PCG PCC Oxyalkylates

Surfactant Product Guide

Solution for High Performance Chemical
and Specialty Additives

PCG PCC
OXYALKYLATES

PCGPCCOxyalkylatesSdn.Bhd. 201701018465 (1232630-T)

AboutOurCompany

PCG PCC Oxyalkylates Sdn. Bhd. is a Malaysian Joint-Venture Company with equal share capital between PETRONAS Chemicals Group Berhad (PCG) and PCC SE (PCC).

Incorporated in 2017, this company is producing:

- Ethoxylates (non-ionic surfactants)
- Polyether Polyols

With a site located at Kertih Integrated Petrochemical Complex (KIPC), Kertih, Terengganu, Malaysia.

The offerings from the group of non-ionic surfactants and polyether polyols are of the highest quality and purity.
With the goal to capture the growing oxyalkylates market in Asia, PCG PCC Oxyalkylates aims to meet our customer's needs with a unique and versatile offering, building on sustainable development, environmental goals and contributing to their success.

PRODUCT SERIES	DESCRIPTION	APPEARANCE	HLB	ACTIVE CONTENT %
ETHOXYLATED ALCOHOL				
VOXA™ NOL LK1	Alcohols, C12-14 + 1EO	Liquid	6.2	min. 99.8
VOXA™ NOL L10	Alcohols, C12-14 + 10EO	Paste	13.8	min. 99.5
VOXA™ NOL L12	Alcohols, C12-14 + 12EO	Wax	-	min 99.5
VOXA™ NOL K18	Alcohols, C16-18 unsaturated + 18EO	Paste/Wax	15.8	min. 99.0
VOXA™ NOL T6	Alcohols, C16-18 + 6EO	Wax	10	min. 99.5
VOXA™ NOL T10	Alcohols, C16-18 + 10EO	Wax	12.5	min. 99.5
VOXA™ NOL T12	Alcohols, C16-18 + 12EO	Wax	13.5	min. 99.5
VOXA™ NOL T18	Alcohols, C16-18 + 18EO	Wax	15.8	min. 99.0
VOXA™ NOL T20 FLAKES	Alcohols, C16-18 + 20EO	Flakes	15.3	min. 99.0
VOXA™ NOL T25 FLAKES	Alcohols, C16-18 + 25EO	Flakes	16	min. 99.0
VOXA™ NOL NL3	Alcohols, C9-11 + 3EO	Liquid	8.5	min. 99.8
VOXA™ NOL NL4	Alcohols, C9-11 + 4EO	Liquid	10.3	min. 99.5
VOXA™ NOL NL5	Alcohols, C9-11 + 5EO	Liquid	11.6	min. 99.5
VOXA™ NOL NL6	Alcohols, C9-11 + 6EO	Liquid	12.3	min. 99.5
VOXA™ NOL NL8	Alcohols, C9-11 + 8EO	Liquid	13.8	min. 99.5
VOXA™ NOL NL8P4	Alcohols, C9-11 + EO/PO	Liquid	9.5	min. 99.0
VOXA™ NOL NL9	Alcohols, C9-11 + 9EO	Liquid	14.2	min. 99.5

VOXA™ NOL Series

The main advantages of the products:

- wide range of functions and applications for industry
- great solubilisers with good wetting capability
- alkali and acid resistance - acidic cleaners to remove mineral deposits from acid-resistant surfaces, while alkaline agents are known for their remarkable degreasing ability
- enhance detergency and degreasing property
- form outstanding and stable emulsion
- lower foam

