

### 1. Identification

Product Identifier: **Zinc Metal: Special High Grade** Manufacturer:

Hohmann & Barnard, Inc. 30 Rasons Court Hauppauge, NY 11788 (631) 234-0600 www.h-b.com Telephone Numbers During normal business hours call: (800) 645-0616 24-hour emergency call Chemtrec: (800) 255-3924

### 2. Hazards Identification

### EMERGENCY OVERVIEW:

**Short Term Overexposure:** ZINC: Inhalation of high levels of zinc vapor (zinc oxide fumes) may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever, muscular pain, nausea and vomiting.

Long Term Overexposure: ZINC: Chronic exposure to zinc may cause respiratory tract irritation with nasopharyngitis and laryngitis Medical Conditions Generally Aggravated By Exposure: Inhalation of dust may be an irritant to pre-existing respiratory conditions Prevention: Avoid contact with acids and alkalis..

Route of Exposure: PRIMARY: Inhalation, if material has been heated above the boiling point, driving off zinc fume. SECONDARY: Ingestion of dusts..

GHS Ratings:

Inhalation Toxicity: Acute 4

GHS Hazards H332 May be harmful if inhaled

**GHS** Precautions

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

- P271 Use only outdoors or in a well-ventilated area
- P312 Call a POISON CENTER or doctor/physician if you feel unwell

P304+P340

IF INHALED: Remove victim to fresh air and Keep at rest in a posi-tion comfortable for breathing

Signal Word: Warning



POTENTIAL HEALTH EFFECTS:

Inhalation: Inhaling dust may be an irritant to pre-existing respiratory conditions. Skin: No data found. Ingestion: No data found. Eyes: No data found. Carcinogenicity: N/A.

# HOHMANN & BARNARD, INC.

### 3. Composition/Information on Ingredients

Component	CAS No.	%
ZINC	7440-66-6	99.9



### 4. First-Aid Measures

Symptoms resulting from inhalation overexposure usually disappear within 24 hours. Symptomatic treatment, such as bed rest and possibly aspirin is recommended to provide relief from fever and chills. In all cases, consult physician for medical attention.

### 5. Fire-fighting measures

#### FLASH POINT: N/A

**EXTINGUISHING MEDIA:** Smother and cool with a suitable dry extinguishing agent (class D fires) such as dry powder (Ansul Met-L-X), zinc oxide or dry sand. Water should not be used; however wherever it is necessary to cool exposures, extreme caution should be taken to prevent contact with molten zinc or burning zinc products.

HAZARDOUS COMBUSTION PRODUCTS: No data found.

FIRE FIGHTING PROCEDURES: No Data Found.

FIRE FIGHTER PROTECTION: Use NIOSH/MSHA approved self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Heating of metal beyond boiling point results in evolution of zinc vapors, which immediately reacts with air to form zinc oxide fume. Slabs must be completely dry before charging into molten metal to prevent a steam explosion.

### 6. Accidental release measures

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Material should be contained for recycling. **WASTE DISPOSAL METHODS:** Material may be recycled or disposed of in accordance with Federal, State, and Local Environmental Regulations. This material may be regulated under CERCLA, TSCA, SARA, and/or RCRA Regulations.

CLEAN WATER ACT REQUIREMENTS: No data found

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) REQUIREMENTS: No data found

### 7. Handling and storage

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Store in a dry location, separate from acids and alkalis. Keep metal dry so it does not contain any moisture when ready for use.

**OTHER PRECAUTIONS:** Damp slabs placed in molten metal may result in a steam explosion. Always practice good personal hygiene when working in areas where this material exists.

REGISTRATIONS/CERTIFICATIONS: No data found.

### 8. Exposure controls/personal protection

ENGINEERING CONTROLS: No data found

ADMINISTRATIVE CONTROLS: No data found

**VENTILATION:** Local exhaust or other ventilation that will reduce dust concentrations to less than permissible exposure limits **PROTECTIVE GLOVES:** Recommended to prevent skin irritation in hypersensitive individuals

**EYE PROTECTION:** Use safety eyewear for protection against airborne particulate matter.

**RESPIRATORY PROTECTION (SPECIFIC TYPE):** Use NIOSH/MSHA approved type respirator for protection against dust and metal fume. **OTHER:** To prevent burns from contact with molten metal, appropriate protective garments should be worn. Such garments may include aprons, face shields, leggings, etc., depending on conditions of use.

LOCAL EXHAUST: N/A.

MECHANICAL (GENERAL): N/A SPECIAL: N/A

### OTHER: N/A.

### 9. Physical and chemical properties

Physical Form: Solid Appearance: Silver-white, or Bluish-white metal Color: No data found Boiling Point: 1665°F Melting Point: 788°F Freezing Point: No data found Specific Gravity: 7.12 Density: No data found Bulk Density: No data found Viscosity: No data found Viscosity: No data found pH: No data found Water Solubility: Negligible Partition Coefficient-Octanol / Water: No data found Molecular Weight: No data found Decomposition Temp.: No data found Taste: No data found Odor: None Odor Threshold: No data found Vapor Pressure: 0.13kPa @ 909°F Vapor Density: N/A Evaporation Rate: N/A VOC (Weight): No data found VOC (Volume): No data found VOC (Volume): No data found Volatiles (Weight): No data found Volatiles (Volume): No data found Flash Point: N/A Upper Explosion Limit: N/A Lower Explosion Limit: N/A Auto Ignition: No data found Flammability (Solid, Gas): No data found

### 10. Stability and reactivity

STABILITY: Stable. HAZARDOUS DECOMPOSITION: Zinc boils off as vapor at elevated temperatures. HAZARDOUS POLYMERIZATION: Will not occur. CONDITIONS TO AVOID: None. INCOMPATIBLE MATERIALS: Avoid contact with acids and alkalis.

### 11. Toxilogical information

**ROUTES OF ENTRY:** PRIMARY: Inhalation, if material has been heated above the boiling point, driving off zinc fume. SECONDARY: Ingestion of dusts. **TARGET ORGANS:** No data found. **EFFECTS OF OVEREXPOSURE:** 

**Short Term Overexposure:** ZINC: Inhalation of high levels of zinc vapor (zinc oxide fumes) may result in tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute, self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever, muscular pain, nausea and vomiting.

Long Term Overexposure: ZINC: Chronic exposure to zinc may cause respiratory tract irritation with nasopharyngitis and laryngitis.

CARCENOGENICTY: None.

#### 12. Ecological Information

No data available for this product.

#### 13. Disposal Considerations

Material may be recycled or disposed of in accordance with Federal, State, and Local Environmental Regulations. This material may be regulated under CERCLA, TSCA, SARA, and/or RCRA Regulations.

### 14. Transport information

D.O.T. Shipping Information: Not data found. I.M.O. Shipping Information: Not data found.

### 15. Regulatory Information

No data found.

### 16. Other information

Issue Date:May 31, 2015Revision Date:May 31, 2015

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The information contained herein is based on current knowledge and experience; no responsibility is accepted and that the information is sufficient or correct in all cases. Users should consider this data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customer, and the protection of the environment.





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IF INHALED: Remove victim to fresh air and Keep at rest in a posi-tion comfortable for breathing

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POTENTIAL HEALTH EFFECTS:

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Component	CAS No.	%
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### 5. Fire-fighting measures

#### FLASH POINT: N/A

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**OTHER PRECAUTIONS:** Damp slabs placed in molten metal may result in a steam explosion. Always practice good personal hygiene when working in areas where this material exists.

REGISTRATIONS/CERTIFICATIONS: No data found.

### 8. Exposure controls/personal protection

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ADMINISTRATIVE CONTROLS: No data found

**VENTILATION:** Local exhaust or other ventilation that will reduce dust concentrations to less than permissible exposure limits **PROTECTIVE GLOVES:** Recommended to prevent skin irritation in hypersensitive individuals

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LOCAL EXHAUST: N/A.

MECHANICAL (GENERAL): N/A SPECIAL: N/A

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CARCENOGENICTY: None.

#### 12. Ecological Information

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# SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Merchant, rebar, structural, and select sheet steel grades CAS Number: Not applicable Synonyms: Carbon Steels Use/Description: Bar and structural steel products, billets (sheet steel for Castrip®), grinding balls

Nucor	Mill Locations 24 Hou	r Contact – CHEMTREC 1-800-	424-9300
Nucor Steel – South Carolina 300 Steel Mill Road Darlington, S.C. 29540 (843) 393-5841	Nucor Steel Kankakee, Inc. One Nucor Way Bourbonnais, IL 60914 (815) 939-5541	Nucor Steel Jackson, Inc. 3630 Fourth Street Flowood, MS 39232 (601) 939-1623	Nucor Steel – Nebraska 2911 East Nucor Road Norfolk, Nebraska 68701 (402) 644-0200
Nucor Steel – Auburn, Inc. 25 Quarry Road Auburn, N.Y. 13021 (315) 253-4561	Nucor Steel – Utah West Cemetery Road Plymouth, Utah 84330 (435) 458-2300	Nucor Steel Birmingham, Inc. 2301 F.L. Shuttlesworth Drive Birmingham, Alabama 35234 (205) 250-7400	Nucor Steel Seattle, Inc. 2424 SW Andover Seattle, WA 98106 (206) 933-2222
Nucor Steel – Texas U.S. Highway 79 South Jewett, Texas 75846 (903) 626-4461	Nucor Steel Marion, Inc. 912 Cheney Avenue Marion, Ohio 43302 (740) 383-4011	Nucor Steel – Berkeley 1455 Hagan Avenue Huger, SC 29450 (843) 336-6000	Nucor Yamato Steel/ Nucor Castrip Arkansas, LLC 5929 E. State Hwy 18 Armorel, AR 72310 (870) 762-5500
Nucor Steel Connecticut, Inc. 35 Toelles Road Wallingford, CT 06492 (203) 265-0615	Nucor Steel Kingman, LLC 3000 West Old Highway 66 Kingman, AZ 86413 (928) 718-7035		

For general product information, contact mill as listed above. For emergencies, use the 24 Hour Contact.

