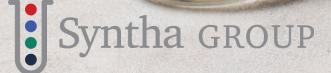
NATURAL PRODUCT LINE

E T H O X The American Chemical Company®

Custom Synthesis



Continuing our dedication to supporting customers and their formulation needs, Ethox Chemicals and Custom Synthesis Natural Product Line utilizes the ISO 16128 certification method to calculate the Naturally Derived content our products. Naturally Derived Ingredients originate from natural ingredients which have undergone allowed chemical or biological reactions, and have a Natural Origin Index** based on their natural content. The ISO 16128 method provides our industry with a global standard for calculating natural content of ingredients and products to bring transparency to the consumer.

PRODUCT	INCI NAME	DESCRIPTION	NATURAL ORIGIN INDEX
C'ESTER MCT	CAPRIC/CAPRYLIC TRIGLYCERIDE	Emollient, quickly imparts conditioning to the skin/hair, and provides a lightweight and non-greasy barrier. As a dispersing agent, it helps enhance the delivery of vitamins, pigments and other active ingredients. Clear, odorless.	1
C'ESTER CP*	CETYL PALMITATE	Waxy, lubricative, imparts body to formulations, binds powders to compact, provides the skin a soft and smooth appearance	1
ETHOXCARE [®] 5213	COCOGLYCERIDES	Liquid moisturizer, emollient and conditioning agent comprised of mono, di, and triglycerides derived from coconut oil.	1
ETHOXCARE® COCO GLYC	COCOGLYCERIDES	Emollient, medium spreading with high polarity. Good emulsifier. Compatible with sunscreen filters.	1
ETHOXCARE [®] 4075	GLYCERYL ISOSTEARATE (and) CAPRYLIC/CAPRIC GLYCERIDES	Viscosity modifier for aqueous surfactant and non-aqueous systems. Medium spreading emollient. In non-aqueous systems used to create soft to firm solid sticks with clarity ranging from clear to opaque.	1
ETHOXCARE [®] GMS PURE	GLYCERYL STEARATE	Thickening agent, emulsifier, anti-sticking agent, dispersing agent, solvent, greasing agent, and perfume diluent.	1
ETHOXCARE® GMS-SE	GLYCERYL STEARATE SE	Emollient, moisturizer, viscosity builder, opacifier, surfactant, and nonionic emulsifier and co-emulsifier for oil-in-water and water-in-oil emulsions.	1
C'ESTER PLPR*	POLYLACTATE/RICINOLEATE	Film former that improves moisture resistance and aids in the dispersion of pigments. Imparts smoothing, and hold to hair styling products. Thermally stable to 260C as determined by thermogravimetric analysis.	1
C'ESTER PLPHS*	POLYLACTATE/ HYDROXYSTEARATE (proposed)	Film former that improves moisture resistance and aids in the dispersion of pigments. Imparts smoothing, and hold to hair styling products. Thermally stable to 260C as determined by thermogravimetric analysis.	1
C'ESTER MM*	MYRISTYL MYRISTATE	Vegetable-derived ester that is useful as a thickening agent, opacifier, and skin conditioning agent. It leaves a pleasant, powdery-soft after feel and helps moisture retention of skin.	1
ETHOXCARE® NATURAL PEARL	LAURYL GLUCOSIDE (and) TRISTEARYL CITRATE (and) WATER	Pearlizing agent and emulsifier. Cold Process	1
C'ESTER PHSA-6*	POLYHYDROXYSTEARIC ACID	All-natural polymeric surfactant, emulsifier, film-former, emollient and pigment dispersant.	1
ETHOXCARE® SL	SORBITAN LAURATE	Emulsifier for O/W. HLB of about. 8-10	1
ETHOXCARE® SO	SORBITAN OLEATE	Emulsifier for O/W. HLB of about 3-5, pigment dispersing aid, thickener, lubricating agent, and emollient	1
ETHOXCARE® SS	SORBITAN STEARATE	Emulsifier for O/W. HLB of about 4-6. Imparts stability in product.	1
C'ESTER PB-4P*	PENTAERYTHRIRHTYL TETRABEHENATE	Emollient that gives matte finish, long lasting hold while providing conditioning.	0.91
ETHOXCARE® BTMS-25	BEHENTRIMONIUM METHOSULFATE (and) CETEARYL ALCOHOL	High efficiency, cationic self-emulsifying wax and conditioner.	0.91
ETHOXCARE® EMULSIFYING WAX*	CETEARYL ALCOHOL (and) POLYSORBATE 60	Emulsifier for O/W.	0.86

* MOQ greater than one drum

** Natural Origin Index represents the fraction of naturally derived content. A Natural Origin Index of "1" is 100% naturally derived.

