

THE INDUSTRY'S PREMIER CHOLINE





# QUALITY, PURITY, CONSISTENCY

PuraChol™ from Balchem is the leading line of choline chloride products available in the industry. PuraChol delivers the highest standards of quality backed by the strictest process controls, for a level of purity, safety and consistency you can't find anywhere else.

### The PuraChol line includes:

## **Dry Choline Chloride**

- 50% on silica carrier
- 60% on vegetable carrier
- 70% on vegetable carrier

## **Aqueous Solution**

- 70% Choline Chloride
- 75% Choline Chloride

#### **PetShure®**

- 60% non-grain, non-GMO
- 70% non-grain, non-GMO
- 97% Choline Chloride
- 98% Choline Bitartrate



# ALL CHOLINE PRODUCTS ARE NOT CREATED EQUAL.

While all choline chloride products are formulated using the same basic molecule, significant differences exist among commercial choline brands and the companies that market them. These differences are seen in product quality testing programs, raw ingredient supply controls and proprietary manufacturing techniques. Differences also extend beyond product to the intangible, but consumer-driven areas such as social responsibility, industry research support and environmental stewardship.

Balchem has invested more than 50 years in research, manufacturing advances and raw ingredient testing and sourcing to ensure you receive the highest quality, purest choline chloride possible.

# **BALCHEM DELIVERS**

- Total supply chain control
- Unmatched raw material standards
- Strictest manufacturing standards
- Highest purity standards
- Comprehensive product portfolio
- Consistent quality
- Reliable customer service

- Technical expertise and support
- Inventory management
- Social responsibility
- Environmental stewardship
- Research leadership
- Industry support
- Multiple production locations
- Global presence

# THE PURACHOL™ DIFFERENCE?



# State-of-the-Art Manufacturing

As the worldwide leader in choline chloride, Balchem has perfected the manufacturing process and continues to leverage the latest manufacturing technologies that improve purity, consistency, reliability and concentration options. Balchem's choline expertise encompasses both human and animal nutrition with US and European manufacturing facilities certified for human nutrition-grade choline production.

The same care and expertise required to manufacture choline for infant formula is also employed to produce choline for poultry and swine diets. That level of quality can only be accomplished through strict process control and rigorous employee training; which is reflected in our extensive list of quality-oriented certifications.



# **Quality Control**

Balchem sets the highest industry standards for choline chloride production, maintaining high and consistent levels of choline while monitoring and reducing undesirable contaminants. Balchem suppliers are required to sign a supplier code of conduct that addresses several requirements to include business ethics, employee rights, environmental stewardship, safety and of course raw ingredient quality. We conduct regular supplier audits to encourage and ensure compliance and new suppliers are required to go through a comprehensive evaluation and approval process. The integrity of Balchem products starts with supplier quality, and our quality system is an integral element of supplier selection.

Balchem maintains a vigorous monitoring program for all finished goods. Quarterly, we release a quality report to our customers documenting the results of our extensive testing program.

	EDTIFIEDIK			
1	BALCHEM QUALITY CERTIFICATIONS			
	US FACILITIES	EU FACILITIES		
	FAMI-QS	FAMI-QS		
	Safe Feed/Safe Food	ISO 9001		
		ISO 14001		
		SEDEX		

BALCHEM TESTING PARAMETERS			
Choline Activity Level	GMO's		
Heavy Metals	Nitrate/Nitrites		
Microorganisms	Density		
Mycotoxins	Trimethylamine		
Dioxins	Pesticides		



As the global leader in choline, Balchem has taken the lead on choline research, in both the human and animal spaces. Balchem has established and supports a scientific advisory board with participating member/researchers from Cornell University, Syracuse University and UC Davis. The advisory board was created to help direct research toward better understanding choline's role in infant cognition, age-related cognitive decline and liver health.

Balchem scientists continue to monitor choline levels in standard feed ingredients to ensure rations contain adequate levels to deliver optimal animal performance. The latest data, presented by Balchem scientists at the 2019 Poultry Science Annual Meeting, showed that analyzed choline levels were 24% lower in SBM and 9% lower for corn than those reported in the current NRC (Poultry 1994). This discrepancy, coupled with a potentially greater choline requirement of today's genetically superior production animals, could be seriously compromising productivity and producer profitability.



# Sustainability

# Sustainability is at the heart of Balchem's mission to make the world a healthier place.

Every day, Balchem delivers creative and innovative solutions that enhance health and well-being through science. Our businesses supply essential nutrients to people and animals around the world, with approximately 1.3 billion people positively impacted in some way by our products.

The PuraChol line helps deliver on Balchem's sustainability promise through higher concentration formulations that provide more choline while reducing transportation costs and lowering fuel consumption. PuraChol also improves production efficiency of each animal, helping them produce more with fewer overall inputs.

# CHOLINE CHLORIDE SUPPLEMENTATION RATES REQUIRED WHEN USING NRC AND ACTUAL VALUES FOR SBM

SUPPLEMENT	USING NRC (1994) VALUES	USING ANALYZED VALUES
Choline Chloride 70% (lb./ton)	0.45	1.30



## THIS IS ANIMAL NUTRITION & HEALTH









#### COMPANION ANIMALS



POROSITY & TEXTURE MANAGEMENT

MANAGEMENT
pH CONTROL SYSTEMS

STRUCTURING & FORMING

TECHNOLOGIES CHOLINE

SENSORY SYSTEMS

RUMINANT









NitroShure™







Balchem Animal Nutrition and Health is the global leader in choline production, chelation and encapsulation technology. With a growing portfolio of nutrition products and a dedication to innovation and industry sustainability, Balchem is leading the charge to meet the nutritional needs of monogastrics, companion animals and ruminants.

#### WE ARE:

## Real People

With a passion for animal nutrition, we are intense advocates for our customers and the animals they feed. You can count on us to provide honest, candid advice to address your toughest challenges.

### **Real Science**

Balchem delivers proven science backed by years of success. Our products are some of the most extensively researched in the industry, further supported by documented on-farm results.

### **Real Results**

In the end, it all comes down to results. We deliver real results you can count on, results that exceed your expectations and deliver value to your customers and your bottom line.

