

# CHOLINE CHLORIDE DRY



## SAFETY INFORMATION CARD

Effective date: 12 may 2015

Revision 0

ANH

Language EN

### MANUFACTURER/SUPPLIER

*Balchem Corporation – 52 Sunrise Park Road – New Hampton, NY 10958 USA – Tel: +1 845-326-5600**Balchem Italia – Via del Porto snc – Marano Ticino (NO) Italy – Tel: +39 0321-9791***Emergency phone number:** CHEMTREC 800-4249300 (USA) - +1 7035273887 (International)

### SUBSTANCE IDENTIFICATION

<b>CAS number:</b> 67-48-1 <b>EC-number:</b> 200-655-4	<b>Formula:</b> C <sub>5</sub> H <sub>14</sub> NO.Cl <b>Molecular weight:</b> 139.6	<b>Appearance:</b> pale yellow / tan to brown powder	<b>Bulk Density:</b> 600-750 kg/m <sup>3</sup> <b>pH:</b> 4.5-7.5 (25% wt. in water)
<b>Dust explosion properties</b>	The product in the original composition is not expected to be a combustible dust hazard. Dust explosion properties have not been fully evaluated. One sample of 70% choline chloride on vegetable carrier was treated to obtain a powder with 0.6 wt% moisture and particle size < 70 micron diameter had the following properties:		
	<b>Minimum ignition temperature (MIT)</b> 300 °C <b>MIE</b> = 30 mJ <b>P<sub>max</sub></b> = 6.8 bar, <b>K<sub>st</sub></b> =245 bar-m/s <b>ST</b> =2 (for dust cloud composed of particle 70 micron or less under high turbulence). <b>Layer Ignition Test (LIT):</b> No ignition up to 400 °C of 5 mm dust layer.	<b>Charge Relaxation Time</b> <0.01 seconds yielding classification as quick which implies rapid elimination of charge buildup when grounded / earthed, <b>Powder Volume Resistivity</b> = 2.6 x 10 <sup>4</sup> classified as low implying grounding/earthing is likely effective preventing charge buildup.	
<b>Industrial Use:</b> <b>Feed additive Use:</b>	Not for industrial use Nutritional Additive; functional group vitamins, pro-vitamins and chemically well-defined substances having similar effect; Choline chloride (3a890); Feed additive preparation		

### HAZARD IDENTIFICATION

The substance is not classified according to the CLP regulation (Regulation (EC) N° 1272/2008).

The substance is not hazardous according to the GHS classification.

Type of hazard /exposure	ACUTE HAZARD / SYMPTOMS	PREVENTION	FIRST AID / FIRE-FIGHTING
<b>FIRE</b>	Formation of toxic gases is possible during heating or in case of fire.	Fire fighting: Wear self-contained respiratory protective device.	CO <sub>2</sub> , powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire extinguishing methods suitable to surrounding conditions.
<b>EXPLOSION</b>	--	--	--
<b>EXPOSURE</b>			Take affected persons out of danger area and lay down.
<b>INHALATION</b>	Breathing dust from any source may cause irritation and/or injury	Ensure adequate ventilation.	Supply fresh air; consult doctor in case of complaints.
<b>SKIN</b>	Generally the product does not irritate the skin.	Wear protective clothing (Rubber/PVC gloves)	Immediately wash with water and soap and rinse thoroughly.
<b>EYES</b>		Safety glasses	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>INGESTION</b>		Do not eat, drink or smoke when using this product. Keep away from foodstuffs, beverages and feed.	Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor.

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**BALCHEM**<sup>™</sup>

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### ACCIDENTAL RELEASE MEASURES

<b>Environmental precautions:</b>	Do not allow to enter sewers/ surface or ground water.
<b>Methods and material for containment and cleaning up:</b>	Sweep material and place in a disposal container. Dispose of the material collected according to regulations.

### HANDLING, DISPOSAL, STORAGE AND TRANSPORT

<b>Precautions for safe handling:</b>	No special precautions are necessary if used correctly.
<b>Disposal considerations:</b>	Do not allow product to reach sewage systems, disposal must be made according to official regulations
<b>Storage:</b>	Store only in the original receptacle. Store away from oxidizing agents Protect from frost
<b>Transport information</b>	<b>UN-Number:</b> Void <b>Transport hazard class:</b> Void <b>Packaging group:</b> Void

### OTHER INFORMATION

<b>Toxicological information</b>	<b>LD50</b> oral 3500 mg/kg (Rat) <b>NOAEL</b> (repeated dose) 1200 mg/kg (Rat) – (reproduction) 78 mg/kg (Rat) <b>Irritant/Sensitization</b> No irritating effect or sensitizing effects known.
<b>Ecological information</b>	<b>EC50</b> (static) 132.8 mg/l (bacteria) - (48h static) >500 mg/l (Daphnia) <b>ErC50</b> (72h static) > 500 mg/l (Algae) <b>LC50</b> (96h static) > 10000 mg/l (Fish) <b>NOEC</b> (21d) 30.2 mg/l (Daphnia) <b>Persistence and degradability:</b> Readily biodegradable > 75% @ 5 days <b>Bioaccumulative potential:</b> Does not accumulate in organisms BCF 3.16 l/kg ww <b>Mobility in soil:</b> logKoc: 0.1576 @ 20 °C <b>Water hazard class 1</b> (German regulation – self assessment) slightly hazardous for water <b>Results of PBT and vPvB assessment:</b> no PBT – no vPvB
<b>Issuing department</b>	This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Balchem corporation – <a href="mailto:sds@balchem.com">sds@balchem.com</a>