Roundtable on Sustainable Palm Oil (RSPO): Mass Balance available upon request for ETHOXCARE® Palm Based Products.



INNOVATIVE. RESPONSIVE. RELIABLE.

PRODUCT		DESCRIPTION	NATURAL ORIGIN INDEX
C'ESTER NBS VPP C'ESTER KBS (kosher)	BUTYL STEARATE - Vegetable & Kosher	A lubricant on the skin's surface providing a soft and smooth appearance. It forms a thin, non-greasy, hydrophobic film when applied to the skin or lips. It decreases the thickness of lipsticks making them glide easier.	0.84
ETHOXCARE [®] 4414	DITRIMETHYLOLPROPANE TETRASTEARATE	Film forming wax that thickens oils, provides moisture barrier properties. Reduces brittleness in color cosmetic formulations.	0.82
ETHOXCARE® HCO-5	PEG-5 HYDROGENATED CASTOR OIL	Emulsifier and emollient	0.81
ETHOXCARE® CO-5	PEG-5 CASTOR OIL	Emulsifier and emollient. HLB of about 3-5.	0.80
C'ESTER BO	BUTYL OLEATE	Emollient and low molecular ester with good water solubility.	0.79
ETHOXCARE® 4985	CETEARYL ALCOHOL (and) STEARETH-30 (and) CETETH-10	Surfactant, Emulsifier, Viscosity Modifier	0.79
ETHOXCARE® SOYSPERSE	BIS-HYDROXYETHYL AMINOETHYL MALEATED SOYBEAN OIL	Pigment dispersant allowing for higher loading of pigments without viscosity build.	0.75†
ETHOXCARE® OA-2	OLETH-2	Emulsifier for W/O. HLB of about 4-6. Wetting agent.	0.75
ETHOXCARE® OAM-2	PEG-2 OLEAMINE	Emulsifier. Suitable for alkaline emulsions. Acts as a cationic surfactant.	0.75
ETHOXCARE® SAM-2	PEG-2 STEARAMINE	Emulsifier and conditioner.	0.75
ETHOXCARE® SA-2	STEARETH-2	Emulsifier for W/O. HLB of about 4-6.	0.75
ETHOXCARE [®] LAN [*]	PEG-5 DITRIMETHYLOLPROPANE TETRAHYDROXYSTEARATE	Lanoline alternative. Film former. Adds gloss and shine to hair in pomades.	0.73
ETHOXCARE® CA-2	CETETH-2	Emulsifier for W/O. HLB of about 4-6. Stabilizer, thickener	0.72
ETHOXCARE [®] PS-81	POLYSORBATE 81	Emulsifier for O/W. HLB of about 9-11. Solubilizer	0.72
ETHOXCARE [®] P2-MP	PPG-2 MYRISTYL ETHER PROPIONATE	Emollient and solvent.	0.71
C'ESTER EHO	ETHYLHEXYL OLEATE	Emollient, medium spreading with high polarity. Good emulsifier. Compatible with sunscreen.	0.68
C'ESTER EHP	ETHYLHEXYL PALMITATE	Emollient, fast spreading with a dry feel and solubilizer .	0.68
C'ESTER EHS	ETHYLHEXYL STEARATE	Emollient, fast spreading with a dry feel and solubilizer .	0.68
ETHOXCARE® LA-2	LAURETH-2	Emulsifier for O/W. HLB of about 5-7. Foam booster, opacifier, solubilizer.	0.68
ETHOXCARE® CAM-2	PEG-2 COCAMINE	Emulsifier for O/W. HLB of about 5-7. Non-ionic suitable for alkaline emulsions.	0.68
C'ESTER PTIS*	PENTAERYTHRITYL TETRAISOSTEARATE	Emollient - slow spreading, Adds gloss and shine.	0.68
ETHOXCARE® PS-21	POLYSORBATE 21	Emulsifier for O/W. HLB of about 12-14. Solubilizer	0.68
C'ESTER E092*	CETYL/LAURYL/MYRISTYL BENZOATE	Emollient, excellent solvent for lipophilic raw materials especially sunscreens. Suitable alternative to C12-15 ALKYL BENZOATE.	0.67
C'ESTER V*	DECYL OLEATE	Emollient, fast spreading, light non-oily velvety feel to the skin, creating a barrier for the skin, reducing the tackiness of other heavy oils in a formulation.	0.67
ETHOXCARE® DL-5	PEG-5 DILAURATE	Emulsifier for O/W. HLB of about 5-7. Solubilizer and non-ionic surfactant.	0.64
ETHOXCARE® DO-9	PEG-8 DIOLEATE	Emulsifier for O/W. HLB of about 7-9. Emollient, viscosity builder, and electrolyte tolerant.	0.62
ETHOXCARE® CSA-4	CETEARETH-4	Emulsifier for O/W. HLB of about 7-9.	0.62
C'ESTER TDS	TRIDECYL STEARATE	Fast-absorbing emollient that leaves no shine. Dry, non-greasy feel on application with an elegant, velvety after feel.	0.61
ETHOXCARE® GPHS	GLYCERETH-18 POLYHYDROXYSTEARATE	Emulsifier for W/O. Cold process. Inverse emulsifier low pH stability. 1% use level.	0.59

