



Issuing Date 28-Jul-2009

Revision Date 30-Mar-2011

Revision Number 2

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Name L-Cysteine HCl
Product Code(s) 0206
Recommended Use For Further Manufacturing Use Only
Not for Human or Animal Drug Use

Company
AMRESKO, LLC
6681 Cochran Road
Solon, Ohio 44139

Emergency Telephone Number Chemtrec 1-800-424-9300

Company Phone Number 1-800-448-4442
E-mail Address info@amresco-inc.com

2. HAZARDS IDENTIFICATION

GHS - Classification

Classification Skin Irritant 2 Eye Irritant 2
Signal Word Warning



Hazard Statements H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary Statements P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
Cysteine hydrochloride, L-(+)-, monohydrate	-	Not available	7048-04-6	95-100	-

4. FIRST AID MEASURES

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician
Skin Contact	Wash off immediately with plenty of water. Remove and wash contaminated clothing before re-use. Consult a physician.
Inhalation	Move to fresh air. If breathing becomes difficult, call a physician.
Ingestion	Clean mouth with water. Consult a physician.
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable
Flash Point	Not applicable
Suitable Extinguishing Media	Dry chemical, CO ₂ , water spray or regular foam
Hazardous Combustion Products	Carbon oxides, Nitrogen oxides (NO _x), Sulfur oxides, Hydrogen Chloride gas.
Explosion Data	
Sensitivity to Mechanical Impact	Not sensitive
Sensitivity to Static Discharge	Not sensitive
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation
Methods for Containment	Prevent further leakage or spillage if safe to do so
Methods for Cleaning Up	Sweep up and place in closed containers for disposal. Avoid dust formation. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling Hygroscopic. Handle in accordance with good industrial hygiene and safety practice. Protect from light.

Storage Keep tightly closed in a dry and cool place. Hygroscopic. Protect from light.

Incompatible Products Strong oxidizing agents. Metals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cysteine hydrochloride, L-(+)-, monohydrate 7048-04-6			

Engineering Measures Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and Body Protection Wear protective gloves/clothing

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Fine white

Odor No information available

Odor Threshold No information available

Decomposition Temperature °C No information available

Freezing Point No information available

Initial Boiling Point No information available

Physical State Crystalline Powder

pH No data available

Flash Point Not applicable

Autoignition Temperature No data available

Boiling Point/Range Not applicable

Melting Point/Range No data available

Flammability Limits in Air **Upper** No data available **Lower** No data available

Explosive Properties No information available

Oxidizing Properties No information available

Evaporation Rate No data available

MMHG @ 37.8 C No data available

Vapor Density No data available

Specific Gravity No data available

Solubility Water-soluble

Partition Coefficient (n-octanol/water) No data available

Viscosity No information available

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Incompatible Products	Strong oxidizing agents. Metals.
Conditions to Avoid	Protect from light and moisture. Protect from moisture.
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides. Hydrogen chloride gas.
Hazardous Polymerization	Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Causes skin, eye and respiratory tract irritation.

Chronic Toxicity

Chronic Toxicity No known effect based on information supplied

Target Organ Effects None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of material in accordance with all federal, state, and local regulations
Contaminated Packaging	Dispose of in accordance with all federal, state and local regulations

14. TRANSPORT INFORMATION

IATA Not regulated

DOT Not regulated

15. REGULATORY INFORMATION

REACH Title VII Restrictions No information available.

Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poison and Deleterious Substances Control Law:
Cysteine hydrochloride, L-(+)-, monohydrate	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Component	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Cysteine hydrochloride, L-(+)-, monohydrate 7048-04-6 (95-100)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

International Inventories

TSCA Does not Comply
 EINECS/ELINCS Does not Comply
 ENCS Does not Comply
 IECSC Complies
 KECL Complies
 PICCS Does not Comply
 AICS Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPS) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CERCLA

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

International Regulations

Mexico - Grade No information available.

Canada

WHMIS Hazard Class

D2B Toxic materials



16. OTHER INFORMATION

Issuing Date 28-Jul-2009

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Revision Note
No information available.

Recommended Restrictions No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS