



TECHNICAL DATA SHEET (TDS)

Linear Alkyl Benzene (LAB)

Product Description

Linear Alkyl Benzene (LAB) is a colorless, high-purity organic intermediate primarily used in the production of Linear Alkylbenzene Sulfonic Acid (LABSA), the key raw material for biodegradable household and industrial detergents. It offers excellent sulfonation performance, high purity, and consistent carbon chain distribution.

Typical Specifications

Property	Test Method	Specification	Typical Value
Linear Alkyl Benzene, wt%	UOP 698	≥92.0	93.09
Carbon Distribution	UOP 698	-	-
C10	UOP 698	≤15.0	11.67
C11	UOP 698	24-36	32.44
C12	UOP 698	26-40	28.74
C13	UOP 698	17-27	20.14
C14	UOP 698	≤1.0	0.10
>C14	UOP 698	≤0.3	0.23
2-Phenyl Alkanes, wt%	UOP 698	≤20.0	15.41
Total Normal Paraffin, wt%	UOP 698	≤0.5	0.36
Average Molecular Weight	UOP 698	238-243	240.1
Density @15.6°C, g/cm ³	ASTM D4052	0.8575-0.8700	0.8597
Bromine Index, mg Br/100 g	UOP 304	≤10	3
Water, ppm	UOP 481	≤200	5
Saybolt Color	ASTM D156	≥+29	>+30
Tetralins, wt%	UOP 929	≤1.0	0.56
Sulfonatability, wt%	UOP 429	≥98.0	98.8
Doctor Test	ASTM D4952	Negative	Negative
Acid Wash Color, T%	EM 07203	≥15	64.1
Refractive Index @20°C	ASTM D1218	1.480-1.490	1.480
Flash Point, °C	ASTM D93	≥140	142

Applications

- Production of Linear Alkylbenzene Sulfonic Acid (LABSA)



- Household laundry detergents
- Dishwashing liquids
- Industrial and institutional cleaning products
- Textile detergents
- Hard surface cleaners
- Emulsifiers and specialty surfactants

Packaging

- Flexitank (20–22 MT)
- ISO Tank
- Bulk Tank Truck
- Steel Drums (200–220 kg)

Storage & Handling

Store in tightly closed containers in a cool, dry, and well-ventilated area away from direct sunlight, oxidizing agents, and ignition sources. Recommended storage temperature: **20–40°C.**

Shelf Life

24 months when stored under recommended conditions in original unopened packaging.

Country of Origin

Turkey