Material Safety Data Sheet

Date of Preparation: July 17, 2001 Revision:A

Section 1 - Chemical Product and Company Identification

Product Name: Surge Arresters
Manufacturer Hubbell Power Systems/ Ohio Brass, 1850 Richland Ave Aiken S.C. 29801

Phone 803-648-8386 ext 175, Nights/ Weekends 573-682-8727

_____ Emergency Overview _____

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt *or* % vol
Nickel	7440020	1-5%
Antimony	7440360	<0.5%
Bismuth Oxide	NA	1-5%
Zinc Oxide	1314132	85-95%

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Nickel	1mg/m3	NA	NA	NA	NA	NA	NA
Antimony	0.5mg/m3	NA	NA	NA	NA	NA	NA
Bismuth Oxide	NA	NA	NA	NA	NA	NA	NA
Zinc Oxide	5mg/m3	NA	NA	NA	NA	NA	NA

Toxicity Data:

Section 3 - Physical and Chemical Properties

Physical State: Solid
Appearance and Odor: Light Grey no Odor
Odor Threshold: NA
Vapor Pressure: NA
Vapor Density (Air=1): NA
Formula Weight: 85.4
Density: 5.7
Specific Gravity (H_2O=1, at 4 °C): 5.7
pH: NA

Water Solubility: Negligible
Other Solubilities: NA
Boiling Point: NA
Freezing/Melting Point: 1400 C
Viscosity: NA
Refractive Index: NA
Surface Tension: NA
% Volatile: 0
Evaporation Rate: NA

Section 4 - Fire-Fighting Measures

Flash Point: NA
Flash Point Method: NA
Burning Rate: Moderate
Autoignition Temperature: NA
LEL: NA
UEL: NA
Flammability Classification: 2
Extinguishing Media: Water, Foam, Dry Powder
Unusual Fire or Explosion Hazards: If product is in service it may be near High Voltage Electricity use caution.
Hazardous Combustion Products: Carbon Monoxide

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Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

Section 5 - Stability and Reactivity

Stability: This product is stable under normal conditions. .
Polymerization: Hazardous polymerization cannot occur.
Chemical Incompatibilities: None Known

Section 6 - Health Hazard Information

Potential Health Effects

Primary Entry Routes:
Target Organs: Eyes and Respiratory System
Acute Effects Irritation of eyes, Coughing, Fatigue, Rash on skin.
Inhalation: Yes
Eye: Yes
Skin: Yes
Ingestion: Yes
Carcinogenicity: IARC, NTP, and OSHA do list this product as a carcinogen.
Medical Conditions Aggravated by Long-Term Exposure: None Known
Chronic Effects: None Known

Emergency and First Aid Procedures

Inhalation: Take to fresh air consult Doctor
Eye Contact: Flush Eyes for 15 Minutes consult Doctor
Skin Contact: Flush skin with water. If rash appears consult Doctor
Ingestion: Give milk and induce to vomit. Consult Doctor
After first aid, get appropriate in-plant, paramedic, or community medical support.
Note to Physicians:
Special Precautions/Procedures: This product contains Zinc Oxide and Antimony

Section 7 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures: NA
Small Spills: NA
Large Spills: NA

Disposal: This product is not regulated under RCRA. Consult with local and State regulators.. Nickel Antimony, and Zinc Oxide are listed under SARA 313

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:
Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.
Administrative Controls:
Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.
Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.
Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.
Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Special Precautions and Comments

These products when used as intended do not expose the user to any occupational exposure. The enclosed core component contains ceramic material that forms dust when sawed. No sawing or cutting is required or recommended in their installation. The data supplied in sections 2 and 6 covers possible exposure to this dust. The Fire fighting instructions in Section 4 refers to the outer layer of non-porcelain arresters, that will burn if exposed to flames.

Prepared By: Bill Emery