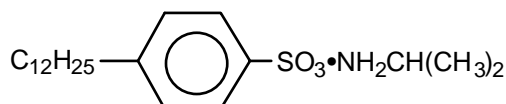


Product Bulletin

Product Name

BIO-SOFT[®] N-411

Chemical Structure



Chemical Description

Isopropyl amine salt of linear alkylbenzene sulfonic acid

INCI Name

Isopropylamine Dodecylbenzenesulfonate

CAS Registry No.

68584-24-7

Applications

BIO-SOFT N-411 is used in the detergent industry. It is both oil soluble and water dispersible. BIO-SOFT N-411 is useful as a surfactant for emulsion degreasers, laundry pre-spotters, dry cleaning products, paint strippers, and other hard surface cleaners. BIO-SOFT N-411 is an effective emulsifier for petroleum based aliphatic, aromatic and chlorinated solvents, pine oil, terpene hydrocarbons such as d-limonene and its isomers such as orange oil. Dilutable microemulsion concentrates can be easily formulated using BIO-SOFT N-411. In cosmetic and personal care products, this ingredient can be used in bath products, cleansing products, shampoos and hair conditioners, and can improve their ability to wet the skin and hair.

Typical Properties

Appearance at 25 °C.....	Viscous yellow liquid
pH, 20% in 1:1 IPA:H2O	3.5
Actives, % (EW 377)	90
Color, Gardner	8 max.
Viscosity at 25 °C, cps	5500
Viscosity at 60 °C, cps	600
Flash Point (PMCC), °C (°F)	>94 (>201)
Density, g/ml (lbs/U.S. gal).....	1.02 (8.5)
RVOC, U.S. EPA, %	0

Environmental Effects

Product is biodegradable. A detailed biodegradability statement is available upon request.

Storage & Handling

As with most surfactants, it is recommended that normal safety precautions (i.e., gloves and safety glasses) be followed when handling BIO-SOFT N-411.

It is recommended that BIO-SOFT N-411 be stored in sealed 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: BIO-SOFT N-411 should be stored in 316 stainless steel or fiberglass with a corrosion liner. Mild agitation is recommended while storing to maintain homogeneity. Material should be stored between 85-105°F (29-41 °C). 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.

Standard Packaging: BIO-SOFT N-411 is available in drums (450 lb/204 kg) and in bulk quantities.



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.

Clearances

All components of BIO-SOFT N-411 are listed in the following countries; the registration numbers for the active ingredients are included in parentheses: United States (TSCA 68584-24-7), Australia (AICS 68584-24-7), Canada (DSL 68584-24-7), Europe (EINECS 271-531-5), and New Zealand (NZIoC 68584-24-7).

It is the responsibility of the formulator to review the chemical control regulations for each country where the end product is intended to be sold or used.

BIO-SOFT N-411 is USDA authorized and is available in Kosher grade.

Product
Stewardship

This product bulletin has been written in accordance with ACC's Product Stewardship guidelines.

Additional
Safety
Information

A Safety Data Sheet is available upon request.



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Stepan 
Corporate Headquarters
Northfield, Illinois 60093, U.S.A.
Phone: 847-446-7500
Fax: 874-501-2100
Website: www.stepan.com

For Technical Service Call:
Stepan Company USA **+1-800-745-7837**
Stepan Mexico **+55-11-5089-2208**
Stepan Quimica **+55-11-5089-2200**
Stepan Colombia **+571-636-2808**
Stepan Europe **+33-476-505-160**
Stepan Asia **+656-879-9855**
Stepan Philippines **+656-879-9855**

For Customer Service Call:
Stepan Company USA **+1-800-457-7673**
Stepan Mexico **+52-555-533-1967**
Stepan Quimica **+55-11-5089-2200**
Stepan Colombia **+57-6-8993125**
Stepan UK **+44-161-338-5511**
Stepan France **+33-476-50-51-00**
Stepan Philippines **+63-2-842-7951**