

This SDS complies with the US OSHA HCS 2012.

1. Product and Company Identification

Product Code: X000052
Product Name: NALC Tablets
Company Name: CalibreScientific US, Inc. **Phone Number:** 1 (360)260-2779
 1311 SE Cardinal Ct Suite 170
 Vancouver, WA 98683
Web site address: Alphatecsystems.com
Email address: Regulatory@calibrescientific.com
Emergency Contact: INFOTRAC 00-1- (352)323-3500
 International 1 (800)535-5053
Information: North America
Intended Use: For Laboratory Use Only
Product List NALC Tablets, Product Codes: X000020, X000052, 0003921, 0003928, 0004815, 0004815S, 0004817, 0004817S.

2. Hazards Identification

GHS Signal Word: **None**
GHS Hazard Phrases: No phrases apply.
GHS Precautionary Phrases: No phrases apply.
GHS Response Phrases: No phrases apply.
GHS Storage and Disposal Phrases: No phrases apply.
Inhalation: Low hazard for normal industrial handling.
Skin Contact: May cause skin irritation.
Eye Contact: May cause eye irritation and possible damage.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Low hazard for usual industrial handling.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
616-91-1	N-Acetyl-L-cysteine	No Data.
7758-11-4	Dipotassium phosphate {Potassium phosphate, dibasic}	No Data.
61-90-5	L-Leucine {(S)-(+)-Leucine}	No Data.
25322-68-3	Polyethylene glycol {Poly(ethylene oxide)}	No Data.

4. First Aid Measures

Emergency and First Aid

Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

In Case of Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

In Case of Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

In Case of Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Point: NP Method Used: Estimate

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NP

Suitable Extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Flammable Properties and Hazards: No data available.

Hazardous Combustion No data available.

Products:

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

7. Handling and Storage

Precautions To Be Taken in Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Precautions To Be Taken in Storing: Store in a cool, dry, well-ventilated area away from incompatible substances.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
616-91-1	N-Acetyl-L-cysteine	No data.	No data.	No data.
7758-11-4	Dipotassium phosphate {Potassium phosphate, dibasic}	No data.	No data.	No data.
61-90-5	L-Leucine {(S)-(+)-Leucine}	No data.	No data.	No data.
25322-68-3	Polyethylene glycol {Poly(ethylene oxide)}	No data.	No data.	No data.

Respiratory Equipment (Specify Type):	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Eye Protection:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure.
Other Protective Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Engineering Controls (Ventilation etc.):	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

9. Physical and Chemical Properties

Physical States:	<input type="checkbox"/> Gas <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid
Appearance and Odor:	White. sulfurous odor.
pH:	No data.
Melting Point:	110.00 C
Boiling Point:	NA / 0.0 mm Hg
Flash Point:	NP Estimate
Evaporation Rate:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure:	No data.
Vapor Density (vs. Air=1):	No data.
Specific Gravity (Water=1):	No data.
Solubility in Water:	No data.
Saturated Vapor Concentration:	No data.
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	NP
Decomposition Temperature:	No data.
Viscosity:	No data.

