



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Malco Iron Blaster 2.0</b>	
<b>Other means of identification</b>		
<b>Product Code</b>	2630	
<b>Recommended use</b>	Not available.	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Malco Products, Inc.	
<b>Address</b>	361 Fairview Ave Barberton, OH 44203 United States	
<b>Telephone</b>	Phone	800-253-2526
	Fax	330-753-2025
<b>Website</b>	www.malcopro.com	
<b>E-mail</b>	msdsinfo@malcopro.com	
<b>Contact person</b>	Technical Department	
<b>Emergency phone number</b>	Phone	1-800-424-9300
<b>Supplier</b>	Not available.	

## 2. Hazard identification

<b>Physical hazards</b>	Corrosive to metals	Category 1
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Sensitization, skin	Category 1A
<b>Environmental hazards</b>	Not classified.	

### Label elements



<b>Signal word</b>	Warning
<b>Hazard statement</b>	May be corrosive to metals. Causes skin and eye irritation. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Keep only in original packaging. Avoid breathing mist/vapors. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.
<b>Response</b>	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor. If skin irritation or rash occurs: Get medical advice/attention. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.
<b>Storage</b>	Store in a corrosion resistant container with a resistant inner liner.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Supplemental information</b>	None.

**Other hazards**

None known.

**3. Composition/information on ingredients****Mixtures**

Chemical name	Common name and synonyms	CAS number	%
azaniam;2-sulfanyacetate		5421-46-5	3 - < 5
propan-2-ol		67-63-0	3 - < 5
1-propoxypropan-2-ol		1569-01-3	1 - < 3
"9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium Chloride"		989-38-8	< 1
N,N-dimethyldodecan-1-amine oxide		1643-20-5	< 1
tetrasodium;2-[2-[bis(carboxylatomet hyl)amino]ethyl-(carboxylatomet hyl)amino]acetate		64-02-8	< 0.3
Other components below reportable levels			80 - < 90

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures****Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.

**Skin contact**

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

**Eye contact**

Rinse with water. Get medical attention if irritation develops and persists.

**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, acute and delayed**

May cause an allergic skin reaction. Dermatitis. Rash.

**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 the doctor in attendance. Wash contaminated clothing before reuse.

**5. Fire-fighting measures****Suitable extinguishing media**

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire. Not applicable.

**Specific hazards arising from the chemical**

Not available.

**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**

Move containers from fire area if you can do so without risk.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

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. Avoid breathing mist/vapors. 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.

**Methods and materials for containment and cleaning up**

Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

**7. Handling and storage****Precautions for safe handling**

Do not taste or swallow. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Store in tightly closed container. Keep only in the original 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****US. ACGIH Threshold Limit Values (TLV)**

Components	Type	Value
propan-2-ol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended**

Components	Type	Value
propan-2-ol (CAS 67-63-0)	STEL	984 mg/m <sup>3</sup>
		400 ppm
	TWA	492 mg/m <sup>3</sup>
		200 ppm

**Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances Workers Compensation Board, as amended**

Components	Type	Value
propan-2-ol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended**

Components	Type	Value
propan-2-ol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**Canada. New Brunswick OELs: Threshold Limit Values (TLVs) Based on the 1991 and 1997 ACGIH TLVs and BEIs Publication (New Brunswick Regulation 91-191)**

Components	Type	Value
propan-2-ol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**Canada. Ontario OELs (Regulation 833, Control of Exposure to Biological or Chemical Agents), as amended**

Components	Type	Value
propan-2-ol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**Canada. Quebec OELs (Regulation respecting occupational health and safety, v. S-2.1, r.13), as amended**

Components	Type	Value
propan-2-ol (CAS 67-63-0)	STEL	1230 mg/m3
		500 ppm
	TWA	985 mg/m3
		400 ppm

**Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996; Table 21), as amended**

Components	Type	Value
propan-2-ol (CAS 67-63-0)	15 minute	400 ppm
	8 hour	200 ppm

**Biological limit values****ACGIH Biological Exposure Indices (BEI)**

Components	Value	Determinant	Specimen	Sampling Time
propan-2-ol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation 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.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles). Face shield is recommended.