### 2. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW**

STEEL PRODUCTS AS SOLD BY NUCOR ARE NOT HAZARDOUS PER OSHA GHS 29 CFR 1910, 1915, 1926. However, individual customer processes, (such as welding, sawing, brazing, grinding, abrasive blasting, and machining) may result in the formation of fumes, dust (combustible or otherwise), and/or particulate that may present the following hazards:

<u>OSHA Hazards</u> :	Carcinogen Skin Sensitizer Target Organ Effect – Lungs
GHS Classification:	Carcinogenicity (Category 2)

<u>GHS Classification</u>: Carcinogenicity (Category 2) Skin Sensitization (Category 1) Specific Target Organ Toxicity-Repeated Exposure (Category 1)

Pictogram(s):



Signal Word: Danger

### Hazard Statement(s)

H317: Dust/fumes may cause an allergic skin reaction.

H351: Dust/fumes suspected of causing cancer via inhalation.

H372: Inhalation of dust/fumes causes damage to respiratory tract through prolonged or repeated exposure.

### Precautionary Statement(s)

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing dust/fumes.

P281: Use personal protective equipment as required.

P308+P313: If exposed or concerned: Get medical advice/attention.

### Potential Health Effects

### Eye Contact

Dusts or particulates may cause mechanical irritation including pain, tearing, and redness. Scratching of the cornea can occur if eye is rubbed. Fumes may be irritating. Contact with the heated material may cause thermal burns.

### **Skin Contact**

Dusts or particulates may cause mechanical irritation due to abrasion. Coated steel may cause skin irritation in sensitive individuals (see Section 16 for additional information.) Some components in this product are capable of causing an allergic reaction, possibly resulting in burning, itching and skin eruptions. Contact with heated material may cause thermal burns.

### Inhalation

Dusts may cause irritation of the nose, throat, and lungs. Excessive inhalation of metallic fumes and dusts may result in metal fume fever, an influenza-like illness. It is characterized by a sweet or metallic taste in the mouth, accompanied by dryness and irritation of the throat, cough, shortness of breath, pulmonary edema, general malaise, weakness, fatigue, muscle and joint pains, blurred vision, fever and chills. Typical symptoms last from 12 to 48 hours.

### Ingestion

Not expected to be acutely toxic via ingestion based on the physical and chemical properties of the product. Swallowing of excessive amounts of the dust may cause irritation, nausea, and diarrhea.

### Potential Fire and Explosion Hazards

Under normal conditions, steel products do not present fire or explosion hazards, and dust generated by handling steel products is oxidized and not combustible. Processing of steel product by some individual customers may produce potentially combustible dust that may represent a fire or explosion hazard.

### Chronic or Special Toxic Effects

Repeated exposure to fine dusts may inflame the nasal mucosa and cause changes to the lung. In addition, a red-brown pigmentation of the eye and/or skin may occur. Welding fumes have been associated with adverse health effects. Contains components that may cause cancer or reproductive effects. The following components are listed by NTP, OSHA, or IARC as carcinogens: Nickel, chromium (hexavalent), cobalt, lead, cadmium, antimony (trioxide), arsenic, beryllium. See Section 11, for additional, specific information on effects noted above.

### **Target Organs**

Overexposure to specific components of this product that are generated in dusts or fumes may cause adverse effects to the following organs or systems: eyes, skin, liver, kidney, central nervous system, cardiovascular system, respiratory system.

### Medical Conditions Aggravated by Exposure

Diseases of the skin such as eczema may be aggravated by exposure. Also, disorders of the respiratory system including asthma, bronchitis, and emphysema. Long-term inhalation exposure to agents that cause pneumoconiosis (e.g. dust) may act synergistically with inhalation of oxide fumes or dusts of this product.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Compone	nts	CAS No.	% Weight	Exposure Limits			
				ACGIH TLV (mg/m <sup>3</sup> ) OSHA PEL (mg/m <sup>3</sup> )			
Base Metal:							
Iron	(Fe)	7439-89-6	Balance	5	Oxide Dust/Fume	10	Oxide Dust/Fume
Alloying Elements							
Aluminum	(AI)	7429-90-5	<0.05	10 5	Dust Fume	15 5	Dust Respirable fraction
Antimony	(Sb)	7440-36-0	<0.9	0.5	As Antimony	0.5	As Antimony
Arsenic	(As)	7440-38-2	<0.09	0.01	As Arsenic (A1 Carcinogen)	0.01	As Arsenic
Beryllium	(Be)	7440-41-7	<0.09	0.00 2 0.01	As Beryllium (A1 Carcinogen) As Beryllium (STEL)	0.002 0.005	As Beryllium As Beryllium (Ceiling)
Boron	(B)	7440-42-8	<0.9	10	Oxide Dust	15	Oxide Dust
Cadmium	(Cd)	7440-43-9	<0.01	0.01 0.00 2	As Cadmium (A2 Carcinogen) Respirable fraction	0.005 0.0025	As Cadmium As Cadmium (Action Level)
Calcium	(Ca)	1305-78-8	<0.9	2	Oxide Dust	5	Oxide Dust
Carbon	(C)	7440-44-0	<1.2		Not Established		Not Established
Chromium	(Cr)	7440-47-3	0.01-1.2	0.5	Metal	1	Metal
Cobalt	(Co)	7440-48-4	<0.09	0.02	As Cobalt (A3 Carcinogen)	0.1	Metal/Dust/Fume
Copper	(Cu)	7440-50-8	<0.9	1 0.2	Dust Fume	1 0.1	Dust Fume
Lead	(Pb)	7439-92-1	<0.07	0.05	Dust / Fume (A3 Carcinogen)	0.05	Dust / Fume
Magnesium	(Mg)	7439-95-4	<0.9		Not Established		Not Established
Manganese	(Mn)	7439-96-5	0.2-2	0.2	Elemental Mn and Inorg Compounds	5	Fume (Ceiling)
Molybdenum	(Mo)	7439-98-7	<0.9	10	Insoluble Compounds	15	Insoluble Compounds
Niobium	(Nb)	7440-03-1	<0.9		Not Established		
Nickel	(Ni)	7440-02-0	<1.0	1.5	Metal	1	Metal and Insoluble Compounds
Nitrogen	(N)	7727-37-9	<0.9		Simple Asphyxiant		Simple Asphyxiant
Phosphorus	(P)	7723-14-0	<0.9	0.1	Phosphorus	0.1	Phosphorus
Selenium	(Se)	7782-49-2	<0.9	0.2	Selenium	0.2	Selenium
Silicon	(Si)	7440-21-3	<0.9	10	Dust	15	Dust
Sulfur	(S)	7446-09- 05	<0.9	5.2 13	Sulfur Dioxide Sulfur Dioxide (STEL)	13	Sulfur Dioxide
Tin	(Sn)	7440-31-5	<0.9	2	Metal,Oxide and Inorganic Compounds	2	Inorganic Compounds
Titanium	(Ti)	7440-32-6	<0.9		Not Established		Not Established
Tungsten	(W)	7440-33-7	<0.9	5 10	Insoluble Compounds as W Insoluble Compounds as W (STEL)		Not Established
Vanadium	(V)	7440-62-2	<0.9	0.05	Oxide Dust/Fume	0.5 0.1	Oxide Dust (Ceiling) Oxide Fume (Ceiling)
Zinc	(Zn)	7440-66-6	0.0-0.10	10 5 10	Oxide Dust OxideFume Oxide Fume (STEL)	5 10	Oxide Fume Oxide Dust

NOTE: No permissible exposure limits (PEL) or threshold limit values (TLV) exist for steel over all. The above listing is a summary of elements used in alloying Nucor Steel Products. Various grades of steel will contain different combinations of these elements and/or trace materials. Exact specifications may be found by calling the division and asking for a specifications sheet.

### 4. FIRST AID MEASURES

**Eye Contact -** In case of overexposure to dusts or fumes, immediately flush eyes with plenty of water for at least 15 minutes occasionally lifting the eye lids. Get medical attention if irritation persists. Thermal burns should be treated as medical emergencies.

**Skin Contact -** In case of overexposure to dusts or particulates, wash with soap and plenty of water. Get medical attention if irritation develops or persists. If thermal burn occurs, flush area with cold water and get immediate medical attention.

**Inhalation -** In case of overexposure to dusts or fumes, remove to fresh air. Get immediate medical attention if symptoms described in this SDS develop.

**Ingestion -** Not considered an ingestion hazard. However, if excessive amounts of dust or particulates are swallowed, treat symptomatically and supportively. Get medical attention.

**Notes to Physician -** Inhalation of metal fume or metal oxides may produce an acute febrile state, with cough, chills, weakness, and general malaise, nausea, vomiting, muscle cramps, and remarkable leukocytosis. Treatment is symptomatic, and condition is self limited in 24-48 hours. Chronic exposure to dusts may result in pneumoconiosis of mixed type.

### 5. FIRE FIGHTING MEASURES

Flash Point (Method) - Not applicable

Flammable Limits (% volume in air) - Not applicable

Auto ignition Temperature - Not applicable

**Extinguishing Media -** For molten metal, use dry powder or sand. For steel dust use or dry sand, water, foam, argon or nitrogen.

**Special Fire Fighting Procedures -** Do not use water on molten metal. Do not use Carbon Dioxide (CO<sub>2</sub>). Firefighters should not enter confined spaces without wearing NIOSH/MSHA approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

**Unusual Fire or Explosion Hazards -** Steel products do not present fire or explosion hazards under normal conditions. Any non-oxidized fine metal particles/ dust generated by grinding, sawing, abrasive blasting, or individual customer processes may produce materials that the customer should test for combustibility and other hazards in accordance with applicable regulations. High concentrations of combustible metallic fines in the air may present an explosion hazard.

