



MATERIAL SAFETY DATA SHEET

DATE PREPARED: Jan 8, 2004

Section I – PRODUCT IDENTIFICATION AND EMERGENCY INFORMATION

Material Name: Broco Underwater Ultrathermic Cutting Rods

Manufacturer: Broco, Inc.
8690 Red Oak Street
Rancho Cucamonga, CA 91730-4819

Emergency Telephone Number: (909) 483-3222
Facsimile: (909) 483-3233

Section II – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

There are no hazardous materials contained in or used in the manufacture of Broco Underwater Ultrathermic Cutting Rods. Electrical insulating tape is PVC based which, when burned, releases fumes containing chlorides.

Section III – PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	N/A	Specific Gravity	N/A
Vapor Pressure	N/A	Melting Point	N/A
Vapor Density	N/A	Evaporation Rate	N/A
Solubility in Water	Insoluble in water		
Appearance and Odor	- Copper coated steel tube filled with wires. No odor. Black insulating tape wrapping.		

Section IV – FIRE AND EXPLOSION HAZARD DATA

Flammability -	No
Flammability Conditions -	N/A
Means of Extinction -	N/A
Special Fire Fighting Procedures -	N/A
Unusual Fire and Explosion Hazards -	N/A
Precautions to be taken in handling and storing -	N/A
Flashpoint -	N/A
Explosion limits -	N/A
Auto-ignition Temperature -	N/A
Hazardous Combustion Products -	See Section V
Sensitivity to Mechanical Impact -	No
Sensitivity to Static Discharge -	No

Section V – REACTIVITY DATA

Stability - Stable material
Conditions to Avoid - None

Materials to Avoid - Combustibles (sparks are generated when rod is lit)
 Hazardous Decomposition/Byproducts - Fumes generated during cutting may contain a variety of hazardous components including oxides of iron, the target material, and paint or plating material. Know the target material before cutting.

Section VI – TOXICOLOGICAL PROPERTIES

Route of Entry:

Skin Contact -	N/A	UV Exposure -	YES
Eye Contact -	N/A	Inhalation Acute -	YES
Inhalation Chronic -	N/A	Ingestion -	N/A

Effects of acute exposure to material – Products of combustion include fumes and gases containing iron oxide and copper oxide as well as oxides of the material being cut. Fumes can aggravate asthma or bronchial conditions. Arc rays can burn eyes and skin. Cutting flame produces intense heat and can burn skin and ignite clothing.

Effects of chronic exposure to material – Not known.
 Carcinogenicity – Not known.

Section VII - PREVENTATIVE MEASURES

FOR UNDERWATER CUTTING ONLY!

Personal Protective Equipment:

- Gloves - Welders gloves/Flameproof.
- Eyes - Protective face shield with No. 5 or No. 6 lens.
- Respiratory - Use only in well ventilated areas. Provide adequate exhaust to assure clean air within the operator’s and any bystander’s breathing zone. Keep head out of fumes. When cutting materials whose oxides are potentially toxic, use special breathing apparatus.
- Other - Wear protective clothing and shoes. See ANSI Z-49.1 “Safety in Welding and Cutting”.

Engineering Controls - Use with adequate ventilation

Leak and Spill Procedures - N/A

Waste Disposal - Scrap metal can be recycled or land filled as local regulations allow.

Handling procedures and equipment – N/A

Storage requirements - Store in low humidity environment. Keep in original packaging material until ready to use.

Special shipping information – N/A

Section VIII - FIRST AID MEASURES

Remove injured person from work area to fresh air. If skin is burned apply burn ointment and consult a physician. If eyes are burned consult a physician. If respiratory difficulty persists, seek medical attention. Wash face and hands after use.