

SAFETY DATA SHEET

Issue Date 12-2-2014

Revision Date 08/3/2017

Version 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Red Hot Aluminum

Other Means of Identification

Product Code 319

Recommended Use of the Chemical and Restrictions on Use

High Heat Aluminum Paint. Interior Only with temperatures up to 1600° F

Details of the Supplier of the Safety Data Sheet

Supplier Address

SHEFFIELD BRONZE PAINT CORP.
17814 S. WATERLOO RD.
CLEVELAND, OHIO 44119

Emergency Telephone Number

Company Phone Number 216-481-8330
Emergency Telephone 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids: Category 2
Acute Toxicity – Inhalation: Category 4
Serious Eye irritation: Category 2
Skin corrosion/irritation: Category 2
Germ Cell Mutagenicity: Category 1B
Carcinogenicity: Category 2
Specific target organ toxicity – single exposure: Category 3
Aspiration Toxicity: Category 1

Signal Word

DANGER

Symbols



Emergency Overview:

Physical State: Liquid
Color: Aluminum
Odor: Characteristic

OSHA/HCS status:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazard Statements

H226: Flammable liquid and vapor.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H340: May cause genetic defects.
H351: Suspected of causing cancer.

Precautionary Statements - Prevention

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements – Response

P302 + P332 + P313: IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.
P362 + P364: Take off contaminated clothing and wash it before reuse.
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER or doctor if you feel unwell.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313: If eye irritation persists: Get medical advice/attention.
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331: Do NOT induce vomiting.
P330: Rinse mouth.
P370 + P378: In case of fire: Use dry chemical, CO₂, or Halon for extinction.
P308 + P313: If exposed or concerned: Get medical advice/attention.

Precautionary Statements – Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Precautionary Statements – Disposal

P501: Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight - %
Medium Aliphatic Naphtha	64742-88-7	30 - 35
Hydrotreated Petroleum Naphtha	64742-47-8	15 - 20
Aluminum	7429-90-5	12 - 17
Vinyl Toluenate Modified Alkyd	Proprietary	10 - 15
Trimethylbenzene	95-63-6	3 - 6
VM&P Naphtha	64742-49-0	2 - 5
m-Ethyltoluene	620-14-4	1 - 2
Xylene	1330-20-7	1 - 2
Ethylbenzene	100-41-4	0 - 1
Cumene	98-82-8	0 - 1
Steric Acid	57-11-4	0 - 1
Additives	Proprietary	0 - 1

The balance of the chemicals in this mixture are either considered nonhazardous or are below the listing limits for hazardous substances. These chemicals are considered trade secrets. The specific identity of these chemicals is available to health professionals.

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses. Immediately flush eyes thoroughly with plenty of water for at least 15 minutes.
Skin Contact	IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Seek medical attention if irritation occurs.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.
Ingestion	IF SWALLOWED: Clean mouth with water. Do NOT induce vomiting or give anything by Mouth to an unconscious person. Call a physician or poison control center immediately. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

Most Important Symptoms and Effects, both acute and Delayed

Symptoms	Direct contact with eyes and skin causes serious irritation. May cause irritation to the Mucous membranes and upper respiratory tract. Choking, coughing and headache may occur. May cause irritation to the digestive tract. May be fatal if swallowed and enters Airway.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Dry Chemical CO₂, Halon.

Unsuitable Extinguishing Media

Do not use water Jet or direct stream.

Specific Hazards Arising from the Chemical

Flammable liquid. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back.

Protective Equipment and Precautions for Firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions: Use personal protective equipment as required. Isolate area. Keep unnecessary personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Methods and Material for Containment and Cleaning Up

Methods for Containment.	For small spills, absorb on poly-pads or other suitable non-reactive absorbent material. Prevent further leakage or spillage if safe to do so.
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Methods for Cleaning	Eliminate all sources of ignition. Use non-sparking hand tools and explosion-proof electrical equipment. Sweep up and shovel into suitable containers for disposal. Discard Any product, residue, disposable container or liner in full compliance with federal, State and local regulations.
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7. HANDLING AND STORAGE

