

Material Safety Data Sheet

Number: **DMN-352**

Product Name: **Boiler-Rite Organic Descaler**

An organic acid.

Revised: 9/25/00

Damon Industries, Inc.
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Alliance, OH 44601

24 hour Emergency Only phone: 1-800-535-5053
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Section 2 - Composition / Information on Hazardous Ingredients

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Percent</u>	<u>Carcinogen</u>
Organic salt	506-89-8	25-30%	No

Section 3 - Hazards Identification

Emergency Overview: Concentrate is severely irritating to the eyes and is irritating to the skin. Diluted product is less irritating. Product is water based and does not burn. Product has a low pH and more than 1 gallon should not be allowed into sanitary sewers without neutralizing. Use produces carbon dioxide gas and possibly hydrogen gas requiring adequate ventilation. A tan liquid with a mild odor.

Health Hazards: Irritant

Physical Hazards: Slightly reactive

Primary Routes of Entry: Through Skin Inhalation Ingestion

Potential Health Effects:

Eyes - Concentrate causes severe irritation. Dilutions may cause mild to moderate irritation.

Skin - Concentrate causes irritation. Brief contact has little or no effect when rinsed off promptly.

Swallowing - Concentrate causes irritation, possibly severe, to mucous membranes.

Breathing - not a likely route of entry. If sprayed the mist can be irritating.

Section 4 - First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention immediately.

Skin Contact: With the concentrate remove contaminated clothing and shoes immediately. With diluted product remove soaked clothing and shoes as soon as practical. If there is no redness or irritation wash with soap and water. If there is redness or irritation flush skin with running water for 15 minutes. If irritation persists, get medical attention. Wash contaminated clothing before reuse. Discard shoes if more than damp with concentrate.

Inhalation: Move affected person to fresh air. If irritation persists get medical attention.

Ingestion: If the product is swallowed, do NOT induce vomiting. If affected person is conscious, give a glass or two of water or milk to drink. Treat for shock by keeping person warm and quiet. Get medical attention immediately.

Section 5 - Fire-Fighting Measures

Flash Point: None (ASTM D-56 closed cup)

Lower Explosive Limit: Not Applicable

Upper Explosive Limit: Not Applicable

Extinguishing Media: Any

Special Fire Fighting Procedures: None.

Unusual Fire And Explosion Hazards: At temperatures above 140°F it may release hydrogen gas when in contact with metals.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Clean up small spills with a rag or mop using an alkaline detergent or a 50% solution of baking soda. Spills of 1 gallon or less can be washed to a sanitary sewer with plenty of water. Larger spills should be diked to prevent spreading and then collected into clean pails or drums or absorbed with a non-reactive absorbent (sand or clay).

Section 7 - Handling and Storage

Empty containers retain product residue and may be hazardous. Observe all precautions given in this data sheet and on label. Keep container closed. Store in fiberglass, polyethylene or polypropylene containers. Do not store in metal containers. Store in a cool, well ventilated area. Remove leaking containers.

Chlorine Gas Warning: If this product contacts bleach or a cleaner containing bleach or chlorinating biocides (hypochlorites), it could produce a dangerous gas (chlorine). If your facility uses a chlorine containing product,

look at the MSDS on that product now, to learn what to do if chlorine is accidentally produced. If this product is used on a regular basis, your facility should decide upon the appropriate emergency action plan for accidental release of chlorine as a part of your emergency preparedness plan. Contact Damon Industries if more information is needed.

Section 8 - Exposure Controls / Personal Protection

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Percent</u>	<u>TWA(source)</u>	<u>STEL</u>	<u>Ceiling</u>
Organic salt (1)=OSHA (2)=NIOSH (3)=ACGIH (4)=CANADA	506-89-8	25-30%	TWA=8 hr Time Weighted Average	there are no published limits known.	STEL=15 minute TWA Ceiling=Instantaneous

Ventilation: Scale removal creates carbon dioxide gas and may create hydrogen gas. Use exhaust fans if present or open doors and windows and use portable fans to prevent build-up of gasses. Carbon dioxide is heavier than air and can accumulate in low places causing a suffocation hazard. Do not smoke or allow flames or sparks close to boiler openings where hydrogen gas could reach flammable limits.

Respiratory Protection: None required. If product is sprayed a NIOSH approved respirator with an acid cartridge may be required.

Protective Gloves: Wear natural or synthetic rubber or nitrile gloves. Do not use disposable latex. Disposable nitrile is acceptable.

Eye Protection: Wear safety glasses with side shields or chemical goggles.

Other Protective Equipment: When considerable splashing is possible wearing full impervious clothing is suggested. An eye wash station near by is not mandatory, but would greatly reduce symptoms and recovery time. A drench hose is recommended if a large sink with running water is not close by for flushing skin.

Section 9 - Physical and Chemical Properties

Boiling Point: 212° F.

Specific Gravity: 1.15

Percent Volatiles: 75%

Solubility In Water: Complete

Appearance and Odor: A tan liquid with mild odor.

Vapor Pressure: Not applicable

Vapor Density: Not Applicable

Evaporation Rate: Same as water.

pH: concentrate < 1.0

Section 10 - Stability and Reactivity

Incompatibility: Alkalis, bleach, oxidizers, cyanides, sulfides. **Hazardous Decomposition Products:** None

Section 11 - Toxicological Information

Target Organs: None.

Section 12 - Ecological Information

Do not dispose of in the environment.

Section 13 - Disposal Considerations

Waste Disposal Method: Dispose of up to 1 gallon of concentrate in the sanitary sewer with a large amount of water. Some sewage departments may allow you to dispose of larger quantities without neutralizing. Call them for approval. Larger amounts may have to be neutralized to within the pH limits of your waste water treatment system before disposal. Call Damon Industries at 1-800-362-9850 if you need neutralizing instructions.

Section 14 - Transport Information

D.O.T. Hazard Class: Not regulated for land transport by the D.O.T.

WHIMS Classification: Class D2B, Class E (Corrosive to Aluminum. Non-Corrosive to Skin and Mild Steel).

Section 15 - Regulatory Information

The components of this product are on the TSCA inventory of chemical substances. This product contains ingredients which are on the following state lists: None

Section 16 - Other Information

NFPA / HMIS Estimates:	Health: 1	Flammability: 0	Reactivity: 1
0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe			

First release 9/25/00.

The information accumulated herein is believed to be accurate but is not warranted to be. Recipients are advised to confirm in advance that the information is current, applicable, and suitable to their circumstances.