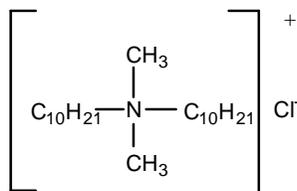


Product Name

Chemical Structure

BTC® 1010 SERIES



Chemical Description

Didecyl Dimethyl Ammonium Chloride (CAS Registry No. 7173-51-5)

EPA Registration No.

BTC 1010	BTC 1010-80%
1839-63	1839-135

PCP Registration No.

BTC 1010	BTC 1010-80%
26159	25106

Applications

BTC 1010 and BTC 1010-80% are cationic materials for formulation into antimicrobial products for use in: agricultural/farm premises, structures, buildings, and equipment; dairy farm milk handling facilities, equipment, storage rooms, houses, and sheds; food processing plant, food handling, food distribution equipment and premises; mushroom houses/empty premises and equipment; egg handling equipment and rooms, egg washing treatment; poultry processing plant equipment/premises, meat processing plant/equipment, eating establishment premises and equipment; commercial, institutional, and industrial premises and equipment (floors, walls, storage areas); domestic dwellings, food handling areas, bathroom premises (hard surfaces), indoor premises; medical, institutional, critical care and noncritical care premises and laundry. For formulation into antimicrobial products for use in air conditioner/refrigeration condensate water systems, air washer and industrial scrubbing systems, once-through and recirculating industrial/commercial cooling water systems, pulp/paper mill water systems, swimming pools, golf/commercial turf/lawns, golf courses, greenhouses/nurseries, fountains/water displays/decorative ponds/standing water, disposal water, sewage treatment systems, spas, gas/oil drilling muds/packer fluids, gas/oil recovery injection water systems, gas/oil pipeline maintenance and gas/oil fracturing fluid systems. For formulation into wood preservation, and wood preservative-seasoned wood pressure/thermal treatment (**and non-pressure treatment (joinery/remedial) - {BTC 1010 only}**) and sapstain treatment; materials preservative, paper (stored) and papermaking (nonfood contact). Formulators using this product are responsible for providing data for the EPA registration of their formulated products.

Composition

Active Ingredients, %	<u>BTC 1010</u>	<u>BTC 1010-80%</u>
Didecyl Dimethyl Ammonium Chloride	50	80
Inert Ingredients, %	50	20
Total, %	100	100

Typical Properties

Appearance at 25°C	Clear liquid	Clear liquid
pH, 10% aqueous	7.2	7.2
Free amine and amine hydrochloride, %	1.5 max	2.4 max
Color, APHA	130 max	300 max
Viscosity, cps at 25°C	20	210
Pour Point, °C (°F)	-9 (16)	---
Flash Point, PMCC, °C (°F)	36 (96.8)	36.8 (98.2)
Density, g/ml (lbs/U.S. gal)	0.91 (7.6)	0.89 (7.4)
RVOC, U.S. EPA, % Ethanol	10-12	12-15



Environmental Effects

BTC products are biodegradable. Additional information is available upon request.

Health Effects

BTC 1010 products are moderately toxic orally (LD50 = 50-500 mg/kg) and corrosive to skin and eyes at 50% active.

Storage & Handling

Handle liquid BTC products with care; use away from sparks and open flame. Use in well ventilated area. Refer to registered label for additional storage and handling information.

Standard Packaging: BTC products are available in 55 gallon drums {425 lb (193 kg) for BTC 1010; 400 lb, (182 kg) for BTC 1010-80%} and in bulk quantities.

It is recommended that BTC products be stored in sealed containers 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: BTC quaternaries can be stored in vessels of 316 stainless steel or fiberglass with a corrosion liner. Contact between quaternaries and anionic materials must be avoided. At use dilution, BTC quaternaries are non-corrosive to most plastics, natural rubber, stainless steel, monel metal, iron, brass, aluminum, lead and tin; however, BTC quaternaries as supplied, may be corrosive to the materials listed above.

Liquid BTC products should be stored between 85 - 120°F. An internal hairpin coil of 316 stainless steel with low pressure steam (under 50 psig) should be used if heating is required. Mild agitation is recommended while storing to maintain homogeneity. Pumps, pipes and transfer lines should be 316 stainless steel. Rubber hoses with Teflon cross-linked polyethylene with 316 S.S. fittings are recommended for loading and unloading.

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 BTC 1010 quaternaries are on the following countries inventories; Europe (EINECS 230-525-2), Japan (ENCS 9-1971), Canada (DSL 7173-51-5), Australia (AICS 7173-51-5), Korea (ECL Serial No. KE-10281), Philippines (PICCS 7173-51-5) and China (IECSC 7173-51-5). It is the responsibility of the end-user to review the chemical control regulations for each country to insure compliance.

BTC 1010 quaternaries are cleared under 40CFR180.940, tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (food contact surface sanitizing solutions).

The BTC 1010 series is available as Kosher Certified.

Registration

In the U.S., all products used on inanimate surfaces which are sold and claimed to be bacteriostatic, germicidal, algaecidal or to kill or inhibit organisms in any way are required to be registered with the U.S. Environmental Protection Agency. Formulators are responsible for any additional data which may be required by local, state or country agencies.

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.



The information contained herein is based on the manufacturer's own study and the works of others and is subject to change without prior notice. The information is not intended to be all-inclusive, including as to the manner and conditions of use, handling, storage or disposal or other factors that may involve additional legal, environmental, safety or performance considerations. Nothing contained herein grants or extends a license, express or implied, in connection with any patents issued or pending of the manufacturer or others, or shall be construed as a recommendation to infringe any patents or to violate any applicable laws. STEPAN COMPANY MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, AND NO WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE, INCLUDING REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY, ACCURACY, COMPLETENESS, ADEQUACY OR OTHERWISE. Stepan Company (and its employees, subsidiaries and affiliates) shall not be liable (regardless of fault) to the vendee, its employees, or any other party in respect of this information, including in respect of its accuracy, completeness, adequacy, furnishing, use, or reliance upon, and the vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise to the fullest extent possible under the relevant law.

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 North America **+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 North America **+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**