### 6. ACCIDENTAL RELEASE MEASURES

**Precautions if Material is Spilled or Released -** Emergency response is unlikely unless in the form of combustible dust. Avoid inhalation, eye, or skin contact of dusts by using appropriate precautions outlined in this SDS (see section 8). Fine turnings and small chips should be swept or vacuumed and placed into appropriate disposable containers. Keep fine dust or powder away from sources of ignition. Scrap should be reclaimed for recycling. Prevent materials from entering drains, sewers, or waterways. Specific standards and regulations may be applicable to materials generated by individual customer processes. As appropriate, these standards and regulations should be consulted for applicability.

**Fire and Explosion Hazards -** Some customer processes may generate combustible dust that may require specific precautions when cleaning spills or releases of dust.

**Environmental Precautions -** Some grades of steel may contain reportable quantities of alloying elements. See Section 15 for additional information.

**Waste Disposal Methods -** Dispose of used or unused product in accordance with applicable Federal, State, and Local regulations. Please recycle.

### 7. HANDLING AND STORAGE

Storage Temperatures - Stable under normal temperatures and pressures.

**Precautions to be Taken in Handling and Storing -** Store away from strong oxidizers. Dusts and/or powders, alone, or combined with process specific fluids, may form explosive mixtures with air. Applicable Federal, state and local laws and regulations may require testing dust generated from processing of steel

products to determine if it represents a fire or explosion hazard and to determine appropriate protection methods. Avoid breathing dusts or fumes.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Operations with potential for generating high concentrations of airborne particulates or fumes should be evaluated and controlled as necessary.

**Eye Protection -** Use safety glasses. Dust resistant safety goggles are recommended under circumstances where particles could cause mechanical injury such as grinding or cutting. Face shield should be used when welding or cutting.

**Skin -** Appropriate protective gloves should be worn as necessary. Good personal hygiene practices should be followed including cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing.

**Respiratory Protection -** NIOSH/MSHA approved dust/fume/mist respirator should be used to avoid excessive exposure. See Section 3 for component material information exposure limits. If such concentrations are sufficiently high that this respirator is inadequate, or high enough to cause oxygen deficiency, use a positive pressure self-contained breathing apparatus (SCBA). Follow all applicable respirator use, fitting, and training standards and regulations.

**Ventilation -** Provide general and/or local exhaust ventilation to control airborne levels of dust or fumes below exposure limits.

**Exposure Guidelines -** No permissible exposure limits (PEL) or threshold limit values (TLV) exist for steel. See Section 3 for component materials. Various grades of steel will contain different combinations of these elements. Trace elements may also be present in minute amounts

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor – Silver grey to grey black with metallic luster.

Boiling Point - Not applicable Melting Point - Approximately 2800 °F pH - Not applicable Specific Gravity (at 15.6°C) - Not applicable Density (at 15.6 °C) - Not applicable Vapor Pressure - Not applicable Vapor Density (air = 1) - Not applicable % Volatile, by Volume - Not applicable Solubility in Water - Insoluble. Evaporation Rate (Butyl Acetate = 1) - Not applicable Other Physical and Chemical Data - None

### 10. STABILITY AND REACTIVITY

Stability - Stable

**Conditions to Avoid -** Steel at temperatures above the melting point may liberate fumes containing oxides of iron and alloying elements. Avoid generation of airborne fume.

Hazardous Polymerization - Will not occur.

**Incompatibility** (Materials to Avoid) - Reacts with strong acids to form hydrogen gas. Do not store near strong oxidizers.

**Hazardous Decomposition Products -** Metallic fumes may be produced during welding, burning, grinding, and possibly machining or any situation with the potential for thermal decomposition. Refer to ANSI Z49.1

### 11. TOXICOLOGICAL INFORMATION

The primary component of this product is iron. Long-term exposure to iron dusts or fumes can result in a condition called siderosis which is considered to be a benign pneumoconiosis. Symptoms may include chronic bronchitis, emphysema, and shortness of breath upon exertion. Penetration of iron particles in the skin or eye may cause an exogenous or ocular siderosis which may be characterized by a red-brown

pigmentation of the affected area. Ingestion overexposures to iron may affect the gastrointestinal, nervous, and hematopoietic system and the liver. Iron and steel founding, but not iron or iron oxide, has been listed as carcinogenic (Group 1) by IARC.

When this product is welded, fumes are generated. Welding fumes may be different in composition from the original welding product, with the chief component being ordinary oxides of the metal being welded. Chronic health effects (including cancer) have been associated with the fumes and dusts of individual component metals (see above), and welding fumes as a general category have been listed by IARC as a carcinogen (Group 2B). There is also limited evidence that welding fumes may cause adverse reproductive and fetal effects. Evidence is stronger where welding materials contain known reproductive toxins, e.g., lead, which may be present in the coating material of this product.

Breathing fumes or dusts of this product may result in metal fume fever, which is an illness produced by inhaling metal oxides. These oxides are produced by heating various metals including cadmium, zinc, magnesium, copper, antimony, nickel, cobalt, manganese, tin, lead, beryllium, silver, chromium, aluminum, selenium, iron, and arsenic. The most common agents involved are zinc and copper.

This product may contain small amounts of manganese. Prolonged exposure to manganese dusts or fumes is associated with "manganism", a Parkinson-like syndrome characterized by a variety of neurological symptoms including muscle spasms, gait disturbances, tremors, and psychoses.

This product may contain small amounts of cadmium. Primary target organs for cadmium overexposure are the lung and the kidney. Because of its cumulative nature, chronic cadmium poisoning can cause serious disease which takes many years to develop and may continue to progress despite cessation of exposure. Progression of the disease may not reflect current exposure conditions. It is also capable of causing a painful osteomalacia called "Itai-Itai" in postmenopausal women, and has caused developmental effects and/or reproductive effects in male and female animals. Cadmium is a listed carcinogen by NTP, OSHA, and IARC (Group 1).

This product may contain small amounts of chromium. Prolonged and repeated overexposure to chromium dusts or fumes may cause skin ulcers, nasal irritation and ulceration, kidney damage and cancer of the respiratory system. Chromium is skin sensitizer. Cancer is generally attributed to the hexavalent (+6) form of chromium which is listed as a carcinogen by NTP and IARC (Group 1).

This product may contain small amounts of nickel. Prolonged and repeated contact with nickel may cause sensitization dermatitis. Inhalation of nickel compounds has caused lung damage as well as sinus, nasal and lung cancer in laboratory animals. Nickel is a listed carcinogen by NTP and IARC (Group 1).

This product may contain small amounts of vanadium. Adverse effects from dermal, inhalation or parenteral exposure to various vanadium compounds have been reported. The major target for vanadium pentoxide toxicity is the respiratory tract. Fumes or dust can cause severe eye and respiratory irritation, and systemic effects. Chronic bronchitis, green tongue, conjunctivitis, pharyngitis, rhinitis, rales, chronic productive cough, and tightness of the chest have been reported following overexposure. Allergic reactions resulting from skin and inhalation exposures have also been reported. A statistical association between vanadium air levels and lung cancer has been suggested, but vanadium currently is not regarded as a human carcinogen.

This product may contain small amounts of lead. Lead can accumulate in the body. Consequently, exposure to fumes or dust may produce signs of polyneuritis, diminished vision and peripheral neuropathy, such as tingling and loss of feeling in fingers, arms and legs. Lead is a known reproductive and developmental toxin. It is also associated with central nervous system disorders, anemia, kidney dysfunction and neurobehavioral abnormalities. The brain is a major target organ for lead exposure. Elemental lead is listed as an IARC 2B carcinogen.

The product may contain small amounts of copper. Copper dust and fumes can irritate the eyes, nose and throat causing coughing, wheezing, nosebleeds, ulcers and metal fume fever. Other effects from repeated inhalation of copper fumes include a metallic or sweet taste, and discoloration of skin, teeth or hair. Copper also may cause an allergic skin reaction. Overexposure to copper can affect the liver.

### 12. ECOLOGICAL INFORMATION

**Aquatic Ecotoxicological Data -** No specific information available on this product. **Environmental Fate Data -** No specific information available on this product.

### 13. DISPOSAL CONSIDERATIONS

Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. Dispose in accordance with federal, state, and local health and environmental regulations. Prevent materials from entering drains, sewers, or waterways.

### 14. TRANSPORT INFORMATION

DOT Proper Shipping Name - Not regulated DOT Hazard Classification - Not regulated UN/NA Number - Not applicable DOT Packing Group - Not applicable Labeling Requirements - Not applicable Placards - Not applicable DOT Hazardous Substance - Not applicable DOT Marine Pollutant - Not applicable

### 15. REGULATORY INFORMATION

This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, dusts and fumes from this product may be combustible or hazardous and require protection to comply with applicable Federal, state and local laws and regulations.

- **California Proposition 65**: This product contains chemicals (antimony [oxide], arsenic, beryllium, chromium [hexavalent], cobalt, cadmium, lead, nickel) known to the State of California to cause cancer and chemicals (cadmium, lead) known to the State of California to cause birth defects or other reproductive harm.
- Massachusetts Substance List: Aluminum, Antimony, Arsenic, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, Magnesium, Manganese, Molybdenum, Nickel, Nitrogen, Phosphorus, Selenium, Silicon, Sulfur, Tin, Titanium, Tungsten, Vanadium, Zinc
- Pennsylvania Hazardous Substance List: Aluminum, Antimony, Arsenic, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, Magnesium, Manganese, Molybdenum, Nickel, Nitrogen, Phosphorus, Selenium, Silicon, Sulfur, Tin, Titanium, Tungsten, Vanadium, Zinc
- New Jersey Hazardous Substance List: Aluminum, Antimony, Arsenic, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, Magnesium, Manganese, Molybdenum, Nickel, Nitrogen, Phosphorus, Selenium, Silicon, Sulfur, Tin, Titanium, Tungsten, Vanadium, Zinc

### Toxic Substances Control Act (TSCA)

Components of this product are listed on the TSCA Inventory.

### Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

Steel is not reportable, however, it contains hazardous substances that may be reportable if released in pieces with diameters less than or equal to 0.004 inches (RQ marked with a "\*").

Reportable Quantity (in Ib)
5000*
1*
10*
10*
5000*
5000*

Chemical Name	Reportable Quantity (in Ib)
Lead	10*
Nickel	100*
Phosphorus	1
Selenium	100*
Zinc	1000*

#### Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III SECTION 311/312 HAZARD CATEGORIES: Immediate Health Effect, Delayed Health Effect

This product contains the following EPCRA Section 313 chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right – To – Know Act of 1986 (40 CFR 372):

### SECTION 313 REPORTABLE INGREDIENTS:

Chemical Name	CAS Number	Concentration (% by weight)	<b>Reportable</b>
Aluminum	7429-90-5	<0.05	No – Less than 1%
Antimony	7440-36-0	<0.9	No – Less than 1%
Arsenic	7440-38-2	<0.09	No – Less than 0.1%
Beryllium	7440-41-7	<0.09	No – Less than 0.1%
Cadmium	7440-43-9	<0.01	No – Less than 0.1%
Chromium	7440-47-3	0.01-1.2	Yes – Greater than 0.1%
Cobalt	7440-48-4	<0.09	No – Less than 0.1%
Copper	7440-50-8	<0.9	No – Less than 1%
Lead	7439-92-1	<0.07	Yes
Manganese	7439-96-5	0.2-2	Yes – Greater than 1%
Nickel	7440-02-0	<1.0	Yes – Greater than 0.1%
Phosphorus	7723-14-0	<0.9	No – Less than 1%
Selenium	7782-49-2	<0.9	No – Less than 1%
Vanadium	7440-62-2	<0.9	No – Less than 1%
Zinc	7440-66-6	0-0.10	No – Less than 1%

Concentrations based on analytical data and process knowledge of typical products distributed by the facility.

### 16. OTHER INFORMATION

This SDS covers Nucor product as delivered from the Nucor facility, but does not include chemicals that may be applied by subsequent handlers and/or distributors of this product. This could include a variety of materials including oils, paints, galvanization, etc. that are not included in this SDS. Additionally, specialty orders may require application of coating material not listed in this SDS. SDSs for any Nucor-applied specialty coating will be provided separately. During welding, precautions should be taken for airborne contaminants that may originate from components of the welding rod. Arc or spark generated when welding or burning could be a source of ignition for combustible and/or flammable materials. The information in this Safety Data Sheet (SDS) was obtained from sources which we believe are reliable; however, the information is provided without any representation or warranty, expressed or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of this product.



### 1. Identification

Product Identifier: FLEXIBLE VINYL PELLET COMPOUND Manufacturer:

Hohmann & Barnard, Inc. 30 Rasons Court Hauppauge, NY 11788 (631) 234-0600 www.h-b.com Telephone Numbers During normal business hours call: (800) 645-0616 24-hour emergency call Chemtrec: (800) 255-3924

### 2. Hazards Identification

\*\* Flexible vinyl pellet compounds are mixtures of PVC resins with various functional additives. Additives are bound up in the manufacturing process and are not expected to create any hazard when handled or processed in accordance with good manufacturing and industrial hygiene practices. Trace amounts of hydrogen chloride may be generated from the PVC compound if overheated. Volatiles from stabilizers, plasticizers, lubricants, etc. which may be generated in trace amounts may prove sensitive to some individuals.

### POTENTIAL HEALTH EFFECTS:

### Inhalation: N/A

Skin & Eyes: At processing temperatures vinyl compounds may emit fumes and vapors that are irritating to the respiratory tract, eyes or skin of some sensitive individuals.

Ingestion: N/A Carcinogenicity: N/A

GHS Ratings:

Flammable Gasses: 2 Self-reactive substances and mixtures: Type B Corrosive to Metals: 1

GHS Hazards:

- H221 Flammable Gas
- H242 Heating may cause a fire
- H290 May be corrosive to metals

#### GHS Precautions:

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P220 Keep/Store away from clothing/combustible materials
- P234 Keep only in original container
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely
- P381 Eliminate all ignition sources if safe to do so
- **P390** Absorb spillage to prevent material damage
- P370+P378
  - In case of fire: Use water, ABC dry chemical, or AFFF and protein type air foams for extinction.
- P403 Store in a well-ventilated place
- P406 Store in corrosive resistant container with a resistant inner liner
- P411 Store at temperatures not exceeding 572°F (300°C)
- P420 Store away from other materials

### P403+P235

- Store in a well-ventilated place. Keep cool
- P501 Refer to manufacturer/supplier for information on recovery/recycling

## **HOHMANN & BARNARD, INC.**

Signal Word: Warning



### 3. Composition/Information on Ingredients

Specific chemical identity and percentage content of ingredients withheld as trade secret pursuant to Massachusetts regulations. Reporting requirements of section 313 title III of the superfund amendments and reauthorization act of 1986 and 10 CFR part 373 apply.



### 4. First-Aid Measures

If irritation from exposure to processing fumes persists, remove affected individual, call a physician and provide suitable protection before re-entry.

### 5. Fire-fighting measures

FLASH IGNITION: 572°F (300°C) SELF IGNITION: 770°F (410°C) EXTINGUISHING MEDIA: Water is most effective. ABC dry chemical, AFFF and protein type air foams are also effective. Belden vinyl compounds are "ordinary combustibles" (NFPA Class A).

**HAZARDOUS COMBUSTION PRODUCTS:** When forced to burn, primary combustion gases will be hydrogen chloride, carbon monoxide, carbon dioxide and aliphatic olefins. Trace amounts of benzene and aliphatic and aromatic hydrocarbons may be present.

FIRE FIGHTING PROCEDURES: Positive pressure self contained breathing apparatus (SCBA) is suggested during and immediately after a fire. FIRE FIGHTER PROTECTION: No data found.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Hydrogen Chloride has a corrosive effect on many metals and appropriate measure should be taken where exposure occurs.

#### 6. Accidental release measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Vacuum or sweep into a closed container for reuse or disposal. WASTE DISPOSAL METHODS: Dispose of in a licensed landfill or by incineration, If incinerated be aware that hydrogen chloride is generated. CLEAN WATER ACT REQUIREMENTS: No data found RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) REQUIREMENTS: No data found

### 7. Handling and storage

No data found

8. Exposure controls/personal protection ENGINEERING CONTROLS: No data found ADMINISTRATIVE CONTROLS: No data found

PERSONAL PROTECTIVE EQUIPMENT PROTECTIVE GLOVES: When handling hot materials EYE PROTECTION: Safety glasses RESPIRATORY PROTECTION (SPECIFIC TYPE): Not normally required

### VENTILATION

Provide effective ventilation to draw fumes away from workers to prevent routine inhalation.

### 9. Physical and chemical properties

Solubility in water: Very Slight Specific Gravity: 1.15 to 1.70 depending on formulation Appearance & Odor: Pigmented or un-pigmented granules, odorless or with a bland odor Other: Characteristics such as vapor pressure, vapor density, boiling point & evaporation rate are not applicable.

### 10. Stability and reactivity

#### STABILITY: Stable.

**HAZARDOUS DECOMPOSITION:** Hydrogen chloride, carbon monoxide, carbon dioxide, aliphatic olefins - Trace amounts of benzene and aromatic and aliphatic hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur. CONDITIONS TO AVOID: Excessive heat. INCOMPATIBLE MATERIALS: Avoid contact with acetal, acetal copolymers and amines during processing

### 11. Toxicological information

ROUTES OF ENTRY: No data found TARGET ORGANS: No data found Exposure: No data found CARCINOGENICITY: No data found

### 12. Ecological Information

No data found

#### 13. Disposal Considerations

Dispose of in a licensed landfill or by incineration, If incinerated be aware that hydrogen chloride is generated.

#### 14. Transport information

\* Vinyl compounds are not classified as hazardous by the US Dept. of Transportation under the Title 49 of the Code of Federal Regulations, 1983 edition.

### 15. Regulatory Information

No data found

### 16. Other information

Issue Date: May 31, 2015

Revision Date: May 31, 2015

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This information is taken from sources or based upon data believed to be reliable; however, Hohmann & Barnard, Inc. disclaims any warranty, express or implied, as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may be required under particular conditions.

The information contained herein is based on current knowledge and experience; no responsibility is accepted and that the information is sufficient or correct in all cases. Users should consider this data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customer, and the protection of the environment.



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## SAFETY DATA SHEET

During normal business hours call: (800) 645-0616 24-hour emergency call Chemtrec: (800) 255-3924

**Telephone Numbers** 

www.h-b.com Recommended use: Various alloy steel wire rod products for masonry constructions. Recommended restrictions: None known.

### 2. Hazards Identification

Trace amounts of residual blowing agent may be present in the foam. Inhalation: Mechanical and thermal processes may produce dust. Tightly sealed containers may burst under fire or intense heat.

### 3. Composition/Information on Ingredients

Ingredient Name Polyethylene Other proprietary additives 5-15% CAS Number CAS # 009002-8804 Percentage by wt. 85-95%

Hazardous Ingredients: Encapsulated residual blowing agent - Isobutane. CAS: 75-28-5

Appearance: Soft Round Foam

### 4. First-Aid Measures

Swallowing: N/A Skin Contact: N/A Inhalation: Remove Blockage Eye Contact: Consult Physician.

### 5. Fire-fighting measures

Extinguishing Media: Water, carbon dioxide (CO2) and dry chemical.

Fire and Explosion Hazards: Trace amounts of residual blowing agent may be present in the foam. Mechanical and thermal processes may produce dust and flammable vapors, which may be potential explosion hazards. Tightly sealed containers may burst under fire or intense heat.