10. Stability and Reactivity

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	High temperatures, Incompatible materials, dust generation.
Incompatibility - Materials To Avoid:	Heavy metals, Heavy metal salts, Strong oxidizers.
Hazardous Decomposition or Byproducts:	Carbon monoxide, oxides of nitrogen, oxides of sulfur, irritating and toxic fumes and gases.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:	<p>Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: CAS# 25322-68-3: Polyethylene glycol {Poly(ethylene oxide)}: Mutagenicity:, Mutation test: DNA damage., 100.0 GM/L, Microorganism - not otherwise specified.. Result: Effects on Embryo or Fetus: Cytological changes (including somatic cell genetic material). - Proceedings of the National Academy of Sciences of the United States of America., National Academy of Sciences, Printing & Pub. Office, 2101 Constitution Ave., Washington, DC 20418, Vol/p/yr: 72,4288, 1975</p> <p>Mutagenicity:, Mutation test: Cytogenetic analysis., Species: Hamster, 50.00 PPH, Cells - not otherwise specified.. Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). - Doklady Biological Sciences, Plenum Pub. Corp., 233 Spring St., New York, NY 10013, Vol/p/yr: 240,228, 1978</p> <p>Acute toxicity, LD50, Oral, Rat, 28.00 GM/KG. Result: Vascular: Acute arterial occlusion. Musculoskeletal: Other changes. - Dow Chemical Company Reports., Dow Chemical USA, Health and Environment Research, Toxicology Research Lab, Midland, MI 48640, Vol/p/yr: MSD-1112,</p> <p>Acute toxicity, LD50, Oral, Mouse, 34.00 GM/KG. Result: Kidney, Ureter, Bladder: Changes in liver weight. Kidney, Ureter, Bladder: Other changes in urine composition. Kidney, Ureter, Bladder: Changes in bladder weight. - "Patty's Industrial Hygiene and Toxicology," 3rd rev. ed., Clayton, G.D., and F.E. Clayton, eds., John Wiley & Sons, Inc., New York, Vol/p/yr: 2C,3847, 1982</p> <p>Acute toxicity, LD50, Intraperitoneal, Mouse, 7500. MG/KG.</p>
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Result:

Behavioral: General anesthetic.

Behavioral: Ataxia.

Related to Chronic Data - death.

- National Technical Information Service, Vol/p/yr: AD628-313,

Acute toxicity, LD50, Oral, Species: Rabbit, 14.00 GM/KG.

Result:

Behavioral: Somnolence (general depressed activity).

Kidney, Ureter, Bladder: Changes in liver weight.

Blood: Pigmented or nucleated red blood cells.

- "Patty's Industrial Hygiene and Toxicology," 3rd rev. ed., Clayton, G.D., and F.E.

Clayton, eds., John Wiley & Sons, Inc., New York, Vol/p/yr: 2C,3847, 1982

Acute toxicity, LD50, Skin, Species: Rabbit, > 20.00 GM/KG.

Result:

Behavioral: General anesthetic.

Behavioral: Ataxia.

Kidney, Ureter, Bladder: Changes in liver weight.

- Dow Chemical Company Reports., Dow Chemical USA, Health and Environment Research, Toxicology Research Lab, Midland, MI 48640, Vol/p/yr: MSD-1112,

Acute toxicity, LD50, Oral, Species: Guinea pig, 17.00 GM/KG.

Result:

Behavioral: Coma.

Vascular: BP lowering not characterized in autonomic section.

Lungs, Thorax, or Respiration: Dyspnea.

- "Patty's Industrial Hygiene and Toxicology," 3rd rev. ed., Clayton, G.D., and F.E.

Clayton, eds., John Wiley & Sons, Inc., New York, Vol/p/yr: 2C,3847, 1982

Tumorigenic Effects:, TDLo, Intravaginal, Mouse, 416.0 MG/KG.

Result:

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.

Tumorigenic Effects: Other reproductive system tumors.

- British Journal of Cancer., Macmillan Press Ltd, Houndmills, Basingstoke, Hampshire RG21 2XS UK, Vol/p/yr: 15,252, 1961

Standard Draize Test, Skin, Species: Rabbit, 500.0 MG, 24 H.

Result:

Lungs, Thorax, or Respiration: Cough.

- "Sbornik Vysledku Toxilogickeho Vysetreni Latek A Pripravku," , Institut Pro Vychovu Vedoucicn P, Marhold, J.V., Institut Pro Vychovu Vedoucicn, Pracovniku Chemickeho, Prumyclu Praha Czechoslovakia, Vol/p/yr: -,255, 1972

Standard Draize Test, Eyes, Species: Rabbit, 500.0 MG, 24 H.

Result:

Cardiac: Change in rate.

Nutritional and Gross Metabolic: Changes in: Ca.