**Skin protection**

**Hand protection** Chemical resistant gloves.

**Other**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**

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

**Thermal hazards**

None known. 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. Contaminated work clothing should not be allowed out of the workplace.

**9. Physical and chemical properties**

**Physical state** Liquid.

**Form** Liquid.

**Color** Pink

**Odor** Lemon Sulfur

**Melting point/freezing point** Not available.

**Boiling point or initial boiling point and boiling range** Not available.

**Flammability** Not applicable.

**Upper/lower flammability or explosive limits**

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Flash point** >200.0 °F (>93.3 °C)

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**pH** 5.8

**Kinematic viscosity** Not available.

**Solubility**

**Solubility (water)** Not available.

<b>Partition coefficient (n-octanol/water) (log value)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Density and/or relative density</b>	
<b>Density</b>	8.79 lb/gal
<b>Vapor density</b>	Not available.
<b>Particle characteristics</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIB estimated
<b>Oxidizing properties</b>	Not oxidizing.
<b>Viscosity</b>	600 cP
<b>Viscosity temperature</b>	68 °F (20 °C)
<b>VOC</b>	2.5 % w/w by weight

## 10. Stability and reactivity

<b>Reactivity</b>	May be corrosive to metals.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Metals.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Harmful if inhaled.
<b>Skin contact</b>	May cause an allergic skin reaction.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**      May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

**Acute toxicity**      Harmful if inhaled. Harmful if swallowed.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
1-propoxypropan-2-ol (CAS 1569-01-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	3.55 g/kg
<b>Oral</b>		
LD50	Rat	2.8 - 3 g/kg
N,N-dimethyldodecan-1-amine oxide (CAS 1643-20-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 20 g/kg
propan-2-ol (CAS 67-63-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	12870 mg/kg

Components	Species	Test Results
<b>Inhalation</b>		
LC50	Rat	51.05 mg/l, 8 Hours
<b>Oral</b>		
LD50	Rat	4.7 g/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.	
<b>ACGIH Carcinogens</b>		
propan-2-ol (CAS 67-63-0)	A4 Not classifiable as a human carcinogen.	
<b>Canada - Manitoba OELs: carcinogenicity</b>		
propan-2-ol (CAS 67-63-0)	Not classifiable as a human carcinogen.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
"9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium Chloride" (CAS 989-38-8)	3 Not classifiable as to carcinogenicity to humans.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not an aspiration hazard.	

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
propan-2-ol (CAS 67-63-0)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50 Bluegill ( <i>Lepomis macrochirus</i> )	> 1400 mg/l, 96 hours
tetrasodium;2-[2-[bis(carboxylatomethyl)amino]ethyl-(carboxylatomethyl)amino]acetate (CAS 64-02-8)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50 Bluegill ( <i>Lepomis macrochirus</i> )	472 - 500 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

1-propoxypropan-2-ol	0.621
N,N-dimethyldodecan-1-amine oxide	4.67
propan-2-ol	0.05

**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.

<b>Hazardous waste code</b>	D002: Waste Corrosive material [pH ≤2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	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). Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
<b>Contaminated packaging</b>	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

### IATA

<b>UN number</b>	UN1760
<b>UN proper shipping name</b>	Corrosive liquids, n.o.s., (contains ammonium mercaptoacetate)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary hazard</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### IMDG

<b>UN number</b>	UN1760
<b>UN proper shipping name</b>	Corrosive liquids, n.o.s., (contains ammonium mercaptoacetate)
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary hazard</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	Not assigned.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

IATA; IMDG



## 15. Regulatory information

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

### Controlled Drugs and Substances Act

Not regulated.

### Export Control List (CEPA 1999, Schedule 3)

Not listed.

### Greenhouse Gases

Not listed.

### Precursor Control Regulations

Not regulated.

### International regulations

#### Stockholm Convention

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*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 components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information**

**Issue date** 01-10-2025

**Revision date** 01-12-2025

**Version #** 02

**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 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. Malco Products, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

**Revision information** Composition / Information on Ingredients: Component Summary