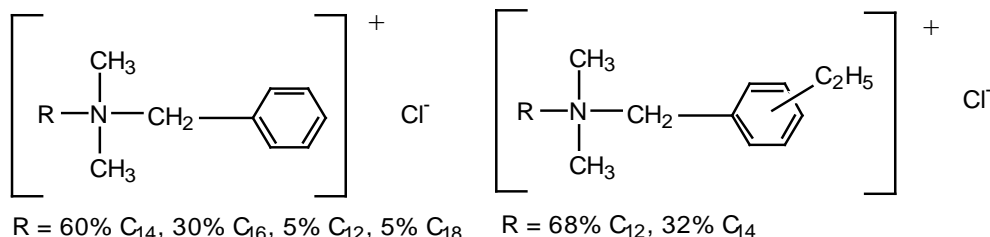


Product Bulletin

Product Name

BTC® 2125M SERIES

Chemical Structure



Chemical Description/CAS Registry No.

n-Alkyl Dimethyl Benzyl Ammonium Chloride (68391-01-5/53516-76-0) and n-Alkyl Dimethyl Ethylbenzyl Ammonium Chloride (68956-79-6/85409-23-0)

EPA Registration No.

BTC 2125M 1839-46	BTC 2125M-80% 1839-54	BTC 2125M P40 1839-55
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PCP Registration No.

BTC 2125M 21337	BTC 2125M-80% 21407	BTC 2125M P40 26058
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Applications

BTC 2125M products are cationic material only 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, greenhouses/nurseries, fountains/ water displays/decorative ponds/standing water, sewage treatment systems, spas, gas/oil drilling muds/packer fluids and gas/oil recovery injection water systems. For formulation into wood preservation 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, %	BTC 2125M	BTC 2125M-80%	BTC 2125M P40
n-Alkyl (60% C ₁₄ , 30% C ₁₆ , 5% C ₁₂ , 5% C ₁₈) Dimethyl Benzyl Ammonium Chloride	25	40	20
n-Alkyl (68% C ₁₂ , 32% C ₁₄) Dimethyl Ethylbenzyl Ammonium Chloride	25	40	20
Inert Ingredients, %	50	20	60
Total, %	100	100	100

Typical Properties

Appearance at 25 °C	Clear liquid	Clear liquid	White prill
pH, 10% aqueous	8.0	7.9	7.2
Free amine and hydrochloride, %	1.0 max	1.6 max	2.5 max
Color, APHA	200 max	150 max	---
Viscosity at 25 °C, cps	50	320	---
Pour Point, °C (°F)	-4 (25)	2 (36)	---
Flash Point, PMCC °C (°F)	54 (129)	36.5 (97.7)	>93 (>200)
Density, g/ml (lb/U.S.gal)	0.97 (8.1)	0.94 (7.8)	38.3 lb/ft ³
RVOC, U.S. EPA, % Ethanol	6	9	0

Environmental Effects

BTC products are biodegradable. A detailed biodegradability statement is available upon request.

Health Effects

BTC 2125M products are slightly toxic orally (LD₅₀ ≤ 500 mg/kg) and cause severe skin and extreme eye irritation.



Storage & Handling

Standard Packaging: BTC 2125M products are available drums 425 lb (193 kg) for BTC 2125M; 400 lb (182 kg) for BTC 2125M-80% and 200 lb (91 kg) for BTC 2125M P40 and in bulk quantities.

Non-Bulk Storage Recommendations: BTC products should be stored in closed containers and kept in a cool, dry place away from incompatible materials. If material is frozen, it should be heated gently and stirred to ensure it is homogeneous before use. Prilled products should be stored in a cool, dry place in their original shipping container. Keep lid closed to prevent agglomeration.

Bulk Storage Recommendations: BTC quaternaries should 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 stainless steel fittings are recommended for loading and unloading.

It is recommended that BTC 2125M products be stored in sealed containers kept in a well ventilated area away from sparks, fire, and open flame. Avoid overheating or freezing. Equipment should be grounded when transferring or using material. Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling BTC 2125M products. Contact with eyes, nose or prolonged contact with skin should be avoided. Wash thoroughly after handling BTC 2125M products.

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

The international inventories (country clearances) for the BTC 2125M series can be found in Section 15 of the Safety Data Sheet (SDS). **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.** If you have any further questions regarding inventories, please contact North America Technical Service at techserv@stepan.com.

BTC 2125M quaternaries are cleared under EPA 40CFR 180.940, food-contact surface sanitizing solutions; exemptions from the requirement of a tolerance.

The BTC 2125M 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.

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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