

Antimicrobial Coated Steel

Material Safety Data Sheet

1. IDENTIFICATION

Product Name: Antimicrobial Galvanized Steel

Common Name: Antimicrobial Coated Steel

Manufacturer: Wheeling Service & Supply, Inc.

P.O. Box 189

Woodstock, Illinois 60098

Information and Emergency: Call 815-338-6410 (8am – 4pm, Monday – Friday)

2. CHEMICAL COMPOSITION

Note: Steel products under normal conditions do not present a health hazard.

INGREDIENTS	%WT	CAS. NO.	EXPOSURE LIMITS	
			OSHA-PEL	ACGIH-TLV
<i>Base Metal:</i>	Balance	7439-89-6	10 ⁽¹⁾ Iron Oxide Fumes	5 ⁽¹⁾ Iron Oxide Fumes
<i>Alloying Elements:</i>				
Carbon	1 ⁽²⁾	7740-44-0	None Established	None Established
Manganese	2 ⁽²⁾	7439-96-5	5 ⁽¹⁾	5 ⁽¹⁾
Phosphorous	1 ⁽²⁾	7723-14-0	None for inorganic phosphates	None for inorganic phosphates
Sulfur	1 ⁽²⁾	7704-34-9	13 ⁽¹⁾	5 ⁽¹⁾
Aluminum (if applicable)	1 ⁽²⁾	7429-90-5	None Established	10 ⁽¹⁾
Copper (if applicable)	1 ⁽²⁾	7440-50-8	.1 ⁽¹⁾ as fume	.2 ⁽¹⁾ as fume
Zinc	1 ⁽²⁾	1314-13-2	5 ⁽¹⁾ as fume	5 ⁽¹⁾ as fume

(1) All values, unless otherwise specified, refer to an 8-hour time weight average; concentrations and units are in mg/M3.

(2) Less than the percent indicated.

3. PHYSICAL DATA

Melting Point: Base Metal: 2600° F.
Metallic Coating: Not Applicable

Appearance: Silver Gray Metallic

Odor: Odorless

4. FIRE AND EXPLOSION HAZARD DATA

Steel products in the solid state do not present a fire or explosion hazard.

5. REACTIVITY DATA

Stable under normal conditions of use, storage, and transportation. Will react with a strong acid to liberate hydrogen. When temperatures are elevated above the melting point, fumes containing oxides, alloying elements, and hydrocarbons may be liberated.

6. HEALTH HAZARD DATA

Note: Steel products under conditions do not present an inhalation, congestion, or contact hazard. Operations such as burning, welding, brazing, grinding, and possibly machining, etc., which may result in elevating temperature of the product to or above its melting point, or result in the generation of airborne particles may present a health hazard.

Effects of Overexposure

The major exposure hazard to be considered is that of inhalation. Chronic inhalation of high concentration of iron oxide fumes or dust may lead to a benign pneumoconiosis (siderosis). Inhalation of high concentrations of ferric oxide may possibly enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens.

The inhalation of high concentrations of freshly respirable particle size range can cause an influenza like illness termed metal fume fever. Typical symptoms last 12 to 48 hours and are characterized by metallic taste in the mouth, dryness and irritation of the throat followed by weakness, muscle pain, fever and chills.

Emergency and First Aid Procedure

For overexposure to airborne fumes and particulates, remove exposed person to fresh air. If breathing is difficult or has stopped, administer artificial respiration or oxygen as indicated. Seek medical attention promptly. Treat metal fume fever by bed rest and administer a pain and fever reducing medication.

7. SPILL, LEAK, AND DISPOSAL INFORMATION

Spill or Release: Not applicable to bare or coated steel in solid state.

Waste Disposal Method: Product can be recycled for further use. Dispose in a permitted waste landfill, or by any other method that is in compliance with local, state, or federal laws.

8. ADDITIONAL OR MISCELLANEOUS INFORMATION

This material safety data sheet has been provided solely as general information, and should not be construed as a determination that the product is hazardous. A nonmetallic coating may be applied at the request of the customer to the surface of the steel product. The typical nonmetallic coating is considered a protective coating. This coating may be a rust preventative oil, lubricating wax, chromate or phosphate treatment, and/or paint finishes such as epoxy, vinyl, acrylic, urethane, polyester, siliconized polyester or fluorocarbon resin based.

Any solid film is not intended to withstand any heat elevation of temperature above that of room temperature, and is to be removed at the time of use by the end user of the product.

Protective coatings are listed in the Addendum to this material safety data sheet as to health hazard procedures.

ADDENDUM

The protective nonmetallic coating(s) which have been applied to the steel product as supplied to you according to your order are listed as follows:

Epoxy Resin: CAS# 25036-25-3

Polyester Resin: Trade Secret

The presence of protective coating(s) should be considered and recognized when evaluating potential health hazards and exposure from dust, fume, and/or temperature elevating activities such as welding, cutting, machining, burning, etc. Possible health hazards as related to the protective coating(s) caused by such activities are as follows:

Thermal decomposition or burning will produce harmful carbon monoxide, carbon dioxide, and various hydrocarbons fumes. Particles or fumes generated should be exhausted through mechanical and/or local ventilation away from the work area.