

Safety Data Sheet: MAX-Cut Exothermic Cutting Rods

Supersedes Date 03/09/2012

Issuing Date 03/04/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name MAX-Cut Exothermic Cutting Rods
Recommended use Cutting
Information on Manufacturer
Partsmaster, Div of NCH Corp.
P.O. Box 655326
Dallas, TX 75265-5326

Product Code PMW08041
Chemical nature Inorganic solid blend
Emergency Telephone Number
CHEMTREC® 800-424-9300

2. HAZARD IDENTIFICATION

Color Copper

Physical State Solid

Odor Odorless

GHS

Classification

Physical Hazards

None

Health Hazard

Acute Oral Toxicity

Category 4

Other hazards

None

Labeling

Signal Word

WARNING



Hazard Statements

H302 - Harmful if swallowed

Precautionary Statements

P270 - Do not eat, drink or smoke when using this product
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P301+ P312 - IF SWALLOWED: Call a physician if unwell
P330 - Rinse mouth
P273 - Avoid release to the environment
P501 - Dispose of contents and container to an approved waste disposal plant.

6 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Iron	7439-89-6	60-100
Aluminum	7429-90-5	1-5
Manganese	7439-96-5	0.1-1
Copper	7440-50-8	0.1-1

4. FIRST AID MEASURES

General advice

Avoid contact with skin, eyes and clothing. Avoid breathing dust.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact

In case of contact, immediately flush skin with soap and plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention.

Ingestion

If swallowed, do not induce vomiting - seek medical advice. Rinse mouth.

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point The product is not flammable **Method** Not applicable
Upper No data available **Lower** No data available
Suitable Extinguishing Media
 Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards arising from the chemical
 Dust can form an explosive mixture in air.
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.
NFPA **Health** 2 **Flammability** 0 **Instability** 0
HMIS **Health** 2 **Flammability** 0 **Instability** 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Wear appropriate protective clothing. Avoid creating dusty conditions. Transfer solid into a properly labeled container for re-use or disposal. If necessary, wash area with water and pick up wash water for disposal. Use personal protective equipment.
Environmental Precautions Prevent product from contaminating soil or from entering sewage, drainage systems, and bodies of water. Do not flush into surface water or sanitary sewer system.
Methods for Containment Pick up and arrange disposal without creating dust.
Methods for Cleaning Up Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Clean contaminated surface thoroughly. Soak up with inert absorbent material.
Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Avoid breathing dust. Avoid contact with skin, eyes and clothing.
Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place.
Storage Temperature **Minimum** No information available **Maximum** No information available
Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Iron	No data available	No data available	No data available
Aluminum	TWA: 1 mg/m ³	TWA: 15 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³
Manganese	TWA: 0.02 mg/m ³ TWA: 0.1 mg/m ³	Ceiling: 5 mg/m ³	IDLH: 500 mg/m ³ STEL 3 mg/m ³ TWA: 1 mg/m ³
Copper	TWA: 1 mg/m ³	TWA: 0.1 mg/m ³ TWA: 1 mg/m ³	IDLH: 100 mg/m ³ TWA: 1 mg/m ³ TWA: 0.1 mg/m ³

Engineering Measures Use enough ventilation, local exhaust at the arc, or both to keep the fumes and gases below the TLV's in the worker's breathing zone and in the general area. Train the worker to keep his head out of the fumes .
Personal Protective Equipment
Eye/Face Protection Wear a helmet or use face shield with filter lens of appropriate shade number (SEE ANSI/ASCZ49.1) provide protective screen and flash goggles, if necessary, to shield others. As a rule of thumb, start a shade that is too dark to see the weld zone. Then go next lighter shade which gives sufficient view of the weld zone .
Skin Protection Welder's leather gloves, Wear fire/flame resistant/retardant clothing.
Respiratory Protection Use a NIOSH/MSHA approved or equivalent fume respirator or air supplied respirator when welding in confined spaces, or where local exhaust or ventilation does not keep exposure below TLV's .
General Hygiene Considerations Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wear head and body protection which help to prevent injury from radiation, sparks, and electrical shock. See ANSI Z49.1. At minimum, this includes welder's gloves and a protective face shield, and may include arm protectors, aprons, hat, shoulder protection as well as dark nonsynthetic clothing. Train the welder not to touch live electrical parts and to insulate himself from work and ground .

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid	Viscosity	Not applicable
Color	Copper	Odor	Odorless
Odor Threshold	Not applicable	Appearance	No information available
pH	Not applicable	Specific Gravity	No data available
Evaporation Rate	Not applicable	Percent Volatile (Volume)	No information available
VOC Content (%)	No information available	Vapor Pressure	Not applicable
Vapor Density	Not applicable	Solubility	Insoluble
n-Octanol/Water Partition	No data available	Melting Point/Range	- °F / - °C
Decomposition Temperature	No data available	Boiling Point/Range	Not applicable °F / °C
Flammability (solid, gas)	No data available	Method	Not applicable
Flash Point	The product is not flammable		
Autoignition Temperature	No information available.		
Upper No data available Lower No data available			

