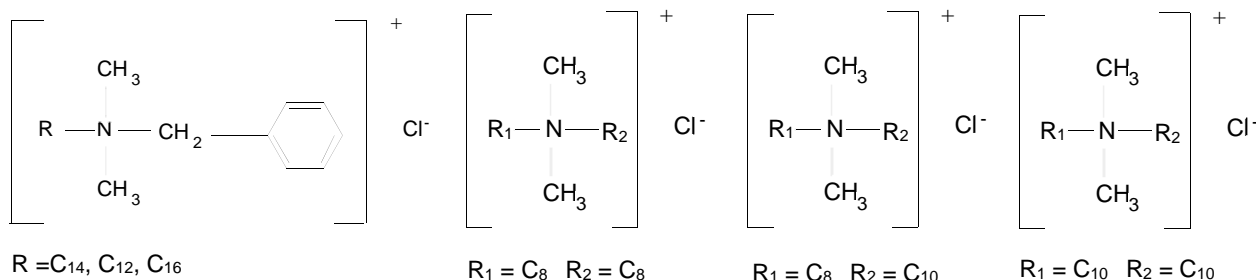


Product Bulletin

ANTIMICROBIALS

Product
Name
Chemical
Structure

BTC® 885/888 SERIES



Chemical
Description/CAS
Registry No.

n-Alkyl Dimethyl Benzyl Ammonium Chloride (68424-85-1)
Di-n-Octyl Dimethyl Ammonium Chloride (5538-94-3)
n-Octyl Decyl Dimethyl Ammonium Chloride (68424-95-3, Alternative CAS 32426-11-2)
Di-n-Decyl Dimethyl Ammonium Chloride (7173-51-5)

EPA
Registration No.
PCP
Registration No.

BTC 885	BTC 888
1839-113	1839-114
BTC 885	BTC 888
26169	26168

Applications

BTC 885 and 888 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 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, greenhouses/nurseries, fountains/water displays/decorative ponds/standing water, spas, gas/oil drilling muds/ packer fluids, gas/oil recovery injection water systems, gas/oil pipeline maintenance and gas/oil fracturing fluid systems, wood preservation to finished wood products, wood preservative-seasoned wood pressure/thermal treatment and non-pressure treatment (joinery/remedial), sapstain treatment; materials preservative in wallboard, mold remediation and HVAC&R systems. Formulators using this product are responsible for providing data for the EPA registration of their formulated products.

Composition

Active Ingredients, %	BTC 885	BTC 888
n-Alkyl (50% C14, 40% C12, 10% C16) Dimethyl Benzyl Ammonium Chloride	20	32
n-Octyl Decyl Dimethyl Ammonium Chloride.....	15	24
Di-n-Octyl Dimethyl Ammonium Chloride	7.5	12
Di-n-Decyl Dimethyl Ammonium Chloride	7.5	12
Inert Ingredients,	50	20
Total, %	100	100

Environmental
Effects

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

Health Effects

BTC 885 and 888 products are moderately toxic orally (LD₅₀ is between 50-500 mg/Kg) and cause severe skin and eye irritation.



Typical Properties

	BTC 885	BTC 888
Appearance at 25°C.....	Clear liquid	Clear liquid
pH, 10% aqueous.....	7.7	8.6
Free amine and amine hydrochloride, %.....	1.4 max	2.1 max
Color, APHA.....	200 max	250 max
Viscosity, cps at 25°C.....	28	360
Pour Point, °C (°F).....	-13 (9)	-12 (10)
Flash Point, PMCC, °C (°F).....	41 (105.8)	38.8 (101.8)
Density, g/ml (lbs/U.S. gal).....	0.94 (7.8)	0.91 (7.6)
RVOC, U.S. EPA, % Ethanol.....	11	10

Storage & Handling

Handle liquid BTC products with care; use away from sparks and open flame. Use in well ventilated area. Avoid contact with eyes, nose and skin contact. Gloves, protective clothing, safety goggles and face shield should be worn when handling BTC products. Wash thoroughly after handling material.

Standard Packaging: BTC 885 and 888 are available in 55 gallon drums {425 lb (193 kg) for BTC 885; 400 lb (182 kg) for BTC 888} and in bulk quantities.

It is recommended that BTC products 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: 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 (29 - 49°C). 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 885/888 quaternaries are on the following country inventories; CASRNs 68424-85-1, 32426-11-2, 5538-94-3, 7173-51-5; United States (TSCA), Europe (EINECS 270-325-2; 251-035-5, 226-901-0, 230-525-2), Japan (ENCS 3-2694, 2-184, 2-184, 2-184), Canada (DSL), Australia (AICS), Philippines (PICCS), China (IECSC), New Zealand (NZIoC) and Korea (ECL KE-29999, KE-26732, KE-11982, KE-10281). It is the responsibility of the end-user to review the chemical control regulations for each country.

BTC 885/888 quaternaries are cleared under EPA 40 CFR 180.940 for use in antimicrobial formulations (food-contact surface sanitizing solutions) on food processing equipment and utensils. Check regulations for end-use concentrations.

The BTC 885/888 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, algacidal 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.



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