Special Fire Fighting Procedures: Firefighters should be equipped with positive pressure self-contained breathing apparatus in enclosed areas.

### 6. Accidental release measures

Handle as general inert material, avoid open flame, smoking and any source of ignition.

### 7. Handling and storage

Max 160°F (71oC)

Precautions to be taken in Handling, Storage and Transportation

WARNING: This polyethylene foam is made with a flammable hydrocarbon blowing agent, most of which is removed prior to shipment. However, residual flammable vapors may gradually exhaust from the foam during storage, fabrication or use. Avoid close confinement of large foam quantities and sources of ignition near the foam (ie: smoking, sparks, flames.) Do not store near heating equipment. Heating equipment should be inspected regularly during every heating season to check for pinholes or larger defects in the combustion chamber. Burns readily when exposed to plentiful and hot ignition sources.



Product Identifier: Backer Rod

30 Rasons Court

Hohmann & Barnard, Inc.

Hauppauge, NY 11788 (631) 234-0600

1. Identification

Manufacturer:

Use self-contained breathing apparatus in the event of fire.

WARNING: Fabricating operations which cut large numbers of interior foam cells can release localized amounts of flammable, residual blowing agent. Provide adequate ventilation to avoid the build up of blowing agent concentration.

WARNING: Transport large quantities of this polyethylene foam in ventilated vehicles, Exercise caution when opening vehicles containing this polyethylene foam to avoid all possible sources of ignition (lit tobacco products, sparks, etc.) near the foam and vehicle.

### 8. Exposure controls/personal protection

Engineering Controls: Fabricating operations which cut large numbers of interior foam cells can release localized amounts of flammable, residual blowing agent. Provide adequate ventilation to avoid the build up of blowing agent concentration. Eye Protection: Wear safety goggles if there is a potential for exposure to flying particles.

Skin Protection: Gloves when being heated

Respiratory Protection: Cloth mask if fabricating (dust)

### 9. Physical and chemical properties

Form: Solid Plastic foam Boiling point: NA Color: Grey Vapor Pressure: NA Vapor Density: (Air-1): NA Bulk Density: 20-200 KG/m<sup>3</sup> Molecular Weight: NA %Volatile by Volume: Nil Melting Point: 230°F (110°C) Solubility in Water: Not Soluble Flash Point: Polyethylene: NA Hydrocarbon Gas: -120°F (-84oC)\* Flammable limits (LEL): Polyethylene: NA Hydrocarbon Gas: 1.8% by volume\* Flammable limits (UEL): Polyethylene: NA Hydrocarbon Gas: 8.5% by volume\* \*Encapsulated residual blowing agent present in the foam.

10. Stability and reactivity	
Stability:	Stable
Polymerization:	Will not occur
Conditions to avoid:	Avoid flame, very high temperature.
Incompatible Materials:	Strong oxidants (long contact)
Hazardous Decomposition Products:	None

### 11. Toxilogical information

No applicable or available data for this section

### 12. Ecological Information

This product is inert to the environment and is not expected to exhibit any significant biodegradation.

### 13. Disposal Considerations

Reuse, recycle, incinerate, or dispose in an approved landfill. Follow all regulatory requirements for disposal.

### 14. Transport information

### DOT: Not regulated

WARNING: Transport large quantities of this polyethylene foam in ventilated vehicles, Exercise caution when opening vehicles containing this polyethylene foam to avoid all possible sources of ignition (lit tobacco products, sparks, etc.) near the foam and vehicle. Plan the shipping so that the product would not be sitting in a trailer over extended periods of time

# HOHMANN & BARNARD, INC.

or over the weekend even if ventilated. Product may release flammable gases therefore make certain that vents are open. When arriving at destination immediately open the door so that the trailer will be well ventilated even if waiting for unloading. No smoking or open flame.

### 15. Regulatory Information

OSHA STATUS: Not Hazardous RCRA Status: The product as supplied is not classified as a RCRA Hazardous waste. NFPA Hazard Code: Health: 0 Flammability: 1 Reactivity: 0

### 16. Other information

Issue Date: May 31, 2015

Revision Date: May 31, 2015

Disclaimer: All information, recommendations, and suggestions appearing herein concerning this product are taken from sources or based upon data believed to be reliable. Although reasonable care has been taken in the preparation of this information, Hohmann & Barnard extends no warranties or guarantees, express or implied, makes no representations, and assumes no responsibility as to the accuracy, reliability or completeness of the information presented. Since the actual use of the product described herein is beyond our control, POSCO assumes no liability arising out of the use of the product by others. It is the user's responsibility to determine the suitability of the information presented herein, to assess the safety and toxicity of the product under their own conditions of use, and to comply with all applicable laws and regulations. Appropriate warnings and safe handling procedures should be provided to handlers and users.







# MATERIAL SAFETY DATA SHEET

# Mighty-Flash<sup>™</sup> Stainless Steel Fabric Flashing

Hohmann & Barnard, Inc. 30 Rasons Court Hauppauge, NY 11788 May 2012

### **SECTION 1: PRODUCT INFORMATION**

PRODUCT NAME:	Stainless Steel Product Flashing			
	Stainless Steel	<85 wt. %		
	Polymer Non-Woven	<10 wt. %		
	Hot Melt Adhesive	<5 wt.%		
	Polypropylene	<10 wt.%		
EMERGENCY TEL. NO:	800-645-0616			
MANUFACTURER:	Hohmann & Barnard,	Inc.		
	30 Rasons Court			
	Hauppauge, NY 1178	38		
DATE PREPARED:	5/12/12			

### SECTION 2: HAZARDOUS INGREDIENTS/ IDENTITY

Hazardous Component(s) OSHA | ACGIH | Other Exposure Chemical & Common Name(s) PEL: NR | TLV: NR | Limits: NA No PEL exists for this product.

This laminate has not been tested as a whole but has been analyzed for chemical composition. Avoid inhalation of metallic dust and any fumes generated at extremely elevated temperatures or when the product is ignited.

### **SECTION 3: PHYSICAL & CHEMICAL CHARACTERISTICS**

BOILING POINT: N/A SPECIFIC GRAVITY: ≈8 (H<sub>2</sub>0=1) EVAPORATION RATE: N/A SOLUBILITY IN WATER: Insoluble APPEARANCE/ ODOR: Odorless J REACTIVITY IN WATER: N/A MELTING POINT: 2700°F VAPOR PRESSURE: N/A VAPOR DENSITY: N/A

APPEARANCE/ ODOR: Odorless, Laminate assumes color of reinforcement material: black, gray, red, or tan.

Hohmann & Barnard, Inc. 30 Rasons Court I Hauppauge, NY 11788 TEL: 800-645-0616 I FAX: 631-234-0683 EMAIL: weanchor@h-b.com I www.h-b.com

### Sandell Manufacturing

310 Wayto Road I Schenectady NY 12303 TEL: 800-283-3888 I FAX: 518-357-9636 EMAIL: moreinfo@sandellmfg.com I www.sandellmfg.com

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# MATERIAL SAFETY DATA SHEET

### SECTION 4: FIRE & EXPLOSION DATA

FLASH POINT: NA METHOD: NA

**EXTINGUISHING MEDIA:** Dry sand or metal extinguishing powders.

**SPECIAL FIREFIGHTING PROCEDURES:** Wear NIOSH/MSHA approved SCBA & full protective equipment (FP N). Standard procedures for Class-A fires.

**FIRE & COMBUSTION HAZARDS:** Steel products in their natural state do not present a fire or explosion hazard.

# SECTION 5: HEALTH HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

Acute or Immediate Effects — Routes of Entry and Symptoms

Ingestion: Not expected to be an ingestion hazard.

**Skin:** May cause irritation to sensitive akin. Molten material will cause thermal burns.

**Eye:** Particles may cause irritation. Molten material will cause thermal burns.

Inhalation: Not a likely route of entry.

Chronic effects: None known

Medical Conditions Aggravated by Exposure: None known.

**Carcinogenicity Information:** None of the components present in this material at concentrations equal to or greater than 0.10% are listed by IARC, NTC, OSHA, or ACGIH as a carcinogen.

### **SECTION 6: FIRST AID PROCEDURES**

**Inhalation:** Remove to fresh air; if condition continues, consult physician.

**Eye Contact:** Immediately flush well with running water to remove particulate; get medical attention.

**Skin Contact:** If irritation develops, remove clothing and wash well with soap and water. If condition persists, seek medical attention.

**Ingestion:** If significant amounts of metal are ingested, seek medical attention.

### SECTION 7: STABILITY AND REACTIVITY

### Stability: Stable

**Incompatibility** (Materials to Avoid): Stable under normal conditions to use, storage and transport. Reacts with strong acids to form hydrogen gas. At temperatures above melting point, metallic oxide fumes may be liberated.

**Conditions to Avoid:** Do not store near strong oxidizers or open flames. Do not heat above 400° when processing. Avoid generation of airborne dust and fumes and non-ventilated areas when cutting, welding, burning or brazing. *Keep Area Well Ventilated* 

Hazardous Decomposition Products: Metallic oxides, Carbon monoxide, carbon dioxide

Polymerization: Will not occur.

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# MATERIAL SAFETY DATA SHEET

# SECTION 8: ACCIDENTAL RELEASE MEASURES

**Special Precautions:** NA - Use good housekeeping practices to prevent accumulation of dust and to keep airborne dust to a minimum, Avoid breathing metal fumes or dust.

**Waste Disposal Method:** Dust, etc. – follow federal, state, and local regulations regarding disposal.

# SECTION 9: EXPOSURE CONTROLS / PERSONAL PROTECTION

**Respiratory Protection:** NIOSH approved dust/mist/fume respirator should be used during welding or burning if OSHA PEL or TLV is exceeded.

Hands, Arms and Body: Use appropriate clothing such as welder's aprons & gloves when welding or burning. Check local codes.

**Eyes and Face:** Safety glasses should always be worn when grinding or cutting; face shields should be worn when welding or burning.

