



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Betaine Hydrochloride USP

30-1557

Section 1: Identification

Product Name Betaine Hydrochloride USP

Commercial Name Acidol

Product Use Not available

Restrictions On Use Not available

Product Code 30-1557

Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Serious Eye Damage/Eye Irritation Category 2

CFR 1910.1200

Signal Word WARNING

Hazard Statement(s) Causes serious eye irritation.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention	Wash skin thoroughly after handling. Wear protective gloves, eye protection, face protection.
Response	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.
Storage	Not available
Disposal	Not available

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Betaine HCL
% By Weight >95
CAS# 590-46-5
Molecular Weight 153.61 g/mole
Chemical Formula C₅H₁₁NO₂.HCl
Synonym(s) Lysine HCl

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Betaine HCl	590-46-5	100	Not available	LD50: Not available. LC50: Not available.

Section 4: First-Aid Measures

Inhalation	Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention
Ingestion	Clean mouth with water. Get medical attention
Symptoms/Effects	
Acute	Not available
Delayed	Not available
Immediate Medical Attention	
Treat symptomatically	

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam

Unsuitable Extinguishing Media

Not available.

Products of Combustion

Nitrogen oxides (NO_x). Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen chloride gas. Keep product and empty container away from heat and sources of ignition.

Firefighters Special Equipment and Precautions

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Section 6: Accidental Release Measures

Ensure adequate ventilation. Use personal protective equipment as required. Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

Section 7: Handling and Storage

Handling: Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Storage. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents

Section 8: Exposure Controls/Personal Protection

Exposure Limits	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Controls	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
Personal Protection	Eye/face 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. Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory Protection: 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. Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

Appearance	Solid. Color: White.		
Odor	Odorless		
Odor Threshold	Not available.		
Melting Point	241 °C / 465.8 °F	pH	1 (@ 20) 50 g/l aq.sol
Freezing Point	Not available.	Vapor Pressure	Not applicable.
Boiling Point/Range	Not available.	Vapor Density	Not available.
Decomposition temperature	Not available.	Viscosity	Not available.
Partition Coefficient: n-octanol/water	Not available.	Evaporation Rate	Not available.
Flash Point	Not available.	Autoignition temperature	Not available.
Flammability	Not available.	Flammability or Explosive Limits:	
		Lower	Not available.
		Upper	Not available.
Solubility(ies)	Soluble in water		
Other	Not available.		

Section 10: Stability and Reactivity

Reactivity	None known, based on information available
Chemical Stability	Stable under normal conditions.
Hazardous Polymerization	Hazardous polymerization does not occur.
Conditions to Avoid	Excess heat. Incompatible products.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride gas.

Section 11: Toxicological Information
RTECS BP3136000

Acute Toxicity

Not available

Skin Corrosion/Irritation

Not available.

Serious Eye Damage/Irritation

Severe eye irritant

Respiratory or Skin Sensitization

Not available.

Germ Cell Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive Toxicity

Not available.

Routes of Entry

Not available

Symptoms Related to Exposure

Not available.

Potential Health Effects

Not available.

Target Organ(s)

Not available.

Section 12: Ecological Information**Ecotoxicity**

Do not empty into drains

Persistence and Degradability

Soluble in water Persistence is unlikely based on information available

Bioaccumulative Potential

Not available.

Mobility in Soil

Will likely be mobile in the environment due to its water solubility.

Other Adverse Effects

Not available.

Section 13: Disposal Considerations**Waste Disposal**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Disposal of Container

Not available.

Other Considerations

Not available.

Section 14: Transport Information**DOT Classification**

Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information**Regulations**

ARA 313 Not applicable SARA 311/312 Hazard Categories See section 2 for more information CWA (Clean Water Act) Not applicable Clean Air Act Not applicable OSHA - Occupational Safety and Health Administration Not applicable CERCLA Not applicable California Proposition 65 This product does not contain any Proposition 65 chemicals. U.S. State Right-to-Know Regulations Not applicable U.S. Department of Transportation Reportable Quantity (RQ): N DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland Security This product does not contain any DHS chemicals

Other

WHMIS Not controlled under WHMIS (Canada). (Canada);DSCL (EEC) R36/38- Irritating to eyes and skin.;Gloves.;Lab coat.;Dust respirator. Be sure to use an approved/certified respirator or equivalent.;Splash goggles.

Section 16: Other Information

Not available.