moeve nextlab

Technical data sheet

Rev.0 Mar 2024

Low Carbon 500-H

Identification [1]

CAS number: 67774-74-7 EC number: 267-051-0

Description

NextLab-Low Carbon 500-H is a linear alkylbenzene (LAB) that has been produced using energy from renewable sources, and therefore reducing greenhouse gas emissions during the process.
This product maintains the same technical specifications as its fossil counterpart PetreLAB 500. It is a blend of C10-C13 homologues with a high content of 2-phenyl isomers (27-31%) and a lower molecular weight than its counterpart PetreLAB 550, but with a lower carbon footprint. The Detal Flex 2-Phenyl technology is used for its production.
In addition, our production plants have a certification system that allows us to identify and guarantee sustainable production from the origin of the product to its delivery, using the mass balance methodology applied to the energy.

Aplication

NextLab-Low Carbon 500-H is mainly used as a raw material to produce Linear Alkylbenzene Sulfonic Acid (LABSA) through sulfonation reaction, which is then neutralized to produce sodium linear alkylbenzene sulfonate (LAS), the main anionic surfactant used for the formulation of biodegradable detergents. It is also used in dishwashers and other household cleaners, as well as in a wide range of applications in other industries.

Typical properties

Property		Unit	Method	Typical Value
Density	@ 15ºC	g/ml	ASTM D 4052	0.86
Saybolt Colour			ASTM D 156	30
Bromine Index		mg/100g	ASTM D 2710	1
Carbon chain distribution		%wt	UOP 673	
<5 phenyl C10				1.3
phenyl C10				17
phenyl C11				42
phenyl C12				36
phenyl C13				4
phenyl C14				0.1
>phenyl C14				0.1
2 phenyl alkanes		%wt	UOP 673	28
Total linear alkylbenzene			UOP 673	>90
Total branched alkylbenzene			UOP 673	<10
Molecular weight		g/mol	UOP 673	235
Paraffins		%wt	UOP 673	≤0.1
Tetralins and Indans		%wt	EN 13405	<0.5
Water		ppm	UOP 481	<50
Viscosity	@ 40ºC	cSt	ASTM D 445	3.2
Flash point		ºC	ASTM D 93	128
Sulfonability		%wt	LSC_CQPM 704	98.5
Refractive index	@ 20ºC		ASTM D 1218	1.482
Acid wash test		% T		45

The sodium sulfonate obtained in the neutralization of the sulphonic acid derived from NextLab-Low Carbon 500-H complies with biodegradability requirements laid down in C.E detergent regulation CE nº 648/2004.

*All the data provided does not imply the replacement of the Moeve Specification Sheets or Safety Sheets

[1] For the latest updates on these numbers, please consult the safety data sheet available at: chemicals.moeveglobal.com

Standard packaging

Available in trucks, flexitanks 20ft, isotanks, railcars and bulk vessels.

Storage and handling

Store in accordance with local regulations.
Carbon steel is preferred for pipes and storage in contact with NextLab-Low Carbon 500-H.
For more information, refer to the Safety Data Sheet.

Health and safety

Refer to the Material Safety Data Sheet (MSDS).

Contact us for more info at: techsupport@moevechemicals.com
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