Nutritional and Gross Metabolic: Changes in: Metals, not otherwise specified.

- "Sbornik Vysledku Toxilogickeho Vysetreni Latek A Pripravku," , Institut Pro Vychovu Vedoucicn P, Marhold, J.V., Institut Pro Vychovu Vedoucicn, Pracovniku Chemickeho, Prumyclu Praha Czechoslovakia, Vol/p/yr: -,255, 1972

Open irritation test., Skin, Species: Rabbit, 500.0 MG.
 Result:
 Maternal Effects: Other effects.
 - Union Carbide Data Sheet, Union Carbide Corp., 39 Old Ridgebury Rd., Danbury, CT 06817, Vol/p/yr: 4/13, 1965

Carcinogenicity/Other Information:

CAS# 616-91-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Carcinogenicity:

NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information:

Environmental: No information reported.
 Physical: No information available.
 Other: None.
 CAS# 25322-68-3: Polyethylene glycol {Poly(ethylene oxide)}:
 LC50, Goldfish (Carassius auratus), 5000000. UG/L, 24 H, Mortality, Water temperature: 20.00 C C, pH: 7.00.
 Result:
 Abnormal development.
 - The Acute Toxicity of Some Petrochemicals to Goldfish, Bridie, A.L., C.J.M. Wolff, and M. Winter, 1979

LC50, Atlantic Salmon (Salmo salar), Parr, 1000000. UG/L, 24 H, Mortality, Water temperature: 15.00 C C, Hardness: Soft.
 Result:
 Abnormal development.
 - Lethal Response by Atlantic Salmon Parr to Some Polyoxyethylated Cationic and Nonionic Surfactants, Wildish, D.J., 1974

LC50, Atlantic Salmon (Salmo salar), Parr, 1000000. UG/L, 96 H, Mortality, Water temperature: 15.00 C C, Hardness: Soft.
 Result:
 Abnormal development.
 - Lethal Response by Atlantic Salmon Parr to Some Polyoxyethylated Cationic and Nonionic Surfactants, Wildish, D.J., 1974

13. Disposal Considerations

Waste Disposal Method:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
 RCRA P-Series: None listed.
 RCRA U-Series: None listed.

14. Transport Information

GHS Classification:

No GHS classifications apply.

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not regulated as a hazardous material.

DOT Hazard Class:

UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not regulated as a hazardous material.

UN Number:

Hazard Class:

TDG Classification:

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not regulated as a hazardous material.

UN Number:

Hazard Class:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not regulated as a hazardous material.

UN Number:

Packing Group:

Hazard Class:

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
616-91-1	N-Acetyl-L-cysteine	No	No	No
7758-11-4	Dipotassium phosphate {Potassium phosphate, dibasic}	No	No	No
61-90-5	L-Leucine {(S)-(+)-Leucine}	No	No	No
25322-68-3	Polyethylene glycol {Poly(ethylene oxide)}	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
616-91-1	N-Acetyl-L-cysteine	CA PROP.65: No; MA Oil/HazMat: No; NJ EHS: No; PA HSL: No
7758-11-4	Dipotassium phosphate {Potassium phosphate, dibasic}	CA PROP.65: No; MA Oil/HazMat: No; NJ EHS: No; PA HSL: No
61-90-5	L-Leucine {(S)-(+)-Leucine}	CA PROP.65: No; MA Oil/HazMat: No; NJ EHS: No; PA HSL: No
25322-68-3	Polyethylene glycol {Poly(ethylene oxide)}	CA PROP.65: No; MA Oil/HazMat: No; NJ EHS: No; PA HSL: No

16. Other Information

Revision Date: 03/21/2025 **Previous revision:** 12/03/2018

Preparer Name: A. Frontella

Additional Information About This Product: No data available.

This Product:

Document & Change Control Number SDS0180.F.

Company Policy or Disclaimer: Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific

SAFETY DATA SHEET

NALC Tablets

material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.