**Other Clothing and Equipment:** As required for protection depending on the operation and safety codes.

### SECTION 10: TRANSPORTATION INFO.

- D.O.T. Shipping Information: Not regulated
- I.M.O. Shipping Information: Not regulated

### SECTION 11: REGULATORY INFORMATION

Section 313 Supplier Notification: This product contains no known toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right To-Know Act of 1986 and of 40CCFR372.

STATE REGULATIONS (U.S.)

### Hohmann & Barnard, Inc.

30 Rasons Court I Hauppauge, NY 11788 TEL: 800-645-0616 I FAX: 631-234-0683 EMAIL: weanchor@h-b.com I www.h-b.com No substances on the static hazardous substances list for the states indicated below are used is the manufacture of products on this Material Safety Data Sheet with the exceptions indicated. While we do not specifically, analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

- Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for special hazardous substances): None known
- 2. WARNING: Substances known to the State of California to cause cancer, birth defects, or other reproductive harm: None known
- Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens, or reproductive toxins): None known

CANADIAN WHMIS: To the best of our knowledge, this material is classified as a NONCONTROLLED PRODUCT.

### **SECTION 1 2: ADDITIONAL COMMENTS**

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

This information is taken from sources or based upon data believed to be reliable; however, Alpha System Inc. disclaims any warranty, express or implied, as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may be required under particular conditions.

### Sandell Manufacturing

310 Wayto Road I Schenectady NY 12303 TEL: 800-283-3888 I FAX: 518-357-9636 EMAIL: moreinfo@sandellmfg.com I www.sandellmfg.com



## SAFETY DATA SHEET

1. Identification Product Identifier: xxx Manufacturer: Hohmann & Barnard, Inc. 30 Rasons Court Hauppauge, NY 11788 (631) 234-0600 www.h-b.com

Telephone Numbers During normal business hours call: (800) 645-0616 24-hour emergency call Chemtrec: (800) 255-3924

### 2. Hazards Identification

Health studies have shown that individual sensitivities vary from person to person. As a precaution, exposure to vapors, liquids, mists, or fumes should be minimized

**IARC:** In March 1987, the International Agency for Research on Cancer (IARC) classified extracts of steam and air refined bitumens (such as cutback asphalts) as possibly carcinogenic to humans (Group 2B). This classification was based on a combined evaluation of published human and animal studies. IARC concluded that the human studies did not provide adequate evidence that extracts of steam and air-refined bitumens caused cancer in humans. No epidemiological study of workers exposed only to bitumens is available. The 2B classification was substantially based on experimental animal studies.

ACGIH, NTP, OSHA: No components listed as carcinogens hydrocarbons, which have been shown.

**WARNING:** Hydrogen sulfide (H2S), an extremely flammable, colorless, highly toxic gas, is emitted from heated (above 450°F) asphalt and may accumulate in storage tanks and bulk transport compartments. Prolonged breathing (greater than 1 hour) of concentrations of H2S around 50 ppm can produce eye and respiratory tract (mouth, nose and throat) irritation, and at high concentration (around 100 ppm) can result in rapid unconsciousness and death. Since the sense of smell becomes rapidly insensitive to H2S, its odor cannot be relied upon as an indicator of its concentration. Always use caution when working around closed bulk containers of asphalt. Use ventilation or work upwind from sources of fumes or vapors. Use supplied air respirators or self-contained breathing apparatus if the PEL or TLV for H2S is exceeded.



#### POTENTIAL HEALTH EFFECTS:

Eyes: Asphalt components, fibers and fillers can cause severe irritation, redness, tearing and blurred vision.

Skin: Possible mechanical irritant.

Inhalation: Possible respiratory irritant.

Ingestion: An irritant.

**Carcinogenicity:** IARC classifies extracts of steam and air refined bitumens (such as cutback asphalts) as possibly carcinogenic to humans (Group 2B).

GHS Ratings:

Flammable solid: 2 Oral Toxicity: Acute 4 Serious eye irritation: 2

### GHS Hazards:

- H228 Flammable solid
- H302 Harmful if swallowed
- H319 Causes serious eye irritation

### GHS Precautions:

- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
- **P240** Ground/bond container and receiving equipment
- P241 Use explosion-proof electrical/ventilating/lighting/.../equipment
- P264 Wash hands thoroughly after handling
- **P270** Do not eat, drink or smoke when using this product
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P330 Rinse mouth

### P301+P312

IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell

### P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313

IF eye irritation persists: Get medical advice/attention

#### P370+P378

- In case of fire: Use foam, carbon dioxide, dry chemical or water for extinction
- P501 Dispose of contents/container to local regulations

### Signal Word: Warning



### 3. Composition/Information on Ingredients

COMPONENT	CAS NO.	ACGIH TLV	APPROX. WT% CONCENTRATION
Copper	7440-50-8	N/A	85%
Fiberglass Fabric	65997-17-3	10 mg/m3 (dust)*	5%
Petroleum Asphalt	8052-42-4	5 mg/m3 (fume)*	10%

### 4. First-Aid Measures

Eyes: Flush with large amounts of water for at least 15 minutes. Get medical attention.

Skin: Wash with soap and water or use waterless hand cleaner. Do not use solvents or thinners to clean skin. If irritation persists, seek medical attention.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Seek medical attention.

Ingestion: If victim is conscious, give liquids. Do not induce vomiting. Transport to hospital immediately. Get medical attention immediately.

### 5. Fire-fighting measures

Flash Point: Greater than 450°F Auto Ignition Temperature: Greater than 905°F Flammable or Explosive Limits: N/A

# HOHMANN & BARNARD, INC.

**Extinguishing Media and Fire Fighting Procedures:** Foam, Carbon dioxide, dry chemical or water. Do not direct water on substance. Water and foam may cause frothing.

**Decomposition Products Under Fire Conditions:** Carbon monoxide and dioxide, oxides of nitrogen and sulphur and hydrocarbon. Hydrogen sulfide gas (H2S) may be generated (see section E of this MSDS for more H2S information) when and if the product is heated above 450° F or if the product incurs fire conditions.

### 6. Accidental release measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Assure conformity with applicable governmental regulations. WASTE DISPOSAL METHODS: No data found.

CLEAN WATER ACT REQUIREMENTS: No data found.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) REQUIREMENTS: No data found.

### 7. Handling and storage

Handling Precautions: Keep containers cool, dry and away from sources of ignition.

### 8. Exposure controls/personal protection

**ENGINEERING CONTROLS:** Do not store near heat, sparks, flame or strong oxidants. **ADMINISTRATIVE CONTROLS:** No data found.

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Not normally required. If required, use NIOSH approved dust respirator.

Protective Gloves: Use chemical-resistant gloves, if needed.

Eye Protection: Use safety glasses, splash goggles or face shield when eye contact may occur.

**Other Protective Equipment:** Use chemical-resistant apron or other impervious clothing, if needed.

**Personal Hygiene:** Cleanse skin thoroughly after contact, before breaks and meals, and at the end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

VENTILATION Normal ventilation is usually adequate.

### 9. Physical and chemical properties

The following are approximate or typical values and should not be used for precise design purposes: Boiling Range: >450° F for Asphalt Vapor Pressure: N/A Specific Gravity: Greater than 1.00 for product Vapor Density: N/A Molecular Weight: N/A, complex mixture Percent Volatile by Vol: N/A pH: Not determined Solubility in Water @ ATM and 77° F: Insoluble Evaporation Rate: N/A Viscosity: N/A, A composite sheet, a solid

#### 10. Stability and reactivity

**STABILITY:** Stable – Upon heating above 450° F hydrogen sulfide gas (H2S) may be generated. See section E of this MSDS for more information on H2S.

**HAZARDOUS DECOMPOSITION:** Carbon monoxide and dioxide, oxides of nitrogen and sulphur, hydrocarbons from combustions. **HAZARDOUS POLYMERIZATION:** Will not occur

CONDITIONS TO AVOID: Avoid all sources of ignition.

**INCOMPATIBLE MATERIALS:** Avoid contact with strong oxidizing agents such as: liquid chlorine, concentrated oxygen, sodium or calcium, hypochlorite.

### 11. Toxicological information

Routes of entry: Eyes, Ingestion

Target organs: Eyes, digestive tract.

**Overexposure:** Persons with a history of chronic skin or respiratory disorders may be at increased risk for worsening their conditions from exposure to this product

**Carcinogenicity:** IARC classifies extracts of steam and air refined bitumens (such as cutback asphalts) as possibly carcinogenic to humans (Group 2B).

### 12. Ecological Information

No data found.

### **13. Disposal Considerations**

No data found.

### 14. Transport information

Refer to latest Department of Transportation Guidebook for Hazardous Materials Incidents, DOT P 5800.3. Not listed as a hazardous material by Federal DOT.

Product label should say: CAUTION! CONTAINS PETROLEUM ASPHALT!

### 15. Regulatory Information

No data found.

### 16. Other information

Issue Date: May 31, 2015

### Revision Date: May 31, 2015

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The information contained herein is based on current knowledge and experience; no responsibility is accepted and that the information is sufficient or correct in all cases. Users should consider this data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customer, and the protection of the environment.





## SAFETY DATA SHEET

### 1. Identification

Product Identifier: **Epra-Max™** Manufacturer:

Hohmann & Barnard, Inc. 30 Rasons Court Hauppauge, NY 11788 (631) 234-0600 www.h-b.com Telephone Numbers During normal business hours call: (800) 645-0616 24-hour emergency call Chemtrec: (800) 255-3924

### 2. Hazards Identification

Under normal circumstances, no know adverse effects exists, however sensitive individuals may exhibit eye, nose, throat or dermal irritation with contact or prolonged exposure to processing fumes.



### 3. Composition/Information on Ingredients

Nonhazardous as per 29 CFR 1910.1200.

### 4. First-Aid Measures

No special action necessary.

