

## Product Specification Sheet

### CC 75

## Choline chloride, aqueous solution

<b>Grade</b>	Nutritional Additive; functional group vitamins, pro-vitamins and chemically well-defined substances having similar effect Active substance 75 wt.% Choline Chloride (3a890)		
<b>Quality</b> (Declared on CoA)	<b>Determination</b>	<b>Specification</b>	<b>Reference</b>
	Choline chloride	75 ± 1% w/w	IM 328
	pH (5% solution)	5-8	SAM 176.15
	Trimethylamine	0.05% w/w max	SAM 704.03
	Color APHA	25 max	COL 84.3.3
	Ion Chromatographic method (SAM 839.05) for testing choline chloride content is available on request		
<b>Appearance</b>	Clear liquid, free from solids with a slight amine odor		
<b>Retest date</b>	24 months from date of manufacture (in original packaging and protected from excessive heat)		
<b>Formula</b>	C <sub>5</sub> H <sub>14</sub> NOCl		
<b>Synonyms</b>	(2-hydroxyethyl) trimethylammonium chloride  CAS N°: <b>67-48-1</b>		
<b>Physical Properties</b>	See Safety Information Card		
<b>Recommended storage conditions</b>	Protect from excessive heat. Keep the containers tightly closed, the product is hygroscopic		
<b>Composition</b>	Feed additive preparation: <ul style="list-style-type: none"><li>- Choline chloride (3a890)</li><li>- Water</li></ul>		

# BALCHEM ITALIA

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<b>Packaging</b>	<b>Polyethylene drum</b> 230 kg net (238,5 kg. gross) Multilingual label Standard pallet configuration: 4 drums on a wooden "CP 9" HT pallet (IPPC-FAO), size 1140 x 1140 mm with PE stretch film. Standard dimensions: Net weight: 920 kg. Gross weight: 970 kg. Pallet size (w x l x h): 1160 x 1160 x 1100 mm. <b>Balchem Italia product code: 5400536</b>
	<b>Polyethylene IBC</b> 1100 kg net (1160 kg. gross) Multilingual label Standard pallet configuration: 1 IBC on a wooden HT pallet (IPPC-FAO), size 1210 x 1000 mm. Standard dimensions: Net weight: 1100 kg. Gross weight: 1160 kg. Pallet size (w x l x h): 1210 x 1000 x 1150 mm. <b>Balchem Italia product code: 5405116</b>
	<b>Bulk</b> in road tank cars, tank containers and transoceanic flexitanks <b>Balchem Italia product code: 5400370</b>
<b>Health and safety</b>	Breathing, eye and skin protection shall be used during handling Choline Chloride is not classified according to the CLP Regulation (EC) N° 1272/2008 See our Safety Information Card
<b>Regulatory info</b>	Choline chloride is authorized as Feed Additive by Regulation (EU) No 795/2013 from 21 August 2013 and included in the European Union Register of Feed additives in the category "Nutritional Additives" with identification number 3a890 Choline chloride aqueous solution is a feed additive preparation under the European regulation (EU) N° 2015/327 Balchem Italia is registered for production of choline chloride according to regulation 183/2005/EC (registration number <b>αITM00001 NO</b> )
<b>Directions for use</b> (other provisions (EU) N° 795/2013)	All animal species Choline chloride may be used via water for drinking The labelling of feed for poultry and pigs containing choline chloride should indicate in the instructions of use: 'simultaneous use with water for drinking in which choline chloride has been added should be avoided' Recommended not to exceed supplemental levels of 1000 mg of choline chloride/kg of complete feed for poultry and pigs
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<b>Certifications</b>	Feed safety ISO 22000:2005 and FAMI-QS Management System Quality ISO 9001:2008 Environmental ISO 14001:2004
<b>Note</b>	These conditions can be subject to amendments
<b>Version</b>	May 2015