





FEED ADDITIVES

SICOCHOL® Choline Chlorides feedgrade

- 60% and 70% on Corn Cobs carrier
- 50% on Silica carrier
- 70% and 75% liquid
Made in China

04/2019

1/ TRADE NAMES SICOCHOL-C 60 / SICOCHOL-C 70 / SICOCHOL-S 50 / SICOCHOL-L 70 / SICOCHOL-L 75

2/ DESCRIPTION

SICOCHOL Choline Chloride is an important member of the B-complex group of vitamins. The importance of an adequate supply of dietary Choline for poultry, swine and other animals is universally recognised and Choline Chloride has become a standard additive in formulating rations for poultry and livestock. Additional information on nutritional aspects and physiological action is available upon request.

SICO offers a whole range of first class Choline Chloride products:

SICOCHOL-C 60, 60 % Choline Chloride on corn cobs carrier

SICOCHOL-C 70, 70 % Choline Chloride on corn cobs carrier

SICOCHOL-S 50, 50 % Choline Chloride on silica carrier

SICOCHOL-C 60, 60 % Choline Chloride on corn cobs carrier

SICOCHOL-L 70, 70 % Choline Chloride in aqueous solution

SICOCHOL-L 75, 75 % Choline Chloride in aqueous solution

3/ APPLICATION

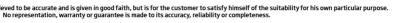
SICOCHOL Choline Chloride can promote fat metabolism and transformation, and prevent liver and kidney tissue degeneration. It is also the basis of acetychoiline incorporation and influences the transmission of neural signals. Choline is a methyl group source used for methionine incorporation. The shortage of choline can result in fatty liver, retarded growth, low egg laying and high mortality and so on. Adding choline chloride into the feed is the most economical way to supplement choline.

4/ AVERAGE DOSAGE RECOMMENDATIONS

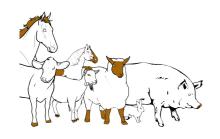
Species	Growth stage	Supplement of SICOCHOL Choline Chloride (mg/kg)
Broilers	0-8 weeks	500-700
Layers	0-6 weeks	400-600
•	7-18 weeks	300-400
	after 19 weeks	400-600
Piglets	less than 15 weeks	400-600
-	15-30 kg LW (live weight)	300-400
Pigs	more than 30 kg LW (live weight)	200-300
	gestating / lactating	300-500
Fish	cold water fish	700-1000
	warm water fish	300-600
Shrimp		400-600

Remarks:

- 1/ 1 mg/kg choline = 1.34 mg/kg choline chloride
- 2/ The recommendation is just a general guidance, and feed makers should add the choline according to different feed formulation.











5/ INSPECTION STANDARD

GB344462-2017

6/ TEST METHOD

Reinecke Salt Gravimetric Method

7/ SPECIFICATIONS

ITEM	SICOCHOL-C 60	SICOCHOL-C 70	SICOCHOL-S 50
Carrier	Corn cobs	Corn cobs	Silica
Appearance	yellow-brownish granule	yellow-brownish granule	white free-flowing powder
Content of Choline chloride	≥ 60.0 %	≥ 70.0 %	≥ 50.0 %
Moisture	≤ 2.0 %	≤ 2.0 %	≤ 18.0 %
Trimethylamine	≤ 0.03 %	≤ 0.03 %	≤ 0.03 %
Heavy metals	≤ 0.002 %	≤ 0.002 %	≤ 0.002 %
Particle size (through 850 µm sieve)	≥ 90 %	≥ 90 %	≥ 90 %

ITEM	SICOCHOL-L 70	SICOCHOL-L 75
Appearance	Colorless or slight yellow	Colorless or slight yellow
	liquid	liquid
Content of Choline chloride	≥ 70.0 %	≥ 75.0 %
pH value	6.0 - 8.0	6.0 - 8.0
Trimethylamine	≤ 0.03 %	≤ 0.03 %
Heavy metals	≤ 0.002 %	≤ 0.002 %
Ethylene glycol	≤ 0.50 %	≤ 0.50 %
Residue on ignition (or Ash)	≤ 0.20 %	≤ 0.20 %

8/ SHELF LIFE

2 years if stored under normal conditions (dry, dark and cool)

9/ PACKING

- in 25 kg bags
- in 230 ltr drums

