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## Material Safety Data Sheet

### Cholinex

(Rumen Protected Encapsulated Choline)

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#### A. GENERAL INFORMATION

Product Name:

Cholinex

Chemical Name:

Choline Chloride

FORMULA:

Mixture/compound

CONTACT:

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DATE OF ISSUE:

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ChemTrec

+1-800-424-9300

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#### B. COMPOSITION ON INGREDIENTS

MATERIAL OR COMPONENT:

Choline Chloride

C.A.S NUMBER:67-68-1

PERMISSIBLE AIR CONCENTRATION:

N/A

Food-grade Lipids

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#### C. FIRST AID MEASURES

INGESTION:

If large amounts are ingested, get medical attention, induce vomiting.

INHALATION:

Remove to fresh air or give oxygen.

EYE CONTACT:

If eye irritation exists, flush thoroughly with plain water.

SKIN CONTACT:

If skin irritation exists, wash with soap and water.

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#### D. HAZARDS INFORMATION

HEALTH EFFECTS:

INHALATION:

May cause irritation of the nasal membranes and upper respiratory tract.

INGESTION:

Ingestion of glycerides may cause gastrointestinal disturbances.

SKIN:

In rare cases, glycerides may cause allergic reaction upon Prolonged or repeated contact.

EYES:

Contact may cause irritation.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED:

Respiratory problems.

USUAL CHRONIC TOXICITY:

None.

FIRE AND EXPLOSION DATA:

FLASH POINT:

OPEN CUP  CLOSED CUP

Non-flammable

AUTO IGNITION TEMPERATURE:

N/A

FLAMMABLE LIMITS IN AIR

(% BY VOL.):

N/A

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#### E. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION:

Use NIOSH-MSHA approved dust respirator if irritation exists or if dust exceeds the nuisance level of 10 mg. per cubic meter.

EYES AND FACE:

HANDS, ARMS,

OTHER CLOTHING

Glasses, goggles, or Face shields are recommended if irritation exists

AND BODY:  
No Irritation expected.

AND EQUIPMENT:  
None.

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## F. PRECAUTIONS/ PROCEDURES:

FIRE EXTINGUISHING AGENTS RECOMMENDED: As appropriate for surrounding material.

FIRE EXTINGUISHING AGENTS TO AVOID:  
None.

SPECIAL FIRE FIGHTING PRECAUTIONS:  
None.

ENGINEERING CONTROLS:

Use containment and/or local exhaust ventilation to control dust

USUAL CHRONIC

TOXICITY:  
None.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED:

Respiratory problems.

NORMAL HANDLING:

Avoid breathing dust. Maintain good housekeeping practices.

STORAGE:

Keep Dry.

SPILL OR LEAK:

Dry sweeping may be used.

SPECIAL PRECAUTIONS/ PROCEDURES/ LABEL INSTRUCTIONS:

Keep dry. Avoid contact with eyes. Avoid breathing dust.

Wash thoroughly after handling.

Keep dust to a minimum.

PERSONAL HYGIENE:

Good personal hygiene reduces the possibility of any irritations.

Washing clothing with a good detergent reduces the possibility of permanent stains.

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## G. PHYSICAL DATA

APPEARANCE AND ODOR:

Cholinex is white granular powder with slight fish odor

MATERIAL IS (AT

NORMAL

CONDITIONS):

LIQUID  GAS

SOLID

% VOLATILES BY

VOLUME

(At 20° C):

N/A

VAPOR PRESSURE

N/A

B.P. (°C)

N/A

M.P. (°C)

N/A

SPECIFIC GRAVITY:

(H<sub>2</sub>O=1)

N/A

Ph

5-7

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## H. REACTIVITY DATA

STABILITY

UNSTABLE

STABLE

CONDITIONS TO

AVOID:

Keep dry to avoid mold.

INCOMPATIBILITY(MATERIALS TO

AVOID):

None.

HAZARDOUS

DECOMPOSITION

PRODUCTS: None.

HAZARDOUS

POLYMERIZATION:

MAY OCCUR

WILL NOT OCCUR

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## I. ENVIRONMENTAL

EPA HAZARDOUS SUBSTANCE?

YES  NO

IF SO,

REPORTABLE

QUANTITY:

WASTE DISPOSAL METHODS (DISPOSER MUST COMPLY WITH FEDERAL, STATE AND LOCAL DISPOSAL OR DISCHARGE LAWS):

Landfill or maybe used as trace-mineral fertilizer in single applications not exceeding 40 lbs. per acre.

RCRA STATUS OF UNUSEDMATERIAL:

Not listed

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## J. REFERENCES

PERMISSIBLE

CONCENTRATION:

REFERENCES:

N/A

HAZARD INFORMATION REFERANCES:

None. Use as directed on manufacturer's literature.

GENERAL:

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## K. ADDITIONAL INFORMATION

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