Precautions for Safe Handling & Storage

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Keep away from heat, sparks, flame and other sources of ignition. All equipment used when handling the product must be grounded.
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Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.
Incompatible Materials	Strong oxidizing agents, sparks or open flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminum 7429-90-5	TWA 1mg/m ³ Respirable fraction	PEL 5mg/m ³ respirable dust PEL 15 mg/m ³ total dust	5mg/m ³ Respirable fraction 5 mg/m ³ Welding fume or powder. 10 mg/m ³ Total
VM&P Naphtha 64742-49-0	247 ppm (1200 mg/m ³) 8 hrs.	Data Not Available	Data Not Available
C9-C15 Cycloalkanes	TWA: 400 ppm 8 hrs.	Data Not Available	Data Not Available
C9-C15 Aromatics	TWA 400 ppm 8 hrs.	Data Not Available	Data Not Available
Nonane, All isomer	TWA: 200ppm 8 hrs. TWA: 1050 mg/m ³ 8 hrs.	Data Not Available	Data Not Available
Trimethylbenzene, all isomers	TWA: 25 ppm 8 hrs. TWA: 123 mg/m ³ 8 hrs.	Data Not Available	Data Not Available
Xylene (Mixed isomers) 1330-20-7	TWA 100 ppm 8 hrs. TWA 434 mg/m ³ 8 hrs. STEL 150 ppm 15 min. STEL 651 mg/m ³ 15 min.	TWA 100 ppm 8 hrs. TWA 435 mg/m ³ 8 hrs.	Data Not Available
Cumene 98-82-8	TWA: 50 ppm 8 hrs. TWA: 245 mg/m ³ 8 hrs.	PEL Absorbed through skin	Data Not Available
Ethylbenzene 100-41-4	TWA 435 mg/m ³	Data not available	TWA 100ppm 435mg/m ³
Toluene 25013-15-4	TWA 20ppm	Data not available	TWA 100 ppm 375mg/m ³
Mesitylene 108-67-8	Data not available	Data not available	TWA 25 ppm 125 mg/m ³

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or other biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate Engineering Controls: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and the using the bathroom and at the end of the working periods.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	Avoid contact with eyes. Wear safety eyewear.
Skin and Body Protection	Wear suitable protective clothing. Use impervious gloves.
Respiratory Protection	Ensure adequate ventilation, especially in confined areas.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid	Odor	Characteristic
Color	Aluminum	Odor Threshold	Not determined

Property

Values

pH		Not determined	
Melting Point/Freezing Point		Not determined	
Boiling Point/Boiling Range		250 ° F - 375 ° F	
Flash Point		105° F	
Evaporation Rate		Slower than Butyl Acetate	
Flammability (Solid, Gas)		n/a-liquid	
Upper Flammability Limits		Not determine	
Lower Flammability Limits		LEL= 0.8 -7.0%	
Vapor Pressure		Not determined	
Vapor Density		Lighter than Air	
Specific Gravity		Not determined	
Water Solubility		Not determined	
Solubility in Other Solvents		Not determined	
Partition Coefficient		Not determined	
Auto ignition Temperature		Not determined	
Threshold Limit Value		Not determined	
Decomposition Temperature		Not determined	
Kinematic Viscosity		Not determined	
Dynamic Viscosity		Not determined	
Explosive Properties		Oxidizing	
Combustible liquid		Not determined	
VOC Properties		5.36 lbs/Gallon; 649 Grams/Litre	
Percent Volatile by:	Weight	Volume	Weight per Gallon
	71.9	83.2	7.45 lbs.

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children. Avoid all possible sources of ignition (spark or flame).

Incompatible Materials

Strong oxidizers, acids, peroxides, alkalies and halogenated hydrocarbons.

Hazardous Decomposition Products

In a fire: Carbon Monoxide, Carbon Dioxide and Hydrocarbons. Aluminum paints will react slowly with water to generate hydrogen.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact

Causes severe skin irritation.

Inhalation May be harmful if inhaled.

Ingestion

May be fatal if swallowed and enters airways.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Light Aliphatic Solvent Naphtha	LD50 >2000 mg/kg (Rat)	LD50 3000 mg/kg (Rabbit)	LC50 >5000 ppm (Rat) 1 hr.
Trimethylbenzene, All Isomers	LD50 6900 mg/kg (Mouse)	Data Not Available	LC50 18000 mg/m ³ (Rat)
Mesitylene	LD50 5000 mg/kg (Rat) LD50 7000 mg/kg (Mouse)		LC50 24mg/l (Rat) 4 hrs.
Cumene	LD50 1400 mg/kg (Rat) LD50 2260 mg/kg (Rat) LD50 2.9 g/kg (Rat)	LD50 12300 uL/kg (Rabbit) LD50 10627 mg/kg (Rabbit)	LC50 8000 ppm (Rat) 1.0 g/m ³ (Mouse)
Xylene mixed isomers	LD50 2119 mg/kg (Mouse) 4 hrs. LD50 4300 mg/kg (Rat) 4 hrs.	Data Not Available	LC50 5000 ppm (Rat) 4 hrs.
Aluminum	LD50 4.6 g/kg (Rat)	Data Not Available	Data Not Available
Ethylbenzene	LD50>3,500 mg/kg (Rat)	LD50 >15,380 mg/kg (Rabbit)	LC50> 4000 ppm (Rat)
VM & P Naphtha	LD50 >6800 mg/kg (Rat)	LD50 > 3400 mg/kg (Rabbit)	LC50 3,400 ppm (Rat)

