MATERIAL SAFETY DATA SHEET

AMSTEP 100, 200, 300, 500 SERIES

SECTION 1: PRODUCT IDENTIFICATION AND USE

MFG'S NAME: AMSTEP PRODUCTS
190 CENTURY DRIVE
BRISTOL, CT 06010
(860)-589-9085

TRADE NAME: 100, 200, 300, 500 SERIES
All Colors

CHEMICAL FAMILY: EPOXY

DOT SHIPPING CLASSIFICATION (49 CFR 172.101): Paint (Not Regulated)
TRANSPORTATION EMERGENCY NUMBER: (860)-589-9085 Plant

HMIS RATING:

Health	**=**	**1**
Flammability	**=**	**0**
Reactivity	**=**	**0**

PREPARED BY: Nardin Yousefshirabad **DATE:** 7/29/2011 **REVISION:** 0

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Ingredients	CAS No.	% Wt.	OSHA PEL	ACGIH TLV	Carcinogenic
Tread Fill Material					
Epoxy Resin Hardened	25068-38-6	15-30%	Non Haz	Non Haz	No
Aluminum Oxide	1344-28-1	40-60%	15mg/m3	10mg/m3	No
Crystalline silica (quartz)	14464-46-1	40-60%	0.1 mg/m3	0.025mg/m3	See Section 5
Carbon Black	1333-86-4	<2%	3.5mg/m3	3.5mg/m3	See Section 5
Tread Extrusion Material					
Aluminum Alloy	7429-90-5	100%	5mg/m3 dust	1mg/m3 dust	No

(N.E. = Not Established)

SECTION 313 SUPPLIER INFORMATION: THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372. THIS INFORMATION MUST BE INCLUDED ON THE MSDS COPIED AND DISTRIBUTED FOR THIS MATERIAL.

CHEMICAL NAME	CAS NUMBER	WEIGHT %
None		

SECTION 3: PHYSICAL DATA

BOILING POINT:	N.A.	**Specific Gravity**	**:**	2.7
VAPOR PRESSURE:	N.A.	**% Volatile by Vol.:**		N.A.
VAPOR DENSITY:	N.A.	**EVAPORATION RATE:**		N.A.

SECTION 4: FIRE AND EXPLOSION HAZARD

FLASH POINT: Not Applicable
METHOD USED: TCC

FLAMMABLE LIMITS:

LEL	UEL
N.A.	N.A.

(N.A. = Not Applicable)

FLAMMABILITY PROPERTIES: This product does not present fire or explosion hazards as shipped. Aluminum chips, fine turnings and dust from processing may be readily ignitable. Aluminum chips, fines and dust in contact with water can generate flammable/explosive hydrogen gas. These gases could present an explosion hazard in confined or poorly ventilated spaces. Dusts and fines in contact with certain metal oxides (e.g. rust, copper oxide) when initiated by a weak ignition source can generate a thermite reaction with considerable heat generation. Molten metal in contact with water/moisture or certain metal oxides can be explosive.

EXTINGUISHING MEDIA: Use Class D extinguishing agents on small chips/fires. Do not use water in fighting fires around molten metal.

SPECIAL FIRE FIGHTING PROCEDURES: Fire Fighter should wear NIOSH approved, positive pressure, self contained breathing apparatus and full protective clothing when appropriate.

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SECTION 5: HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation/Skin/Ingestion

HEALTH HAZARDS (ACUTE AND CHRONIC)

Eyes:	Irritant. Aggregate may cause injury.
Skin:	May cause irritation.
Inhalation:	Dust or fumes can cause irritation of upper respiratory tract.
Ingestion:	No specific information available. Contains materials that may be slightly toxic.

CONDITIONS AGGRAVATED BY EXPOSURE: Allergy, eczema and other skin conditions.

OVEREXPOSURE EFFECTS: Irritation.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes:	Flush with large quantities of water for at least 15 minutes. Get medical attention.
Skin:	Wash with soap and water for 15 minutes. Get medical attention if irritation develops.
Inhalation:	Remove to fresh air. Give oxygen if breathing is difficult. Get medical attention.
Ingestion:	Get medical attention.

CARCINOGENIC DATA: Contains crystalline silica (quartz). The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or crystobalite from occupational sources," the overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or crystobalite from occupational sources is carcinogenic to humans (Group 1). NTP, in its Ninth Annual Report on Carcinogens, has classified "silica, crystalline (respirable)" to be a carcinogen." Crystalline silica is not regulated by OSHA as a carcinogen. Since all silicon dioxide/silica is encapsulated in the Tread Fill Material no over exposure to airborne dusts is to be expected. However, during removal by mechanical abrasion, appropriate safety practices should be followed to prevent inhalation of airborne dusts.

Some tread colors may contain carbon black pigment which contains less than 0.1% polynuclear aromatic hydrocarbons (PAH) , some of which, in non-adsorbed form, have been found to be carcinogens in animal studies. Carbon Black has not been listed by the NTP or OSHA. NIOSH recommends that only carbon blacks with a PAH level greater then 0.1% be considered suspect carcinogens. The International Agency for Research on Cancer ("IARC") classifies carbon black as a suspect human carcinogen based on animal studies. Since the carbon black is not present in respirable form and encapsulated in the coating no over exposure to airborne dusts is to be expected.

SECTION 6: REACTIVITY DATA

STABILITY: Stable under normal conditions of use, storage and transportation.

CONDITIONS TO AVOID: metal chips, fines, dust and molten metal are considerably more reactive with the following.

- Water: Slowly generates flammable/explosive hydrogen gas and heat. Generation rate is greatly increased with smaller particles (e.g., fines and dusts). Molten metal can react violently/explosively with water or moisture, particularly when the water is entrapped.
- Heat: Oxidizes at a rate dependent upon temperature and particle size.
- Strong oxidizers: Violent reaction with considerable heat generation. Can react explosively with nitrates (e.g., ammonium nitrate and fertilizers containing nitrate) when heated or molten.
- Acids and alkalis: Reacts to generate flammable/explosive hydrogen gas. Generation rate is greatly increased with smaller particles (e.g., fines and dusts).
- Halogenated compounds: Many halogenated hydrocarbons, including halogenated fire extinguishing agents, can react violently with finely divided or molten aluminum.
- Iron oxide (rust) and other metal oxides (e.g., copper and lead oxides): A violent thermite reaction generating considerable heat can occur. Reaction with aluminum fines and dusts requires only very weak ignition sources for initiation. Molten aluminum can react violently with iron oxide without external ignition source.
- Iron powder and water: Explosive reaction forming hydrogen gas when heated above 1470°F (800°C).

HAZARDOUS DECOMPOSITION PRODUCTS: Tread Filler Material - Carbon Monoxide and Carbon Dioxide, Aldehydes.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 7: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Collect scrap aluminum for recycling.

WASTE DISPOSAL METHODS: Dispose of in accordance with Federal, State and Local Regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH/MSHA approved respirator if required for dusts.

VENTILATION: Local exhaust recommended. Mechanical exhaust is not recommended as the sole means of controlling employee exposure.

PROTECTIVE GLOVES: Impervious gloves to avoid repeated or prolonged skin contact with residual oils and to avoid any skin injury.

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SECTION 8: SPECIAL PROTECTION INFORMATION (CONTINUED)

EYE PROTECTION: Safety glasses with side shields.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Avoid sharp edges.

SECTION 9: SPECIAL / OTHER INSTRUCTIONS

CALIFORNIA PROPOSITION 65 INFORMATION: WARNING! THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. SILICON DIOXIDE/SILICA.