### 5. Fire-fighting measures

#### FLASH POINT: N/A

EXTINGUISHING MEDIA: Carbon dioxide, foam, sand/earth, or dry chemicals.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide and carbon monoxide, oxides of nitrogen, sulfur dioxide, partially burned carbon. FIRE FIGHTING PROCEDURES: No data found.

FIRE FIGHTER PROTECTION: Wear impermeable protective clothing and self-contained breathing apparatus. Toxic fumes and vapors may be evolved.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Oil "bleeds" from material when burning.

### 6. Accidental release measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: N/A WASTE DISPOSAL METHODS: No data found. CLEAN WATER ACT REQUIREMENTS: No data found. RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) REQUIREMENTS: No data found.

### 7. Handling and storage

Keep away from heat, sparks and open flames. Store in a dry area. Storage area should be well ventilated.

#### 8. Exposure controls/personal protection

ENGINEERING CONTROLS: No data found.

ADMINISTRATIVE CONTROLS: No data found.

VENTILATION: Store and use in well ventilated areas.

**PERSONAL PROTECTIVE EQUIPMENT:** No special equipment required. Wash exposed skin prior to eating, drinking or smoking and at the end of each work shift. Wash contaminated clothing prior to reuse.

### 9. Physical and chemical properties

Appearance and odor: Black solid with rubber odor. Flash Point: N/A Evaporation Rate: N/A pH (undiluted product: N/A Solubility in Water: Insoluble Vapor Density: N/A Vapor Pressure: N/A

10. Stability and reactivity STABILITY: Stable HAZARDOUS DECOMPOSITION: No data found. HAZARDOUS POLYMERIZATION: Will not occur. CONDITIONS TO AVOID: Heat, sparks, and open flames INCOMPATIBLE MATERIALS: No data found.

#### 11. Toxicological information

ROUTES OF ENTRY: No data found. TARGET ORGANS: No data found. OVEREXPOSURE: Sensitive individuals may exhibit eye, nose, throat or dermal irritation with contact or prolonged exposure to processing fumes. CARCINOGENICITY: If stored for a prolonged period of time in a poorly ventilated area or heated during reprocessing, this product may generate measurable amounts of volatile N–Nitrosamines, some of which may be animal carcinogens. Insure proper ventilation where this product is used or stored.

### 12. Ecological Information

No data found.

13. Disposal Considerations

No data found.

14. Transport information

Not regulated.

15. Regulatory Information

No data found.

### 16. Other information

This product is considered to be a finished article as per 29 CFR 1910.1200 (C) and is therefore exempt from the requirements of The Hazard Communication Standard.

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Hohmann & Barnard, Inc. 30 Rasons Court | Hauppauge, NY 11788 TEL: 800-645-0616 | FAX: 631-234-0683 www.h-b.com

Lower Explosive Limit: N/A Upper Explosive Limit: N/A Boiling Point: None Melting Point: Unknown Specific Gravity: Varies Percent Volatile: Unknown



# SAFETY DATA SHEET

# **HB SEALANT**

Multi-Purpose Sealant – 25% Movement

### 1. Product Data

Date of Preperation: July 14, 2015 Product Name: HB SEALANT Producer: Hohmann & Barnard, 30 Rasons Court, Hauppauge, NY 11788 Telephone: 800.645.0616 | Fax: 631.234.0683 Email: weanchor@h-b.com | Web: www.h-b.com

### 2. Hazards Identification

Hazardous classification: Irritant Category 2

### Hazardous Statements:

- H315 Causes skin Irritation
- **H317** May cause an allergic skin reaction.
- H319 Causes serious eye irritation

### **Precautionary Statements:**

- **P273** Avoid release to the environment
- P280 Wear protective gloves/protective clothing/ eye protection

### P302+P352

IF ON SKIN: Wash with plenty of soap and water.

### P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**P501** Dispose of contents/container in accordance with local regulation.

### R-phrases:

- **R38** Irritating to skin.
- **R41** Risk of serious damage to eyes.
- **R43** May cause sensitization by skin contact.

### S-phrases:

- **S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- **S39** Wear eye/face protection.

**Carcinogenicity:** This product contains no ingredient listed as a carcinogen on California Proposition 65 list.

Signal word: Warning



Hazardous Material Information System (HMIS)

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	

0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH 4 = EXTREME

### 3. Composition

Chemical Name	CAS Number	Concentration
Amino Silane	1760-24-3	1-3%

Specific chemical identity and percentage content of ingredients withheld as trade secret pursuant to Massachusetts regulations. Reporting requirements of section 313 title III of the superfund amendments and reauthorization act of 1986 and 10 CFR part 373 apply.

### 4. First Aid

**Skin:** Clean product from affected area with Ethyl alcohol, then wash with soap and water.

**Eyes:** Flush with large amounts of water for at least 15 minutes. Consult a Physician if ill effects or irritation occurs.

**Inhalation:** An unlikely route of entry. Remove to fresh air. Consult a physician.

Ingestion: An unlikely route of entry. Consult a physician.

# SAFETY DATA SHEET



### 5. Fire Fighting Measures

Flammable Limits: Not applicable. Flash Point: Not applicable. Extinguishing Media: Water, CO2, Dry Chemical, Foam.

**Special Fire Fighting Measures:** None. Full emergency equipment with self –contained breathing apparatus and full protective clothing should be worn by firefighters.

**Hazardous Combustion Products:** Thermal decomposition may produce toxic fumes of Carbon Monoxide, Carbon dioxide, Sulfur oxides and Hydrogen

Unusual Fire and Explosion Hazards: None

### 6. Accidental Release Measures

Handling Precautions: Use personal protection recommended in section 8. Avoid eye, skin and clothing contact.

**Cleanup:** Collect spill with absorbent material such as cardboard, allow to cure and place into a container approved for waste disposal.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

### 7. Handling and Storage

Handling Precautions: Use personal protection recommended in section 8. Avoid eye, skin and clothing contact.

**Prevention of fires and explosions:** Product is not considered flammable under normal conditions, and product is not considered explosive.

**Storage Requirements:** Store in a cool dry area (this product polymerizes when in contact with moisture.)

### 8. Exposure Controls / Personal Protection

**Hands:** Wear impervious gloves such as vinyl to minimize contact with skin.

**Eyes:** Wear safety glasses or goggles to avoid eye contact.

**Skin:** Wear impervious gloves such as vinyl to minimize contact with skin.

Environmental Exposure Control: None.

### 9. Physical and Chemical Properties

Water Solubility: Insoluble % Volatile: 0.98% Appearance and Odor: Paste, mild mint scent VOC: 14.97 g/l Freezing/Melting Point: N/A Flash Point: NA (Tag closed cup) *Method:* Based on FP of the most volatile component. *LEL:* NA UEL: N.A.

Odor Threshold (ppm): N/A Autoignition Temperature: NA Vapor Pressure: <1 pH: N/A Vapor Density (Air=1): >1 Density: 12.76 lbs./gal. (calculated) Specific Gravity: 1.53

### 10. Stability and Reactivity

**Stability:** Considered Stable. **Conditions to Avoid :** None known. **Incompatible Materials :** None known. **Hazardous Decomposition Products:** Thermal decomposition may produce toxic fumes of CO and /or CO<sub>2</sub>.

### **11. Toxicological Information**

Information below is based on Amino Silane. (Refer to sections 2 and 3.)

Oral Result: LD50 > 2,000 mg/kg. Remark: Very low order of toxicity. Skin Absorption Result: LD50 > 2,000 mg/kg. Remark: Very low order of toxicity. Skin Direct contact Result: Slight irritation. Eye Direct contact Result: Severe irritation. Remark: Causes corneal injury. Inhalation Result: LC50 Not acutely Toxic. Exposure Limits: Not applicable. Sensitization: No. Reproductive Toxicity: No. Mutagenicity: No. Teratogenicity: No. Synergistic Products: None.

### 12. Ecological Information

No known applicable information.





### 13. Disposal Considerations

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. This product becomes a firm synthetic rubber when cured. Please allow to cure before disposal.

### 14. Transport Information

Not regulated.

### 15. Regulatory Information

Rotterdam Convention (PIC) Annex III: listed (Tributyl tin compounds (impurities) <2ppm)

### OSHA 29 CFR 1910-1200: Irritant.

**TSCA:** All components of this product are listed on TSCA Inventory.

CERCLA Reportable Quantity: Not applicable.

### SARA Title III:

Section 302 Extremely Hazardous Substances: None. Section 304: Not applicable. Section 311/312: Immediate (acute) health hazard. Section 313: None.

RCRA: Refer to section 13.

**California Proposition 65 Carcinogens:** This product does not contain any chemicals known by the State of California to cause cancer.

**California Proposition 65 Reproductive Toxins:** This product does not contain any chemicals known by the State of California to cause reproductive harm

WHIMS Classification: D2B

Issue Date: August 1, 2015 Revision Date: August 1, 2015

Prepared in accordance with 29 CFR 1910.1200

This Product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

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### 1. Identification

Product Identifier: **Textroflash Film** Manufacturer:

Hohmann & Barnard, Inc. 30 Rasons Court Hauppauge, NY 11788 (631) 234-0600 www.h-b.com Recommended use: Masonry flashing. Telephone Numbers During normal business hours call: (800) 645-0616 24-hour emergency call Chemtrec: (800) 255-3924

### 2. Hazards Identification

**EMERGENCY OVERVIEW:** 

Overview: All components of this product are encapsulated within a PE matrix. When handled as intended and used under normal conditions, the product listed is not expected to pose a physical hazard or health risk to humans. This product does not contain any form of asbestos materials or any other known hazardous materials.

Prevention: Avoid breathing dust, fumes, gas, mist, vapors, and/or spray.

Storage/Disposal Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Route of Exposure Skin, Eye, Ingestion

#### POTENTIAL HEALTH EFFECTS:

Inhalation: Not expected under normal conditions of use.

Skin: Not expected under normal conditions of use.

