Printing date 12/31/2015 Reviewed on 12/31/2015

1 Identification

· Product identifier

· Trade name: Choline Chloride

· Article number: No other identifiers

· Recommended use and restriction on use

· Recommended use: Animal nutrition.

· Restrictions on use: No relevant information available.

· Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

EZ PAK, LLC P.O. BOX 185

JEFFERSON, GA 30549

Emergency telephone number:

ChemTel Inc.

+1 (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

- · Label elements
- GHS label elements Not regulated.
- · Hazard pictograms: Not regulated.
- · Signal word: Not regulated.
- · Hazard-determining components of labeling: None.
- Hazard statements: Not regulated.
- · Precautionary statements: Not regulated.
- · Other hazards

There are no other hazards not otherwise classified that have been identified.

0 % of the mixture consists of component(s) of unknown toxicity.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Dangerous components:** None in reportable quantities.

4 First-aid measures

- Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn, if possible.

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Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

- · Most important symptoms and effects, both acute and delayed: No relevant information available.
- Indication of any immediate medical attention and special treatment needed:

No relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: None.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information: No relevant information available.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Particular danger of slipping on leaked/spilled product.

· Environmental precautions:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the collected material according to regulations.

Send for recovery or disposal in suitable receptacles.

· Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · **Precautions for safe handling:** No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: Store in a cool location.

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· Information about storage in one common storage facility:

Store away from oxidizing agents.

Store away from foodstuffs.

- · Further information about storage conditions: None.
- · Specific end use(s): No relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Avoid close or long term contact with the skin.

Avoid contact with the eyes.

- · Engineering controls: No relevant information available.
- · Breathing equipment: Not required under normal conditions of use.
- · Protection of hands:

Not required.

Protection may be required for spills.

· Eve protection:



Safety glasses

Body protection:

Not required under normal conditions of use.

Protection may be required for spills.

- Limitation and supervision of exposure into the environment Avoid release to the environment.
- · Risk management measures See Section 7 for additional information.

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General information
- · Appearance:

Form: Liquid
Color: Light beige
Odor: Mild

· Odor threshold: Not determined.

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		(Cont'd. of page
· pH-value at 20 °C (68 °F):	4.5-7	
· Change in condition:		
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	Not determined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· Auto-ignition temperature:	Not determined.	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not self-igniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Oxidizing properties:	Not determined.	
· Vapor pressure:	Not determined.	
· Density:	Not determined.	
· Relative density:	Not determined.	
· Vapor density:	Not determined.	
· Evaporation rate:	Not determined.	
· Solubility in / Miscibility with:		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Other information	No relevant information available.	

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions:

Reacts with strong oxidizing agents.

Reacts with strong acids.

· Conditions to avoid:

Avoid acids.

Store away from oxidizing agents.

· Incompatible materials: No relevant information available.

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· Hazardous decomposition products:

Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.
- · Carcinogenic categories
- IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): May be harmful if swallowed.
- · Repeated dose toxicity: No relevant information available.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No relevant information available.
- · Persistence and degradability: No relevant information available.
- · Behavior in environmental systems
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No relevant information available.

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- Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Other adverse effects: No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- · Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.

4 Transport information		
· UN-Number · DOT, ADR, IMDG, IATA	Not regulated.	
· UN proper shipping name · DOT, ADR, IMDG, IATA	Not regulated.	
· Transport hazard class(es)		
· DOT, ADR, IMDG, IATA · Class	Not regulated.	
· Packing group · DOT, ADR, IMDG, IATA	Not regulated.	
· Environmental hazards · Marine pollutant:	No	
· Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	

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acc. to OSHA HCS (29 CFR 1910.1200)

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15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 304 (emergency release notification):

None of the ingredients are listed.

Sections 311/312 (hazardous chemical threshold planning quantity in pounds):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

- · Canadian substance listings
- · Canadian Domestic Substances List (DSL):

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

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· Canadian Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

16 Other information

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.

· Date of preparation / last revision 12/31/2015 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Sources

Website, European Chemicals Agency (http://http://echa.europa.eu/)

Website, US EPA Substance Registry Services (http://http://ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (https://www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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