CONSTRUCTION	METAL WORKING	DETERGENTS	PERSONAL CARE	EMULSION POLYMERIZATION	POLYMER ADDITIVES	OIL FIELD	I&I	PAINTS & COATINGS	PULP & PAPER	TEXTILES & LEATHER	AGROCHEMICAL
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PRODUCT SERIES	DESCRIPTION	APPEARANCE	HLB	ACTIVE CONTENT %
ETHOXYLATED ALCOHOL				
VOXA™ NOL GA3	Alcohols, C10 + 3EO	Liquid	—	min. 99.0
VOXA™ NOL GA4	Alcohols, C10 + 4EO	Liquid	—	min. 99.0
VOXA™ NOL GA5	Alcohols, C10 + 5EO	Liquid	—	min. 99.0
VOXA™ NOL GA6	Alcohols, C10 + 6EO	Liquid	—	min. 99.0
VOXA™ NOL GA7	Alcohols, C10 + 7EO	Liquid	—	min. 99.0
VOXA™ NOL GA8	Alcohols, C10 + 8EO	Liquid	—	min. 99.0
VOXA™ NOL GA9	Alcohols, C10 + 9EO	Liquid	—	min. 99.5
VOXA™ NOL ID3	Alcohols, C10-iso + 3EO	Liquid	—	min. 99.0
VOXA™ NOL ID5	Alcohols, C10-iso + 5EO	Liquid	11.7	min. 99.0
VOXA™ NOL ID6	Alcohols, C10-iso + 6EO	Liquid	—	min. 99.0
VOXA™ NOL ID7	Alcohols, C10-iso + 7EO	Liquid	13.2	min. 99.5
VOXA™ NOL ID8	Alcohols, C10-iso + 8EO	Liquid	13.8	min. 99.5
VOXA™ NOL DB3	Alcohols, C12-15 + 3EO	Liquid/Paste	7.8	min. 99.7
VOXA™ NOL DB5	Alcohols, C12-15 + 5EO	Liquid	10.2	min. 99.5
VOXA™ NOL DB7	Alcohols, C12-15 + 7EO	Liquid/Paste	12	min. 99.5
VOXA™ NOL DB11W	Alcohols, C12-15 + 11EO	Oily liquid/Paste	13.6	88-92
VOXA™ NOL IT3	Alcohols, C13-Iso + 3EO	Liquid	8	min. 99.0
VOXA™ NOL IT5	Alcohols, C13-Iso + 5EO	Liquid	10.5	min. 99.5
VOXA™ NOL IT6	Alcohols, C13-Iso + 6EO	Liquid	11.4	min. 99.5
VOXA™ NOL IT7	Alcohols, C13-Iso + 7EO	Liquid	12.1	min. 99.0
VOXA™ NOL IT8	Alcohols, C13-Iso + 8EO	Liquid/Paste	12.8	min. 99.5
VOXA™ NOL IT9	Alcohols, C13-Iso + 9EO	Oily liquid/Paste	13.2	min. 99.0
VOXA™ NOL IT10	Alcohols, C13-Iso + 10EO	Liquid	13.8	min. 99.5
VOXA™ NOL IT12	Alcohols, C13-Iso + 12EO	Liquid/Paste	14.5	min. 99.5
VOXA™ NOL IT13	Alcohols, C13-Iso + 13EO	Liquid/Paste	–	min. 99.5
VOXA™ NOL IT20	Alcohols, C13-Iso + 20EO	Solid	–	min. 99.5

CONSTRUCTION	METAL WORKING	DETERGENTS	PERSONAL CARE	EMULSION POLYMERIZATION	POLYMER ADDITIVES	OIL FIELD	I&I	PAINTS & COATINGS	PULP & PAPER	TEXTILES & LEATHER	AGROCHEMICAL
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PRODUCT SERIES	DESCRIPTION	APPEARANCE	HLB	ACTIVE CONTENT %
ALKOXYLATED ALCOHOLS				
VOXA™ NOL LP2804	Alcohols, C12-14 +EO/PO	Liquid	5.3	min. 99.5
VOXA™ NOL LP2805	Alcohols, C12-14 +EO/PO	Liquid	6	min. 99.5

LOW FOAMING SURFACTANT of the VOXA™ NOL range are ethylene oxide and propylene oxide adducts to various types of alcohols. They are particularly useful for:

- Automatic dishwashing detergents
- Laundry detergents
- Agriculture
- Textile industry
- Paints and coatings
- Hard surface cleaners
- Pulp and paper
- Metal cleaning

CONSTRUCTION	METAL WORKING	DETERGENTS	PERSONAL CARE	EMULSION POLYMERIZATION	POLYMER ADDITIVES	OIL FIELD	I&I	PAINTS & COATINGS	PULP & PAPER	TEXTILES & LEATHER	AGROCHEMICAL
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		●					●				●

