

**SAFETY DATA SHEET**  
SENTINEL® PVC 150 HFB COPPER ART®



**SECTION 1 IDENTIFICATION**

**Product Name** SENTINEL® PVC P150 HFB Copper Art®  
**Restrictions** None  
**Manufacturer** DERBIGUM Americas, Inc  
**Address** 4821 Chelsea Avenue  
Kansas City, MO 64130  
**Phone Number** (800) 727-9872  
**Emergency Number** (800) 424-9300 (CHEMTREC)

**SECTION 2 HAZARDS**

**GHS Classification** As defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200, the products listed below are considered articles and do not require an SDS. In addition, articles are not included in the scope of the Globally Harmonization System (GHS). As such, the GHS labeling elements are not included on this SDS. All components listed for this product are bound within the product. When handled as intended and under normal conditions of use, there is no evidence that any of the ingredients are released in amounts that pose a significant health risk. Although these products are not subject to the OSHA Standard or GHS labeling elements, DERBIGUM would like to disclose as much health and safety information as possible to ensure that this product is handled and used properly. This SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and be made available for employees and other users of this product. In addition, the recommendations for handling and use of these products should be included in worker training programs.

**Precautionary Statements** P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from open flames. - NO SMOKING  
P260 - Do not breathe fume, gas, vapors  
P264 - Wash hands, forearms and face thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P273 - Avoid release into the environment  
P280 - Wear protective gloves and clothing

**Response** P301+P330+P331 - If swallowed: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 - If on skin (or hair), Take off immediately all contaminated clothing. Rinse skin with water/shower  
P303+P340 - If inhaled, remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P314 - Get medical advice/attention if you feel unwell  
P370+P378 - In case of fire: Use carbon dioxide (CO<sub>2</sub>), foam, dry extinguishing powder to extinguish

**Storage** P403+P235 - Store in well-ventilated place. Keep cool

**Disposal** P501 - Dispose of contents and/or container in accordance with local, regional and national regulations

ABBREVIATION KEY

GHS = Global Harmonized System  
OSHA = Occupational Safety & Health

HCS = Hazard Communication Standard

**SECTION 3 COMPOSITION**

**Chemical Composition**

COMPONENT	CAS NUMBER	PERCENT BY WEIGHT
Antimony trioxide	1309-64-4	1 - 5
Copper, powder <sup>1</sup>	7440-50-8	1 - 5
Titanium Dioxide <sup>1</sup>	13463-67-7	1 - 5
Carbon Black <sup>1</sup>	1333-86-4	<2

**Note:** The above components and their percentages are provided for health and safety purposes, ONLY. This document should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

<sup>1</sup> Component is not likely to occur above the limits of exposure considering its incorporated into the mixture and/or provided use.

**SECTION 4 FIRST AID MEASURES**

<b>Eyes</b>	If foreign matter enters eyes, immediately flush with large amounts of potable water for at least 15 minutes or until irritation subsides. Get medical attention if irritation persists.
<b>Skin</b>	Remove contaminated clothing and wash with soap and water.
<b>Inhalation</b>	Remove affected person from source of exposure. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, give oxygen. Get medical attention.
<b>First-Aid, Ingestion</b>	Consult a physician if unusual reaction is noted. Product is not intended nor is it likely to be ingested or eaten.
<b>Symptoms, Acute &amp; Delayed Immediate Medical Attention</b>	<b>Refer to Section 11 - Toxicological Information</b> All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials

**SECTION 5 FIRE FIGHTING MEASURES**

<b>Flash Point</b>	Not Available
<b>Hazardous Products of Combustions</b>	Hydrogen Chloride gas, Carbon Monoxide, Carbon Dioxide.
<b>Extinguishing Media</b>	Dry chemical, Carbon Dioxide, water spray or foam.
<b>Protection Gear</b>	Do not enter fire area without proper protective equipment, including respiratory protection.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Use personal protective equipment as required during use. Evacuate unnecessary personnel. Avoid breathing dust/fumes/gas/mist/vapors/spray during hot-air welding.
<b>Environmental Precautions</b>	N/A solid sheeting
<b>Method and Materials for Containment &amp; Clean Up</b>	N/A solid sheeting