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 $^{\dagger}\textsc{Variable}$, 10% maleated with 1/1 TEA/maleate



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ETHOCARE® CSA-3	CETEARETH-3	Emulsifier for O/W. HLB of about 6-8.	0.58
ETHOXCARE® 4216	CETEARYL ALCOHOL (and) CETEARETH-20	Emulsifier, non ionic, forms stable emulsions in extremes pH ranges and electrolyte tolerant.	0.58
ETHOXCARE® LA-3	LAURETH-3	Emulsifier for O/W. HLB of about 7-9. Foam booster, opacifier.	0.58
ETHOXCARE® MO-5	PEG-5 OLEATE	Emulsifier for O/W. HLB of about 7-9. Electrolyte tolerant.	0.58
ETHOXCARE® HCO-16	PEG-16 HYDROGENATED CASTOR OIL	Emulsifier for O/W. HLB of about 8-10.	0.57
ETHOXCARE® CO-16	PEG-16 CASTOR OIL	Emulsifier for O/W. HLB of about 8-10.	0.57
ETHOXCARE® OAM-5	PEG-5 OLEAMINE	Emulsifier for O/W. HLB of about 9-11. Viscosity booster. Good for alkaline emulsions.	0.57
ETHOXCARE® OA-5	OLETH-5	Emulsifier for O/W. HLB of about 8-10.	0.59
ETHOXCARE® DL-9	PEG-8 DILAURATE	Emulsifier for O/W.	0.55
ETHOXCARE® P3-ME	PPG-3 MYRISTYL ETHER	Emollient, solubilizer, surfactant. Gives lubricity with a light feel.	0.55
ETHOXCARE® PS-85	POLYSORBATE 85	Emulsifier fro O/W. HLB of about 10-12.	0.54
ETHOXCARE® LA-4	LAURETH-4	Emulsifier for O/W. HLB of about 8-10. Solubilizer for fragrances.	0.54
ETHOXCARE [®] 165V	GLYCERYL STEARATE (and) PEG- 100 STEARATE	Emulsifier for O/W. HLB of about 10-12. Very stable in broad pH ranges, and strong electrolyte tolerance. Supports high heat and freeze thaw stability.	0.53

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The information contained herein is believed to be correct; however, it should not be construed as a guarantee or as a statement of suitability for use in any application. This information should not be considered as a recommendation to infringe any patent.

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