PRODUCT SERIES	DESCRIPTION	APPEARANCE	HLB	ACTIVE CONTENT %
EO/PO BLOCK COPOLYMER				
VOXA™ MER PE-6100	PEG/PPG Copolymer	Liquid	2.4	min. 99.0
VOXA™ MER PE-6200		Liquid	4.9	min. 99.0
VOXA™ MER PE-6400		Liquid/Semi liquid paste	8.1	min. 99.0
VOXA™ MER PE-8100		Liquid	5.6	min. 99.0
VOXA™ MER G5000E	Glycerine + EO/PO	Liquid	—	100

VOXA™ MER Series

The VOXA™ MER series is a group of non-ionic surfactants belonging to block copolymers of ethylene oxide and propylene oxide. These products are high molecular weight polymers with a specific, bifunctional structure, which means that they have two hydrophilic groups. This feature distinguishes the VOXA™ MER series from other non-ionic surfactants and determine a number of their properties.

Thanks to its properties, VOXA™ MER reduces the surface tension between the liquid and air, and at the same time improve the "drainage" of the foam, which results in its reduction.

Advantages of the products:

- very good anti-foaming properties,
- foam reducers in industrial processes,
- very good solubility in ground water,
- low pour point,
- products not classified as dangerous,
- approved for contact with food,
- high reactivity - possibility of modification with other substances.

CONSTRUCTION			●		
METAL WORKING			●		
DETERGENTS	●	●	●	●	●
PERSONAL CARE					
EMULSION POLYMERIZATION					
POLYMER ADDITIVES			●	●	
OIL FIELD		●	●	●	●
I&I	●	●	●	●	●
PAINTS & COATINGS					
PULP & PAPER	●	●		●	
TEXTILES & LEATHER		●			●
AGROCHEMICAL		●	●	●	●

PRODUCT SERIES	DESCRIPTION	APPEARANCE	HLB	ACTIVE CONTENT %
FATTY ACID ETHOXYLATE				
VOXA™ CET HR40	Castor oil + 40EO, hydrogenated	Liquid/Paste	—	min. 99.0
VOXA™ CET R11	Castor oil + 11EO	Liquid	6.9	min. 99.5
VOXA™ CET R26	Castor oil + 26EO	Liquid	11	min. 99.5
VOXA™ CET R36	Castor oil + 36EO	Paste	—	min. 99.0
VOXA™ CET R40	Castor oil + 40EO	Paste	13	min. 99.0

VOXA™ CET Series

The VOXA™ CET series is a group of non-ionic surfactants belonging to alkoxylated fatty acids. These raw materials are in the form of a liquid or semi-liquid paste. They are characterized by very good low-foaming, emulsifying, washing, and cleaning properties. They also have softening abilities. The variety of functions of the VOXA™ CET series products determine the wide spectrum of their applications in various industries.

Advantages of the products:

- very good washing and cleaning properties
- excellent non-foaming and softening agents,
- anti-electrostatic effect,
- very good emulsifiers in industrial formulations,
- improve the lubricating properties of the formulation.

The products belonging to the VOXA™ CET series are mostly biodegradable.

CONSTRUCTION	METAL WORKING	DETERGENTS	PERSONAL CARE	EMULSION POLYMERIZATION	POLYMER ADDITIVES	OIL FIELD	I&I	PAINTS & COATINGS	PULP & PAPER	TEXTILES & LEATHER	AGROCHEMICAL
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PRODUCT SERIES	DESCRIPTION	APPEARANCE	HLB	ACTIVE CONTENT %
FATTY AMINE ETHOXYLATE				
VOXA™ MIN SR5	Tallow Amine + 5.8EO	Liquid/Semi-liquid paste	9.8	min. 99.0
VOXA™ MIN SR8	Tallow Amine + 10EO	Liquid or paste	12.4	72-77
VOXA™ MIN SR11	Tallow Amine + 11EO	Liquid/Semi-liquid paste	12.5	min. 99.0
VOXA™ MIN SR15	Tallow Amine + 15EO	Liquid/Slip paste	14.1	min. 99.5
VOXA™ MIN SR22	Tallow Amine + 25EO	Paste	16.1	min. 99.0

