid	
Lipoparticle 81660	Coated Ammonium persulfate										solid	
Lipoparticle 81540	Coated Potassium persulfate										solid	

## **Vantage Specialties, Inc.**

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