

# GenFlex Roofing Systems, LLC

## Material Safety Data Sheet

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### SECTION 1: PRODUCT IDENTIFICATION

Product Name:	TPO Coated Metal
Chemical Name / Synonym:	None
Chemical Family:	None
24-Hour Emergency Phone:	(800) 424-9300 CHEMTREC
Manufacturer's Name:	GenFlex Roofing Systems, LLC
Manufacturer's Address:	250 West 96 <sup>th</sup> Street, Indianapolis, IN 46260
NFPA Hazard Rating:	Health 1, Flammability 0, Reactivity 0
HMIS Hazard Rating:	Health 1, Flammability 0, Reactivity 0

### SECTION 2: CHEMICAL COMPOSITION

Chemical Name:	Common Name:	CAS #:	% (by wt)	Exposure Limits:
Iron	Iron	1309-37-1	<100	5 mg/m <sup>3</sup> (respirable) TLV 10 mg/m <sup>3</sup> (as Fe <sub>2</sub> O <sub>3</sub> ) PEL
Zinc Oxide	Zinc	1314-13-2	<10	2 mg/m <sup>3</sup> (respirable) TLV (ZnO) 10 mg/m <sup>3</sup> (respirable) TLV – STEL (ZnO) 5 mg/m <sup>3</sup> (respirable) PEL (ZnO) 15 mg/m <sup>3</sup> (total) PEL (ZnO)
Manganese	Manganese	7439-96-5	<1	0.2 mg/m <sup>3</sup> TLV 5 mg/m <sup>3</sup> PEL - Ceiling
Inorganic Chromium	Chromium	7440-47-3	<1	0.5 mg/m <sup>3</sup> TLV
Non-hazardous Coating	None	All TSCA Reg.	Varies	None Established

### SECTION 3: HAZARD IDENTIFICATION

<p>Primary Route of Exposure:</p> <p>Signs and Symptoms of Exposure:</p>	<p>Inhalation and skin (primarily if welding, cutting or grinding).</p> <p>General handling of metal products typically do not present a health hazard. Sharp metal edges may cause skin cuts. Repeated contact with coating may lead to skin irritation and dermatitis.</p> <p>Upon welding, cutting, or grinding on materials the following signs and symptoms of exposure:</p> <p>Dusts and fumes generated during welding, cutting or welding activities can cause irritation to the eyes, respiratory tract and mucous membranes. Accumulation of zinc oxide dust can cause skin eruptions, typically in warm and moist areas of the body. Inhalation of the zinc oxide fume can cause metal fume fever, symptoms including muscular pain, chills, nausea and</p>
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Medical Conditions Aggravated by Exposure:	vomiting. Symptoms typically last for 24-48 hours, and are not life-threatening nor cause any permanent damage.
Chronic Effects:	As a fume or dust, chronic respiratory disorders, including (but not limited to) asthma, chronic bronchitis and emphysema. No chronic effects are expected due to general handling of metal products. Upon heating of this material (e.g., welding, cutting, or grinding), the following chronic effects may occur: The repeated inhalation of large amounts of manganese dust and fume can cause fibrotic changes in the lung, including some resembling those of silicosis. Additionally, repeated exposures to large amounts of manganese can lead to central nervous system (CNS) effects.
Carcinogenicity:	None

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### SECTION 4: FIRST AID MEASURES

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First Aid Procedures:	Treat skin cuts via washing wound with soap and clean water, and apply antibiotic. If particles from this material contact the eyes, hold eyelids open and flush immediately with a gentle stream of water for at least 15 minutes, preferably at an eyewash fountain. If particles become imbedded, or irritation continues, get medical attention. Following skin contact, clean immediately by washing affected area with soap and water. In case of inhalation of fumes or dusts, remove to fresh uncontaminated air. Administer oxygen if breathing is labored. Give artificial respiration if breathing has stopped. Get medical attention immediately if oxygen or artificial respiration is administered. While an unlikely means of exposure, in case of accidental ingestion, do not induce vomiting. Get medical attention and advise the physician of the nature of the material.
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### SECTION 5: FIRE FIGHTING PROCEDURES

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Suitable Extinguishing Media:	Not applicable. Material will not burn unless involved in an intense fire supported by surrounding materials. In this case, extinguish using suitable media for surrounding materials.
Hazardous Combustion Products:	Various metal oxides and carbon oxides.
Recommended Fire Fighting Procedures:	No special procedures recommended for solid material. Do not permit water to come in contact with molten metal.
Unusual Fire and Explosion Hazards:	None for solid material. Small chips, dust or other fines may be readily ignitable, generating considerable heat. Molten metal will splatter when it comes in contact with water.

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### SECTION 6: PRECAUTIONS FOR SAFE HANDLING AND USE

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Steps to Be Taken in Case Material is Released or Spilled:	Not Applicable for solid material. When cleaning up fine dusts, avoid creating airborne dust. Use non-sparking tools, and avoid water.
Precautions to Be Taken in	Keep dry.

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Handling and Storing:

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### SECTION 7: EXPOSURE CONTROLS / PERSONAL PROTECTION

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Ventilation:	Activities involving the generation of high amounts of fine dusts and/or fumes should be evaluated to determine if additional local exhaust is necessary. If a local exhaust system is used, explosion-proof equipment may be warranted.
Respiratory Protection:	Activities involving the generation of high amounts of fine dusts and/or fumes should be evaluated to determine if a NIOSH approved air purifying respirator may be appropriate based on employer-determined exposure levels. Air supplied or SCBA respirators may be required when the measured chemical concentration exceeds the capacity of the air purifying respirator or when personal exposure levels are unknown.
Eye Protection:	Safety glasses with side shields may be warranted when cutting or grinding on this product. Employer-determined protective eye ware for welding, torching or other hot-work activities is required.
Skin Protection:	Cut-resistant gloves may be warranted while handling solid material. Welding or other hot-work gloves may be warranted when carrying out welding, cutting or other hot-work activities involving this material.
Other:	Other protective clothing may be warranted depending upon the activities involving this material. The employer must make this determination.
Work / Hygienic Practices:	Wash exposed skin prior to eating, drinking or smoking and at the end of each shift.

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### SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

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Appearance and Odor:	Solid metal with gray color polypropylene coating; no odor.		
Flash Point:	Not Applicable	Lower Explosive Limit:	Not Applicable
Method Used:	Not Applicable	Upper Explosive Limit:	Not Applicable
Evaporation Rate:	Not Applicable	Boiling Point:	Not Applicable
pH (undiluted product):	Not Applicable	Melting Point:	5072°F
Solubility in Water:	Insoluble	Specific Gravity:	7
Vapor Density:	Not Applicable	Percent Volatile:	Not Applicable
Vapor Pressure:	Not Applicable		

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### SECTION 9: STABILITY AND REACTIVITY

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Thermal Stability:	Stable
Hazardous Polymerization:	Will not occur

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Conditions to Avoid: None when material is in solid form. When dusts, chips or other fines are present, avoid water, strong oxidizers, acids, alkalis, and halogenated compounds.

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### SECTION 10: TRANSPORTATION

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Regulatory Agency:	Not Regulated
Proper Shipping Name:	Not Applicable
Hazard Classification:	Not Applicable
Identification Number:	Not Applicable
Labels Required:	Not Applicable
Other Requirements:	Not Applicable

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### SECTION 11: MISCELLANEOUS INFORMATION

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Additional Comments:	None
Date of Previous MSDS:	March 11, 2009
Changes Since Previous MSDS:	Format change.
Telephone Number for Additional Information:	(317) 575-7190

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### DISCLAIMER

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