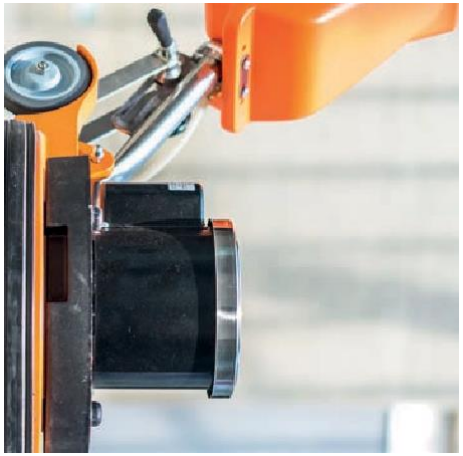
VOXA™ MIN Series

The VOXA™ MIN series are surfactants belonging to the group of alkoxylated fatty amines. The compounds form a group of surfactants based on tallow amine.

The presence of a double oxyethylene chain at the nitrogen atom means that the products from the VOXA™ MIN series have a combination of action in the application as a non-ionic and cationic surfactant. This is especially true in acidic systems.

Product advantages:

- effective emulsifier,
- resistant to hard water and acid and alkaline environments,
- has anti-corrosion properties,
- very good detergent properties,
- biodegradable product.



CONSTRUCTION					
METAL WORKING					
DETERGENTS	●	●	●	●	●
PERSONAL CARE	●				
EMULSION POLYMERIZATION					
POLYMER ADDITIVES		●	●		
OIL FIELD	●	●	●	●	●
I&I	●	●	●	●	●
PAINTS & COATINGS					
PULP & PAPER					
TEXTILES & LEATHER	●	●	●	●	●
AGROCHEMICAL	●	●	●	●	●

PRODUCT SERIES	DESCRIPTION	APPEARANCE	HLB	ACTIVE CONTENT %
POLYETHYLENE GLYCOL				
VOXA™ PEG 1500 FLAKES	Polyoxyethylene Glycol	Flakes	—	min. 98.5
VOXA™ PEG 2000 FLAKES		Flakes	—	min. 99.0
VOXA™ PEG 3350 FLAKES		Flakes	—	min. 99.0
VOXA™ PEG 4000 FLAKES		Flakes	—	min. 99.0
VOXA™ PEG 4500 FLAKES		Flakes	—	min. 99.0
VOXA™ PEG 6000 FLAKES		Flakes	—	min. 99.0

VOXA™ PEG Series

The VOXA™ PEG series are products belonging to non-ionic surfactants from the group of polyoxyethylene glycols (PEG). They are characterized by a non-toxic profile.

Our PEG's are supplied in a wide variety of molecular weight grades.

Advantages of the products:

- solubilizing, softening, lubricating and moisturizing properties,
- show adhesive and binding abilities,
- a wide range of applications in industry,
- safe, non-toxic substances,
- non-hygroscopic products,
- very soluble in water,
- biodegradable products.

CONSTRUCTION	METAL WORKING	DETERGENTS	PERSONAL CARE	EMULSION POLYMERIZATION	POLYMER ADDITIVES	OIL FIELD	I&I	PAINTS & COATINGS	PULP & PAPER	TEXTILES & LEATHER	AGROCHEMICAL
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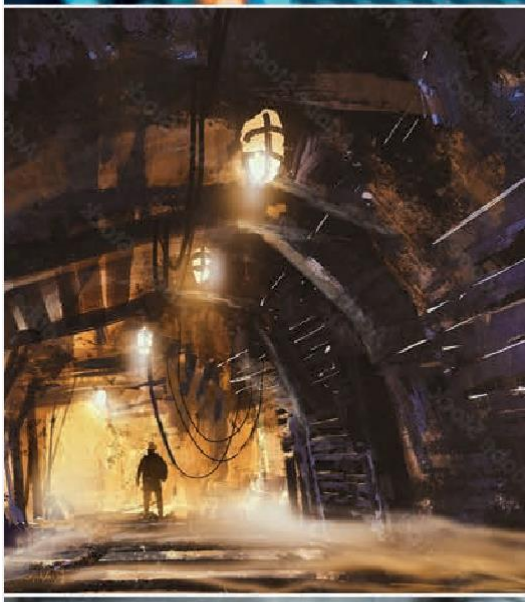

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