**SECTION 7 HANDLING AND STORAGE**

**Handling** Use this product with adequate ventilation. Avoid breathing dusts or fumes generated from cutting or heating this material. Wash thoroughly after handling. *Use personal protective equipment as described in Section 8.*

**Storage** Store indoors in a cool, dry, well-ventilated area. Do not handle or store near an open flame, heat or other sources of ignition. This product will react with strong oxidizing agents, reducing agents, strong acids and alkali

**SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Occupational Exposure Limits**

COMPONENT	CAS NUMBER	OSHA PEL	ACGIH TLV	NIOSH
Antimony Trioxide	1309-64-4	0.5 mg/m <sup>3</sup> TWA	0.5 mg/m <sup>3</sup> TWA	0.5 mg/m <sup>3</sup> TWA
Copper, powder	7440-50-8	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA
Carbon Black	1333-86-4	3.5 mg/m <sup>3</sup> TWA	3.0 mg/m <sup>3</sup> TWA	3.5 mg/m <sup>3</sup> TWA
Titanium Dioxide	13463-67-7	15 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA	N/A

**PERSONAL PROTECTIVE EQUIPMENT**

**Pictographs**



**Eyes/Face**

**Safety glasses with side shields**

Follow the national guidelines concerning the use of protective eye wear.

**Hand**

**Protective Gloves**

Leather or cotton gloves may be worn to prevent skin contact and irritation.

**Skin/Body**

Normal work clothing (long sleeved shirts, long pants and smooth bottom work shoes) is recommended.

**Inhalation**

Use NIOSH or MSHA approved respiratory protective equipment when airborne exposure limits are exceeded.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State** Solid

**Appearance** variable in color, depending on the composition

**Odor** characteristic odor

**Odor Threshold** No data available

**pH** No data available

**Relative Evaporation Rate** No data available

**Melting Point** No data available

**Boiling Point** No data available

**Flash Point** No data available

**Auto-ignition Temperature** 350 °C

ABBREVIATION KEY

NIOSH = National Institute for Occupational Safety  
OSHA = Occupational Safety & Health Administration  
ACGIH = American Conference of Governmental Industrial Hygiene  
MSHA = Mine Safety and Health Administration

PEL = Permissible Exposure Level  
TLV = Threshold Limit Value  
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Decomposition Temperature</b>	No data available
<b>Specific Gravity (H<sub>2</sub>O =1)</b>	1.2 - 1.3
<b>Vapor pressure</b>	No data available
<b>Vapor Density (AIR=1)</b>	No data available
<b>Solubility in Water</b>	Insoluble

**SECTION 10 STABILITY AND REACTIVITY**

<b>Stability</b>	Stable at room temperature in closed containers under advised storage and handling conditions.
<b>Reactivity</b>	Upon combustion CO and CO <sub>2</sub> are formed
<b>Conditions to Avoid</b>	Strong oxidizers, no spark or open flame, direct sunlight and high temperatures
<b>Hazardous Decomposition</b>	Carbon monoxide, carbon dioxide, hydrogen sulfide and sulfur dioxide
<b>Hazardous Polymerization</b>	Will not occur

**SECTION 11 TOXICOLOGICAL INFORMATION**

**POTENTIAL HEALTH EFFECTS**

**Eyes**

<b>Acute (Immediate)</b>	Mechanical irritation may occur in contact with particles.
<b>Chronic (Delayed)</b>	No data available

**Skin**

<b>Acute (Immediate)</b>	May cause irritation to the skin.
<b>Chronic (Delayed)</b>	No data available

**Inhalation**

<b>Acute (Immediate)</b>	May cause irritation to the respiratory tract.
<b>Chronic (Delayed)</b>	No data available

**Ingestion**

<b>Acute (Immediate)</b>	Product is not intended nor is it likely to be ingested or eaten.
<b>Chronic (Delayed)</b>	No data available

