

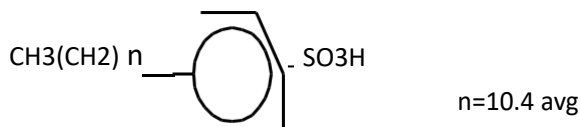
Technical Data sheet

1. Identification

Product identifier

Other means of identification **LABSA** (Linear Alkyl Benzene Sulfonic Acid 97%)

Chemical
Structure



Chemical Description

Linear Alkylbenzene Sulfonic Acid

CAS Registry No

68584-22-5

INCI Name

Linear Alkylbenzene Sulfonic Acid

2. Applications

LABSA is an economical and versatile, biodegradable surfactant intermediate. This product can be neutralized with a variety of inorganic bases and organic amines to give a wide range of sulfonates with the properties of your choice. LABSA can be used to make both liquid and dry products, and left unneutralized it is an effective surfactant in acidic environments. LABSA contains a minimum of sulfuric acid and upon neutralization produces material with little salt, light color and low odor, allowing wide latitude in formulating.

LABSA can be used in all types of household, industrial and institutional cleaners including laundry dishwash, carwash, hard surface and general purpose detergents. It can also be utilized as an intermediate in preparation of emulsifiers and wetting and foaming agents. Unneutralized LABSA is an effective surfactant in acidic products such as liquid bowl, aluminum and dairy cleaners.

Neutralization Information: Temperature and pH must be controlled during neutralization of LABSA to prevent darkening of the product and corrosion of stainless steel equipment.

The reaction temperature should not be allowed to exceed 50°C and the pH should not go below 6.5.

Approximate amounts of LABSA and various alkalis for neutralization to make 100 lbs of active Alkylbenzene sulfonate are shown below. Actual requirements will vary with each shipment.

3. Neutralization of LABSA

ALKali	LABSA
25.6 lbs. NaOH (50%)	97.1 lbs.
38.2 lbs. KOH (45%)	92.7 lbs.
33.5 lbs. Triethanolamine (85%)	71.9 lbs.
40.7 lbs. Ammonium Hydroxide (28% NH3)	98.5 lbs.
*to obtain 100 lbs of LAS	

Typical Properties	
Appearance	Dark, viscous liquid
pH, as is	<1
Actives (EW 322), % min	96
Pour Point, °C (°F)	-15 (5)
Freeze Point, °C (°F)	-18 (0)
Color, Klett (5% active sodium salt in water)	30 max
Viscosity, cps at 5 °C	5,600
Viscosity, cps at 25 °C	890
Viscosity, cps at 50 °C	220
Flash Point (PMCC), °C (°F)	>94 (>201)
Density, g/ml (lbs/U.S. gal)	1.06 (8.81)
RVOC, U.S. EPA, %	0

Environmental Effects

Product is readily biodegradable. Additional information is available upon request.

Health Effects

LABSA is slightly toxic orally (LD50 = 500 - 2000 mg/kg) and when tested undiluted is corrosive to skin and eyes.

Storage & Handling

LABSA is a strong acid and should be handled with extreme care. Avoid contact with eyes and skin Wash thoroughly after handling material.

Standard Packaging

LABSA is available in drums (220 kg drums) and in bulk quantities.

It is recommended that LABSA be stored in closed containers and kept in a cool, dry place. If material is frozen it should be heated gently and stirred to ensure it is homogeneous before use.

Bulk Storage Information

LABSA should be stored in vessels of 316 stainless steel or fiberglass with a corrosion liner. Heating and agitation are recommended for outside storage. Material should be stored between 80 - 100°F. An internal hairpin coil of 316 stainless steel with low pressure steam (under 50 psig) should be used if heating is required. Pumps, pipes and transfer lines should be 316 stainless steel.

Workplace Exposure

Occupational exposure can occur primarily through skin contact or via inhalation of vapors and mists. Engineering controls, personal protective equipment, and other workplace practices should be used to control these exposures.

Additional Safety Information

A Safety Data Sheet is available upon request.

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