

## Betaine

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 /  
March 26, 2012 / Rules and Regulation

Revision Date: 21-Apr-2025  
Supersedes: 01-Oct-2021

### 1 PRODUCT & COMPANY IDENTIFICATION

<b>Product Name:</b>	Betaine	<b>Distributor:</b>	MakingCosmetics Inc.
<b>Synonyms:</b>	1-Carboxy-N,N,N-trimethylmethan-aminium hydroxide inner salt. Trimethylglycine	<b>Address:</b>	10800 231 <sup>st</sup> Way NE
<b>INCI Name:</b>	Betaine		Redmond, WA 98053 (USA)
<b>CAS Number:</b>	107-43-7	<b>Phone / Fax:</b>	425-292-9502 / 425-292-9601
<b>Formula:</b>	No data available	<b>Web:</b>	<a href="http://www.makingcosmetics.com">www.makingcosmetics.com</a>
<b>Product Form:</b>	Solid (Powder)		
<b>Product Use:</b>	Cosmetic use	<b>Emergency Telephone Number:</b>	1-800-424-9300 (Chemtrec)

### 2 HAZARDS IDENTIFICATION

<b>Classification:</b>	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)		
<b>Signal Word:</b>	<b>WARNING!</b>		
<b>Hazard Pictograms:</b>	None.		
<b>Hazard Statements:</b>	May form combustible dust concentrations in air.		
<b>Precautionary Statements:</b>	None.		
<b>Potential Health Hazards:</b>	Eyes: May be an irritant. Inhalation: May be an irritant. Skin: May be an irritant. Ingestion: May cause nausea, vomiting, and diarrhea.		
<b>NFPA Ratings (704):</b>	<b>Health</b>	N/A	N/A
	<b>Flammability</b>	N/A	N/A
	<b>Reactivity</b>	N/A	N/A
	<b>Specific Hazard</b>	N/A	

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>Molecular Weight</u>
Betaine	107-43-7	>99%	Not Available

### 4 FIRST AID MEASURES

<b>Eyes:</b>	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.
<b>Inhalation:</b>	Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
<b>Skin:</b>	Wash with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.
<b>Ingestion:</b>	Do Not Induce Vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Get medical attention if symptoms occur.
<b>General Advice:</b>	When in doubt or if symptoms are observed, get medical advice. Treat symptomatically.

### 5 FIRE-FIGHTING MEASURES

<b>Suitable (and unsuitable) extinguishing media:</b>	May be combustible at high temperatures. Use appropriate media (alcohol-resistant foam, fire extinguishing powder, water spray) for surrounding environment and adjacent fire. No unsuitable extinguish media listed.
<b>Special protective equipment &amp; precautions for firefighters:</b>	Wear self-contained breathing apparatus and full protective clothing, including eye protection and boots.

<b>Flash Points:</b>	No data available.
<b>Specific hazards arising from the chemical:</b>	Keep product and empty container away from heat and sources of ignition. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Decomposes on heating. Decomposition products: Trimethylamine. Carbon dioxide (CO <sub>2</sub> ), Esters. No sensitivity to mechanical impact noted. Product is sensitive to static discharge. See also Stability and reactivity section.

## 6 ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment &amp; emergency procedures:</b>	Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Use personal protection recommended in Section 8. Sweep up to prevent slipping hazard. Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions:</b>	Avoid liquid release into sewers/public water/environment. Notify environmental authorities in case of leak.
<b>Methods and material for containment and cleaning up:</b>	Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Use industrial vacuum cleaners approved for combustible dust and area electrical classification. Dispose of absorbed material in accordance with the regulations.

## 7 HANDLING & STORAGE

<b>Precautions for safe handling:</b>	Avoid generation of dust and aerosols. Avoid contact with eyes, skin and clothing. Minimize dust generation and accumulation. Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA- 654). Use good personal hygiene practice. See section 8 for recommendations on the use of personal protective equipment.
<b>Conditions for safe storage, incl. any incompatibilities:</b>	Keep/store only in original container. Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials (see section 10 for incompatibilities).

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Component</u>	<u>Exposure Limits</u>	<u>Basis</u>	<u>Entity</u>
Betaine	Not available		

TWA: Time Weighted Average over 8 hours of work.  
TLV: Threshold Limit Value over 8 hours of work.  
REL: Recommended Exposure Limit  
PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.  
IDLH: Immediately Dangerous to Life or Health  
WEEL: Workplace Environmental Exposure Levels  
CEIL: Ceiling

### Personal Protection:

<b>Eyes:</b>	Wear safety glasses with side shields (or goggles).
<b>Inhalation:</b>	If exposure limits are likely to be exceeded or if irritation or other symptoms are experienced, NIOSH/MSHA or EN 136 approved respiratory protection should be worn.
<b>Body:</b>	Wear suitable gloves and full protective clothing.
<b>Other:</b>	Use good personal hygiene practices. Regular cleaning of equipment, work area and clothing is recommended. Ensure adequate ventilation. Avoid generation of dust and aerosols. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Crystalline Powder	<b>Vapor Pressure:</b>	No data available
<b>Odor:</b>	Faint molasses odor	<b>Vapor Density:</b>	No data available
<b>Odor Threshold:</b>	No data available	<b>Evaporation Rate:</b>	No data available
<b>Color:</b>	White	<b>Flammability:</b>	No data available
<b>Molecular Weight:</b>	No data available	<b>Upper/lower Explosive Limit:</b>	No data available