**Component Analysis**

COMPONENT	CAS NUMBER	ORAL LD50 (mg/kg)	DERMAL LD50 (mg/kg)	INHALATION LC50 (mg/L)
Antimony trioxide	1309-64-4	>34,600 (rat)	>8,300 (rabbit)	> 5.2 (rat) 4 hr
Carbon Black	1333-86-4	>8,000 (rat)	N/A	N/A
Titanium Dioxide	13463-67-7	>2,000 (rat)	N/A	> 5.09 (rat) 4 hr
Copper, powder	7440-50-8	>472 (rat)	N/A	> 0.73 (rat) 4 hr

ABBREVIATION KEY

LD<sub>50</sub> = Lethal dose, 50 percent

LC<sub>50</sub> = Lethal concentration, 50 Percent

**SECTION 11 TOXICOLOGICAL INFORMATION**

**Component Carcinogenicity** Antimony trioxide (1309-64-4)  
IARC: Group 2B - Possible Carcinogen

Titanium dioxide (13463-67-7)  
IARC: Group 2B - Possible Carcinogen

Carbon black (1333-86-4)  
IARC: Group 2B - Possible Carcinogen

**Carcinogenicity** According to IARC, No significant exposure to Antimony trioxide , Titanium dioxide and Carbon black should occur because these components are bound in the polymer matrix and dust exposure would not be expected

**Mutagenicity** Based on available data, the classification criteria are not met.

**STOT Single Exposure** Based on available data, the classification criteria are not met.

**STOT Repeated Exposure** Based on available data, the classification criteria are not met.

**Eco toxicity**

COMPONENT	CAS NUMBER	FISH LC50 (mg/L)	DAPHNA EC50 (mg/L)	ALGAE EC50 (mg/L)
Antimony trioxide	1309-64-4	>14.4 (fathead minnow) 96 Hours	>69 (Water flea) 48 Hours	>36.6 (algae) 72 hours
Carbon Black	1333-86-4	>1,000 (zebra fish) 96 Hours	>5,600 (Water flea) 24 Hours	>10,000 (algae) 72 Hours
Copper, powder	7440-50-8	0.15 (rainbow trout) 96 Hours	.03 (Water flea) 48 Hours	0.0426-0.0535 (algae) 72 Hours

**Persistence & Degradability** No Data

**Soil Absorption/Mobility** No Data

**Ozone-Depletion Potential** This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B)

**SECTION 13 DISPOSAL CONSIDERATIONS**

**Disposal Methods:** The transportation, storage, treatment and dispose of this waste must be conducted in accordance with all applicable federal, state and local regulations.

**SECTION 14 TRANSPORT INFORMATION**

**Transportation Regulations** This product is not regulated as a hazardous material in transportation.

**SECTION 15 REGULATORY INFORMATION**

**TSCA Inventory** Components are listed  
**DSL Inventory** Components are listed  
**Sara 302** None  
**Sara 304** Antimony trioxide (1309-64-4); 1,000 lb  
**Sara 311/312 Categories** Chronic Health Hazard  
**Sara 313** Antimony trioxide (1309-64-4), Copper, powder (7440-50-8)  
**Clean Air Act** This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).  
 This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).  
**CA Proposition 65** **WARNING:** This product can expose you to chemicals including Titanium dioxide, Carbon black and Antimony trioxide which are known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Right to Know States**

COMPONENT	CAS NUMBER	MA	MN	NJ	PA	RI
Antimony Trioxide	1309-64-6	Yes	No	Yes	Yes	Yes
Copper powder	7440-50-8	Yes	Yes	Yes	Yes	Yes
Carbon Black	1333-86-4	Yes	No	Yes	Yes	Yes
Titanium Dioxide	13463-67-7	Yes	No	Yes	Yes	No

**SECTION 16 OTHER INFORMATION**

**Preparation Date** January 2021  
**Revision Date** January 2022  
**Summary of Changes** Branding update  
**Disclaimer** The information and recommendations contained herein are to the best of Performance Roof Systems' knowledge and belief, accurate and reliable as of the date issued. Performance Roof Systems does not warrant or guarantee their accuracy or reliability, and Performance Roof Systems shall not be liable for any loss or damage arising out of the use thereof.  
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