

PetreLAB 550

Identification ¹

CAS number: 67774-74-7

EC number: 267-051-0

Description

PetreLAB 550 is a linear alkylbenzene (LAB) produced by the catalytic alkylation of benzene with olefins. It is a blend of C10-C13 homologues with a low content of 2-phenyl isomers (15-21%). The Detal Flex 2-Phenyl technology is used for its production.

Application

PetreLAB 550 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 @ 15°C	g/ml	ASTM D 4052	0.86
Saybolt Colour		ASTM D 156	30
Bromine Index	mg/100g	ASTM D 2710	1-2
Carbon chain distribution	%wt	UOP 673	
<5 phenyl C10			0.9-1.1
phenyl C10			11-13
phenyl C11			31-35
phenyl C12			33-40
phenyl C13			16-18
phenyl C14			0.3-0.4
>phenyl C14			<0.1
2 phenyl alkanes	%wt	UOP 673	20-21
Total linear alkylbenzene		UOP 673	>90
Total branched alkylbenzene		UOP 673	<10
Molecular weight	g/mol	UOP 673	240
Paraffins	%wt	UOP 673	≤0.1
Tetralins and Indans	%wt	EN 13405	<0.5
Water	ppm	UOP 481	<50
Viscosity @ 40°C	cSt	ASTM D 445	4.23
Flash point	°C	ASTM D 93	140
Sulfonability	%wt	LSC_CQPM 704	98.5
Refractive index @ 20°C		ASTM D 1218	1.483

The Sodium Sulfonate obtained in the neutralization of the Sulphonic Acid derived from PetreLAB 550 complies with biodegradability requirements laid down in C.E detergent regulation CE n° 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 PetreLAB 550.
For more information, refer to the Safety Data Sheet.

Health and safety

Refer to the Material Safety Data Sheet (MSDS).