



SAFETY DATA SHEET

1. Identification

Revision Date: 01-01-2017

Issue Date: 01-01-2017

Product identifier

BOILER TREATMENT #70

Other means of identification

None

Recommended use

ALL PROPER AND LEGAL PURPOSES

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name

Tamco Chemical, Inc.

Address

2919 Oak Street

Santa Ana, CA 92707

Telephone

714-543-6912

Email

tamcochemical@msn.com

Emergency phone number

714-543-6912

2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Acute toxicity, oral

Category 4

Serious eye damage/eye irritation

Category 1

Environmental hazards

Not classified

OSHA defined hazards

Not classified.

Label elements



Signal word

Danger

Hazard statement

Harmful if swallowed. Causes serious eye damage.

Precautionary statement

Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection
Response	If swallowed: Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Rinse mouth.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise Classified (HNOC)	None known.
Supplemental information	95% of the mixture consists of component(s) of unknown acute oral toxicity.

3. Composition/Information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
CARBONIC ACID SODIUM SALT		497-19-8	3
GLYCINE		64-02-8	2
N,N'-1,2-ETHANEDIYL BIS {N-(carboxymethyl)-, SODIUM SALT(1:4)			
Other components below reportable levels			5

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects,	Severe eye irritation.

acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dust may irritate the respiratory tract, skin and eyes.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon Dioxide (CO2)
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General information	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Collect dust using a vacuum cleaner equipped with HEPA filter.
Methods and materials for containment and cleaning up	Large spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water. Small spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for reuse. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or into the ground.

Environmental precautions

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not get into eyes. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personnel protective equipment. Wash hands thoroughly after handling. Observe food industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values
Appropriate engineering controls

No biological exposure limits noted for the ingredient(s).
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may create dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Eye wash facilities must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear suitable protective clothing.

Respiratory protection

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding exposure limits.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid
Form	Powder
Color	Light brown
Odor	No characteristic
Odor threshold	Not available
pH	Not available
Melting point/freezing point	1167.08°F (630.6°C) estimated /999°F (537.22°C)
Initial boiling point and boiling range	Not available
Flash point	999°F (537.2°C)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not available
Flammability limit – upper (%)	Not available
Explosive limit – lower (%)	Not available
Explosive limit – upper (%)	Not available
Vapor pressure	0.00001 hPa estimated
Vapor density	Not available
Relative density	Not available
Solubility(ies)	
Solubility (water)	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Density	21.91 lbs./gal. estimated #
Explosive properties	Not explosive
Flammability class	Combustible IIIB estimated
Oxidizing properties	Not oxidizing
Specific gravity	2.63 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage, and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials

Incompatible materials
Hazardous decomposition products

Strong oxidizing agents
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
Skin contact
Eye contact
Ingestion

May cause irritation to the respiratory system.
Dust or powder may irritate the skin.
Causes severe eye damage
Harmful if swallowed.

Symptoms related to the physical, chemical
and toxicological characteristics

Severe eye irritation. Dusts may irritate the respiratory tract, skin and eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity

Harmful if swallowed

Components

CARBONIC ACID SODIUM SALT (CAS 497-19-8)

Species

Test Results

Acute

Inhalation

LD50

Guinea pig

0.8 mg/l, 2 Hours

Inhalation

LC50

Mouse

1.2 mg/l, 2 Hours

Inhalation

LD50

Rat

2.3 mg/l, 2 Hours

Inhalation

LD50

Rat

4090 mg/kg

GLYCINE, ETHANEDIYLBIS[N-(CARBOXYMETHYL)- SODIUM SALT (CAS 64-02-6)

Acute

LD50

Rat

>2000 mg/kg

Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Not a respiratory sensitizer

Respiratory sensitization

This product is not expected to cause skin sensitization.

Skin sensitization

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Reproductive toxicity	Not listed.	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity-single exposure		Not classified.
Specific target organ toxicity-repeated exposure		Not classified.
Aspiration hazard		Not an aspiration hazard.

12. Ecological information

Ecotoxicity
spills can

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent

Have a harmful or damaging effect on the environment.			
Components		Species	Test Results
CARBONIC ACID SODIUM SALT (1.2) (CAS 497-19-8)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	1 56.6-298.9 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	300 mg/l, 96 hours
GLYCINE, N,N'-1,2-ETHANEDIYLBIS[N-(CARBOXYMETHYL)-SODIUM SALT (1 (CAS 64-02-6)			
Aquatic			
	LC50	Bluegill (Lepomis macrochirus)	472-500 mg/l, 96 hours

*Estimates for product may be based on additional component data not shown.

Persistence and degradability	No data available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer, and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

DOT information on packaging may be different from that listed.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1 200.

One or more components are not listed on TSCA.

TSCA Section 12 (b) Export Notification (40 CFR 707, subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not Listed

SARA 304 Emergency Release Notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard

Yes

Delayed Hazard

No

Fire Hazard

No

Pressure Hazard

No

Reactivity Hazard

No

SARA 302 Extremely hazardous substance

Not Listed

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs)

Not regulated

Clean Air Act (CAA) Section 112 ® Accidental Release Prevention (40 CFR 68.130)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

US state regulations

US. California Controlled Substances. CA Dept. of Justice (CA Health and Safety Code Section 11100)

Not listed

US. Massachusetts RTK – Substance List

Not regulated

US. New Jersey Worker and Community Right-to-Know Act

Not listed

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed

US. Rhode Island RTK

Not regulated

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not

known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or Region	Inventory Name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (ACS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s). A “No” indicates that one or more of the components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue Date	11-30-2015
Version #	04
HMIS Ratings	Health: 3 Flammability: 0 Physical hazard: 0
NFPA Ratings	Health: 3 Flammability: 0 Instability: 0

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Revision Information	Other information, including date of preparation or last revision: Disclaimer 06-02-2015
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