<b>pH:</b>	No data available	<b>Flash Point:</b>	No data available
<b>Boiling Point:</b>	No data available	<b>Specific Gravity:</b>	No data available
<b>Melting/Freezing Point:</b>	No data available	<b>Water Solubility:</b>	Soluble
<b>Relative Density:</b>	No data available	<b>Auto-Ignition Temperature:</b>	No data available
<b>Partition Coefficient:</b>	-3.1 (@ 20°C)	<b>Decomposition Temperature:</b>	No data available
<b>Viscosity:</b>	No data available	<b>Explosive Properties:</b>	No data available
<b>Oxidizing Properties:</b>	No data available	<b>Metal Corrosion:</b>	No data available

## 10 STABILITY AND REACTIVITY

<b>Reactivity:</b>	Not expected.
<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Hazardous Polymerization:</b>	See section 5 for more information.
<b>Conditions to Avoid:</b>	Very hygroscopic; protect from moisture. Heat, flames and sparks. May form combustible dust concentrations in air.
<b>Incompatible Materials:</b>	Keep away from heat, flames and sparks.
<b>Hazardous Decomposition Products:</b>	Decomposes on heating. Decomposition products: Trimethylamine.
<b>Possible Hazardous Reactions:</b>	None under normal processing.

## 11 TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	No data available.
<b>Skin:</b>	OECD Test No. 428: Skin Absorption: In Vitro Method: Negative.
<b>Eyes:</b>	OECD Test No. 405: Acute Eye Irritation/Corrosion: Negative.
<b>Inhalation:</b>	Not expected.
<b>Ingestion:</b>	(Rat) Component: Betaine (CAS: 107-43-7); Oral LD50 = 11179 mg/kg.
<b>Carcinogenicity:</b>	OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies: Negative.
<b>Teratogenicity:</b>	Not expected.
<b>Germ Cell Mutagenicity:</b>	OECD Test No. 476: In vitro Mammalian Cell Gene Mutation Test: Negative. OECD Test No. 474: Mammalian Erythrocyte Micronucleus Test: Negative.
<b>Embryotoxicity:</b>	No data available.
<b>Specific Target Organ Toxicity:</b>	No data available.
<b>Reproductive Toxicity:</b>	Not expected.
<b>Skin Sensitization:</b>	Not a skin sensitizer.
<b>Systemic Toxicity:</b>	OECD Test No. 407: Repeated Dose 28-day Oral Toxicity Study in Rodents: Negative. NOAEL (No observed adverse effect level) = 5771 mg/kg bw/day.

## 12 ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	No data available.
<b>Aquatic Vertebrate:</b>	No data available.
<b>Aquatic Invertebrate:</b>	(Crustacea) Betaine (CAS: 107-43-7); 48-hour daphnia EC50 4335 mg/L.
<b>Aquatic Plants:</b>	(Desmodemus subspicatus) EC50; 72 hours; algae 1199 mg/l.
<b>Persistence and Degradability:</b>	Readily biodegradable (88% after 28 days).
<b>Bioaccumulative Potential:</b>	No bioaccumulation potential.
<b>Mobility in Soil:</b>	Soluble in water.
<b>PBT and vPvB Assessment:</b>	No data available.
<b>Other Adverse Effects:</b>	None known.

## 13 DISPOSAL CONSIDERATIONS

<b>Waste Residues:</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product.
<b>Product Containers:</b>	Dispose of empty containers and wastes safely. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of

the material and alter the waste classification and proper disposal methods

## 14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	Not regulated.
TDG (Transportation of Dangerous Goods, Canada):	No data available.
IMDG (International Maritime Dangerous Goods):	Not regulated.
IATA (International Air Transport Association):	Not regulated.
ICAO (International Civil Aviation Organization):	No data available.

## 15 REGULATORY INFORMATION

TSCA Inventory Status:	Betaine (CAS: 107-43-7): Listed.
SARA 313:	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any 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:	Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.
Clean Water Act:	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).
CERCLA:	This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.
California Prop. 65:	This product does not contain any Proposition 65 chemicals.
Canada (DSL):	Betaine (CAS: 107-43-7): Listed.
EU (EINECS):	Betaine (CAS: 107-43-7): Listed.
China (IECSC):	Betaine (CAS: 107-43-7): Listed.
Australia (AICS):	Betaine (CAS: 107-43-7): Listed.
Japan (ENCS):	Betaine (CAS: 107-43-7): Listed.
Philippines (PICCS):	Betaine (CAS: 107-43-7): Listed.
Korea (KECL):	Betaine (CAS: 107-43-7): Listed.
New Zealand (NZIoC):	No data available.

## 16 OTHER INFORMATION

Revision Date:	21-Apr-2025
Compliance:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Disclaimer:	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.