Information on Physical, Chemical and Toxicological Effects

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity This product contains carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Acute Toxicity Oral ATE:

12. ECOLOGICAL INFORMATION

Ecotoxicity

Material expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Aluminum 7429-90-5	Data not available	Data not available	Data not available	Data not available
Naphtha 64742-49-0	Data not available	Data not available	Data not available	Data not available
Copolymer	Data not available	Data not available	Data not available	Data not available
Trimethylbenzene, all isomers	LC50 17000 pg/l crustaceans	LC50 7720 pg/l Pimephales promelas 96 hrs. LC50 22.4 mg/l Tilapia zillii 96 hrs.	LC50 17000 pg/l Marine Water (Cancer magister zoea) 48 hrs.	LC50 5600 pg/l Crustaceans Palaemonetes pugio 48 hrs.
Xylene, mixed isomer		LC50 15700 pg/l Fresh Water (Lepomis macrochirus) 96 hrs. LC50 1900 pg/l Fresh water (Lepomis macrochirus) 96 hrs. LC50 13400 pg/l Fresh water (Pimephales promelas) 96 hrs. LC50 16940 pg/l Fresh Water (Carassius auratus) 96 hrs.	EC5090 mg/l Fresh Water (Cypris subglobosa) 48 hrs. LC50 8.5 ppm Marine water (Palaemonetes pugio) 48 hrs.	
Cumene	EC50 2600 pg/l, (Pseudokirchneriella subcapitata) 72 hrs.	LC50 2700 pg/l Oncorhynchus mykiss 96 hrs.	EC50 7400 pg/l Fresh water (Artemia sp.Nauplii) 48 hrs. EC50 10600 pg/l Fresh water (Daphnia magnaneonate) 48 hrs.	
Ethylbenzene	EC50 4600 pg/l 72 hrs. EC50 3600 pg/l (Pseudokirchneriella subcapitata) 96 hrs.	LC50 4200 pg/l Oncorhynchus mykiss, 96 hrs.	Data not available	

Persistence and Degradability

Not determined

Bioaccumulation

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA – Basis for listing	RCRA-D Series Wastes	RCRA-U Series Wastes
Xylene 1330-20-77		Included in waste stream: F039		U239
Ethylbenzene 100-41-4		Included in waste stream F039		

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special Circumstances.

DOT UN 1263, Paint, Class 3,111

IATA Not available.

IMDG Not available

TDG Not available

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	AICS	NZ10C	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS
Aluminum	Present	Present	X	Present	Present	Present	Present	Present	Present	Present	Present
Toluene	Present	Present		Present	Present			Present	Present	Present	Present
Ethylbenzene	Present	Present		Present	Present			Present	Present	Present	Present
Trimethylbenzene, all isomers	Present	Present		Present	Present			Present	Present	Present	Present
Naphtalene	Present	Present		Present	Present			Present	Present	Present	Present
Cumene	Present	Present		Present	Present			Present	Present	Present	Present
Xylene	Present	Present									
Vinyl Toluene	Present	Present									

Legend:

TSCA – United States Toxic Substances Control Act Section 8 (b) Inventory

DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

AICS – Australian Inventory of Chemicals and Chemical Substances

NZ10C – New Zealand Inventory of Chemicals and Chemical Substances

EINECS/ELINCS – European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS – Japan Existing and New Chemical Substances

IECSC – China Inventory of Existing Chemical Substances

KECL – Korean Existing and Evaluated Chemical Substances

PICCS – Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical which is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS Number	%
Aluminum	7429-90-5	14.5%
Xylene	1330-20-7	<1
1,2 4 Trimethylbenzene	95-63-6	<5
Ethylbenzene	100-41-4	<1

California Prop 65:

Warning! This product contains chemicals known to the State of California to cause cancer and reproductive toxicity.

Chemical Name	%	Cancer	Reproductive
Toluene 108-88-3	<0.1	No	Yes
Ethylbenzene 100-41-4	<1	Yes	No
1,2 4 Trimethylbenzene 95-63-6	<0.01	Yes	Yes
Naphthalene 91-20-3	<0.01	Yes	No
Cumene 98-82-8	< 1	Yes	No

U. S. State Right to Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	New York	Minnesota	Rhode Island
Aromatic Hydrocarbon	X	X	X			
Aluminum	X	X	X			X
Stoddard Solvent	X	X	X	X		
Xylene	X	X	X			
Ethylbenzene	X	X	X			
Cumene	X	X	X			
Toluene	X	X	X			
Aluminum	X	X	X			

16. OTHER INFORMATION

NFPA	Health Hazards Not determined	Flammability Not determined	Instability Not determined	Special Hazards Not determined
HMIS	Health Hazards 2	Flammability 2	Physical Hazards 1	Personal Protection A

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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.

End of Safety Data Sheet