Ingestion: Not intended to be ingested (eaten). If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract. Eyes: Not expected under normal conditions of use. If material comes in contact with the eyes, it may cause irritation. Carcinogenicity: This product is not considered a carcinogen.

#### HAZARD RATING (NFPA)

HEALTH	0	
FLAMMABILITY	1	
REACTIVITY	0	
SPECIAL NOTICE	-	

### HAZARD RATING (HMIS)

HEALTH	0	
FLAMMABILITY	1	
PHYSICAL HAZARD	0	
PERSONAL PROTECTION	х	

NFPA – National Fire Protection Association

HMIS® is a registered trademark of the American Coatings Association

Degree of Hazard

- 0 Minimal (Insignificant)
- 1 Slight
- 2 Moderate
- 3 Serious (High)
- 4 Severe (Extreme)

### 3. Composition/Information on Ingredients

Ingredient Name	CAS Number
Polyethylene (Polymeric Coating)	9002-88-4
Titanium Dioxide (White Pigment)	13463-67-7
Carbon Black (Black Pigment)	1333-86-4
Light Stabilizer (UV Additive)	71878-19-8

Percentage by wt. >80% range 2-10% range 1-8% range 0.5-2% range

Any concentration shown as a range is to protect confidentiality or is due to batch variability. Note: NA = Not Available, NE = Not Established

### 4. First-Aid Measures

INHALATION: Remove to fresh, uncontaminated air.

SKIN: For minor burns due to molten plastic, use running cold water.

INGESTION: If product is ingested, do not induce vomiting. If vomiting occurs, keep head lower than hips to avoid aspiration of vomit into the lungs, which can cause inflammation or pneumonitis. Get immediate medical attention.

EYES: If material comes into contact with the eyes, immediately flush with plenty of cool water for at least 20 minutes preferably at an eye wash fountain or until irritation subsides, occasionally lifting the eye lids to ensure thorough rinsing. If irritation develops or persists, seek medical attention.

NOTES TO PHYSICIANS/FIRST AID PROVIDERS: None

### 5. Fire-fighting measures

EXTINGUISHING MEDIA: Water spray, Foam, Carbon Dioxide, Dry Chemical.

HAZARDOUS COMBUSTIONPRODUCTS: Carbon Dioxide, Carbon Monoxide, Unidentified organic compounds. If burned, the material could release toxic fumes and smoke.

FIRE FIGHTINGPROCEDURES: Combustible. Avoid breathing fumes. Use extinguishing measures that are appropriate to local circumstances and surrounding environment.

FIRE FIGHTER PROTECTION: Molten polyolefin tends to flow or drip; proper protection required. Firefighters should not enter confined space without wearing NIOSH-approved self-contained breathing apparatus with full face mask and protective equipment. UNUSUAL FIRE ANDEXPLOSION: HAZARDS None known

### 6. Accidental release measures

PERSONAL PRECAUTIONS: Not applicable

EMERGENCY PROCEDURES: Not applicable

ENVIRONMENTAL: Not applicable

CLEAN-UP PROCEDURES: Pick up large pieces. Vacuum dust. If sweeping is necessary, avoid creating dusts by using a dust suppressant such as water. This will help to minimize potential exposures.

WASTE DISPOSAL METHOD: Dispose in accordance with Federal, State, and local regulations. Do not burn.

### 7. Handling and storage

HANDLING PROCEDURES: When handling uncontained material, use personal protective equipment as described in Section 8 of this SDS.

STORAGE PROCEDURES: Store material in accordance with instructions on the product packaging, if any. Material should be kept clean, dry, and in original packaging. Keep this product away from heat, sparks,

ignition sources, and open flames in accordance with applicable laws and regulations.

SPECIAL PACKAGINGMATERIALS: No data available

INCOMPATIBLE MATERIALS: Not known

OTHER PRECAUTIONS: Comply with OSHA and other safety standards and codes for roof work. Always use Fall Protection Systems when working on roofs. Product may be slippery when wet, dusty or covered with water, ice, dew, frost, or snow.

### 8. Exposure controls/personal protection

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION: Not needed under normal use conditions.

EYES/FACE PROTECTION: Safety glasses with side shields are recommended.

HANDS PROTECTION: Leather or Cotton gloves recommended when handling to protect against mechanical

abrasion. Promptly clean hands with waterless hand cleaner, clean fingernails and wash with soap and water after handling.

SKIN/BODY PROTECTION: Normal work clothing (long sleeved shirts, long pants, and non-skid shoes or boots with 6-inch leather uppers) is recommended during application and/or tear-off activities.

OTHER PROTECTIVE EQUIPMENT: Should be provided as necessary to prevent irritation of the throat, eyes, and skin and to keep exposures below the applicable exposure limits identified in this section.

WORK HYGIENE PRACTICES: Use good industrial hygiene practices when handling the material. Wash exposed skin prior to eating, drinking or smoking and at the end of the shift.

EXPOSURE GUIDELINES: Handle using methods and techniques that minimize dust or fume generation. ENGINEERING CONTROLS/VENTILATION: Not needed under normal conditions of use.)

# HOHMANN & BARNARD, INC.

## SAFETY DATA SHEET

CHEMICAL NAME (COMMON NAME)	CAS NUMBER	EXPOSURE LIMIT	
		ACGIH (TWA)	OSHA (PEL)
Polyethylene (Polymeric Coating)	9002-88-4	10 mg/m3	15 mg/m3
Titanium Dioxide (White Pigment)	13463-67-7	10 mg/m3	2.4 mg/m3
Carbon Black (Black Pigment)	1333-86-4	3 mg/m3	3.5 mg/m3
Light Stabilizer (UV Additive)	71878-19-8	NE	NE

Note: NA = Not Available, NE = Not Established

### 9. Physical and chemical properties

Physical Form: Solid	Taste: No data available
Appearance: Sheet in roll form	Odor: Odorless
Color: White / Black	Odor Threshold: No applicable
Boiling Point: N/A	Vapor Pressure: No data
Melting Point: >2300 F	Vapor Density: No data
Freezing Point: No data	Evaporation Rate: No data
Specific Gravity: Variable	VOC (Weight): No data
Density: No data	VOC (Volume): No data
Bulk Density: No data	Volatiles (Weight): No data
Viscosity: No data	Volatiles (Volume): No data
pH: (Undiluted Product) No data	Flash Point: >5700 F
Water Solubility: Insoluble	Flash Point Test Type: COC
Solvent Solubility: No data	Upper Explosion Limit: No data
Partition Coefficient - Octanol / Water: No data	
Lower Explosion Limit: No data	
Molecular Weight :No data	Auto Ignition No data
Decomposition Temp.: No data	Flammability (Solid, Gas): No data

### 10. Stability and reactivity

THERMAL STABILITY: Stable under normal conditions of use. HAZARDOUSDECOMPOSITION:Upon decomposition this product may form carbon dioxide, carbon monoxide, and unidentified organic compound during heating or burning. HAZARDOUS POLYMERIZATION: Will not occur. CONDITIONS TO AVOID: Keep this product away from heat, sparks, ignition sources, and open flames in accordance with applicable laws and regulations. INCOMPATIBLE MATERIALS: None known

### 11. Toxilogical information

ACUTE EFFECTS: If material comes in contact with the eyes, it may cause irritation. If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract. CHRONIC EFFECTS: None known

### **12. Ecological Information**

ECOTOXICITY: No data available for this product PERSISTENCE/DEGRADABILITY: No data available for this product BIOACCUMULATION POTENTIAL: No data available for this product MOBILITY IN SOIL: No data available for this product OTHER ADVERSE EFFECTS (GHG, OZONE): No data available for this product

### 13. Disposal Considerations

PRODUCT INFORMATION: This product, as supplied, is not expected to be a hazardous waste when it is disposed of according to the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. DISPOSAL INSTRUCTIONS: Dispose of waste material in accordance with Federal, State, and Local environmental regulations.

RCRA CLASS None

### 14. Transport information

U. S. DEPARTMENT OF TRANSPORTATION Proper Shipping Name N/A Hazard Class N/A ID Number N/A Packing Group N/A Label Statement N/A Other N/A

### INTERNATIONAL TRANSPORT REGULATIONS:

This product is not classified as dangerous goods according to international transport regulations. UN Number N/A UN Proper Shipping Name N/A Packing Group N/A Environmental Hazards N/A Transport in Bulk N/A Special Precautions N/A

### 15. Regulatory Information

### **INTERNATIONAL REGULATIONS**

These products are not considered articles per international product regulations and as such, these products do not require registration or notification on the various country-specific inventories.

### U. S. FEDERAL REGULATIONS

TSCA	None
CERCLA	None
SARA	
Section 302	None of the product components are listed under this section
Section 311/312	None of the product components are listed under this section
Section 313	None of the product components are listed under this section

### STATE REGULATIONS None

Note:	TSCA	Toxic Substances Control Act
	CERCLA	Comprehensive Environmental Response Compensation and Liabilities Act
	SARA	Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III
	Section	302 Extremely Dangerous Hazardous Substances
	Section	311/312 Immediate health; Delayed health; Fire hazard
	Section	313 Reportable Ingredients

### 16. Other information

Issue Date: May 31, 2015

Revision Date: May 31, 2015

Disclaimer: All information, recommendations, and suggestions appearing herein concerning this product are taken from sources or based upon data believed to be reliable. Although reasonable care has been taken in the preparation of this information, Hohmann & Barnard extends no warranties or guarantees, express or implied, makes no representations, and assumes no responsibility as to the accuracy, reliability or completeness of the information presented. Since the actual use of the product described herein is beyond our control, POSCO assumes no liability arising out of the use of the product by others. It is the user's responsibility to determine the suitability of the information presented herein, to assess the safety and toxicity of the product under their own conditions of use, and to comply with all applicable laws and regulations. Appropriate warnings and safe handling procedures should be provided to handlers and users.



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