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions. Hazardous polymerization does not occur.
Conditions to Avoid	Keep away from open flames, hot surfaces, and sources of ignition
Incompatible Products	Incompatible with oxidizing agents, Humid air.
Hazardous Decomposition Products	Fumes and gasses produced by welding, brazing and similar processes cannot be classified simply. The composition and quantity of both are dependent upon the metal being welded, the process, the procedures and the filler metal being used. Other conditions which also influence the composition and quantity of fumes and gases to which the worker may be exposed include: coatings on the metal being welded, the number of welders and the volume of the work space, the quality and amount of ventilation used, the position of the welder's head in relation to the fume plume, as well as the presence of contaminants in the atmosphere when the filler metal is consumed. The fume and gas decomposition products generated are different in percent and form the product ingredients listed in Section III. The products formed in normal operation include those originating from the volatilization, reaction and oxidation of the filler metal, the metal being welded, the coatings, etc. as noted above. One recommended way to determine the composition and quality of fumes and gases to which workers are exposed is to take an air sample inside the welders helmet if worn or in the workers breathing zone. See ANSI/AWS F1.1 "Method For Sampling Airborne Particles Generated By Welding And Allied Processes" available from the American Welding Society, P.O. Box 35140, Miami, FL 33135
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	No information available
Vapor	No information available

Principle Route of Exposure	Inhalation
Primary Routes of Entry	Inhalation

Acute Effects

Eyes	Causes eye irritation. Welding arc may damage eyes .
Skin	May cause skin irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Inhalation	Welding fumes may result in discomfort such as: dizziness, nausea, or dryness or irritation of nose, throat, or eyes. Fumes can aggravate asthma, bronchial conditions, or allergies. Individuals with allergies or impaired respiratory function may have symptoms worsen by exposure to welding fumes . Excessive inhalation of iron oxides fumes or dust can lead to irritation of the respiratory tract .
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Ingestion	May be harmful if swallowed.
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Chronic Toxicity	Long term. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.
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Target Organ Effects	Respiratory system, Skin, Liver, Kidney, Blood.
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Aggravated Medical Conditions

Pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis, Pre-existing liver and kidney diseases, Allergies, Kidney disorders, Liver disorders, Skin disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Iron	= 984 mg/kg (Rat)	no data available	no data available	no data available	no data available
Aluminum	no data available	no data available	no data available	no data available	no data available
Manganese	no data available	no data available	no data available	no data available	no data available
Copper	no data available	no data available	no data available	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Iron	no data available	no data available	no data available	no data available	no data available
Aluminum	no data available	no data available	no data available	no data available	skin,respiratory system
Manganese	no data available	no data available	no data available	no data available	CNS,respiratory system,blood,kidneys
Copper	no data available	no data available	no data available	no data available	eyes,kidneys,liver,respiratory system,skin

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Other
Iron	not applicable	not applicable	not applicable	not applicable	not applicable
Aluminum	not applicable	not applicable	not applicable	not applicable	not applicable
Manganese	not applicable	not applicable	not applicable	not applicable	not applicable
Copper	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information

No information available.

Bioaccumulation

No information available

Mobility

No information available

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Iron	no data available	LC50 = 13.6 mg/L Morone saxatilis 96 h LC50 = 0.56 mg/L Cyprinus carpio 96 h	no data available	no data available	N/A
Aluminum	no data available	no data available	no data available	no data available	N/A
Manganese	no data available	no data available	no data available	no data available	N/A
Copper	EC50 0.0426 - 0.0535 mg/L Pseudokirchneriella subcapitata 72 h EC50 0.031 - 0.054 mg/L Pseudokirchneriella subcapitata 96 h	LC50 0.0068 - 0.0156 mg/L Pimephales promelas 96 h LC50 < 0.3 mg/L Pimephales promelas 96 h LC50 = 0.2 mg/L Pimephales promelas 96 h LC50 = 0.052 mg/L Oncorhynchus mykiss 96 h LC50 = 1.25 mg/L Lepomis macrochirus 96 h LC50 = 0.3 mg/L Cyprinus carpio 96 h LC50 = 0.8 mg/L Cyprinus carpio 96 h LC50 = 0.112 mg/L Poecilia reticulata 96 h	no data available	EC50= 0.03 mg/L 48 h	N/A

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal

Dispose of in accordance with local regulations.

Container Disposal

Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT

Not regulated

TDG	Not regulated
ICAO	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

15. REGULATORY INFORMATION

Inventories

TSCA	Complies
DSL	Complies
U.S. Federal Regulations	

SARA 313

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

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Aluminum	7429-90-5	1-5	1.0
Manganese	7439-96-5	0.1-1	1.0
Copper	7440-50-8	0.1-1	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	No	No	No	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Iron	Not applicable	Not applicable
Aluminum	Not applicable	Not applicable
Manganese	Not applicable	Not applicable
Copper	5000 lb	Not applicable

U.S. State Regulations

California Proposition 65 This product contains the following Proposition 65 chemicals

Component	CAS-No	California Prop. 65
Nickel	7440-02-0	carcinogen
Chromium	7440-47-3	carcinogen, initial date 2/27/87, developmental female, male 12/19/08

16. OTHER INFORMATION

Prepared By	Christopher Drogin
Supersedes Date	03/09/2012
Issuing Date	03/04/2014
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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