Safety Data Sheet

Product Name: Metal Glaze
Product identifier: 100412
Revision Date: 08-19-2016
Replaces:

1. Identification

Product identifier used on the label:

Product Name:	**Metal Glaze**
Product identifier:	100412
Other means of identification	
Synonyms:	No data available
Recommended use of the chemical and restrictions on use:	Polyester Finishing and Blending Putty

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Chemical Manufacturer / Importer / Distributor:	ITW Evercoat a division of Illinois Tool Works Inc. 6600 Cornell Road Cincinnati, OH 45242 513-489-7600
Emergency phone number:	CHEMTREC: 1-800-424-9300 CANUTEC: 1-613-996-6666

2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Hazard Symbols:

GHS Classification:

Respiratory Sensitisation Category 1
Skin Sensitisation Category 1
Reproductive Toxicity Category 1B
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1
Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1
Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Germ Cell Mutagenicity Category 2
Carcinogenicity Category 2
Hazardous to the aquatic environment - Acute Category 2
Flammable Liquid Category 3

	Hazardous to the aquatic environment - Chronic Category 3
GHS Signal Word:	Danger
GHS Hazard Statements:	Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects. Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
GHS Precautionary Statements:	
Safety Precautions:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.
First Aid Measures:	IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or doctor/physician. IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell. Specific treatment (see on this label). If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.
Storage:	Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal:	Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.
Hazards not otherwise classified:	Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

3. Composition/information on ingredients

Chemical Component:	CAS number and other unique identifiers	% (or range) of ingredient
Styrene	100-42-5	10 - 30
Titanium dioxide	13463-67-7	1 - 5
Zinc Phosphate	7779-90-0	0.5 - 1.5
Acid anhydride	85-43-8	0.5 - 1.5

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Eye Contact:	Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention. Flush eyes gently with water for at least 15 minutes, lifting upper & lower eye lids. Seek immediate medical attention.
Skin Contact:	Wash with soap and water. Get medical attention if irritation develops or persists. Remove contaminated clothing and continue flushing with water. Wash affected area thoroughly with soap and water. Seek medical advice if symptoms persist Wash clothing before reuse.
Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately If symptoms develop, immediately move individual away from exposure and into fresh air. Get medical attention immediately. Keep the victim warm and quiet. If the victim has stopped breathing open airway, loosen collar and belt, and administer artificial respiration. If breathing is difficult, oxygen

may be beneficial if administered by trained personnel, preferably on a doctor's advice.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS. Call a physician or poison control center immediately. Do not induce vomiting unless directed to do so by medical personnel. If individual is drowsy or unconscious, do not give anything by mouth; place individual on left side with head down. If possible, do not leave individual unattended. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.

Most important symptoms/effects, acute and delayed:

Most important symptoms/effects (Acute): No data available

Most important symptoms/effects (Delayed): No data available

Indication of immediate medical attention and special treatment needed, if necessary: No additional first aid information available

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire. Regular foam Carbon dioxide Dry chemical

Unsuitable extinguishing media: No data available

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Fire and/or Explosion Hazards: Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Styrene oxide, Phthalic anhydride, Hydrocarbons

Special protective equipment and precautions for fire-fighters: Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Water may be used to cool closed containers to prevent pressure build-up

and possible auto ignition or explosion when exposed to extreme heat.
Wear a self contained breathing apparatus (NIOSH approved) with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures: No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section VIII of this MSDS

Methods and materials for containment and cleaning up: No special spill clean-up considerations. Collect and discard in regular trash. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area. Activate available exhaust ventilation equipment in the immediate spill area. All personnel in the area should be protected as in Section 8. Avoid breathing vapors. Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container.

7. Handling and storage

Precautions for safe handling: Mildly irritating material. Avoid unnecessary exposure. All hazard precautions given in the data sheet must be observed. Do not get in eyes, on skin and clothing Wash hands before eating Use with adequate ventilation Avoid contact with material, avoid breathing dusts or fumes, use only in a well ventilated area. Do not take internally. Keep container closed when not in use. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Conditions for safe storage: Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Store in a cool dry place For maximum product quality, avoid prolonged storage at temperatures above 75 °F (25 °C). Keep away from heat, sparks, and flame Store in a tightly closed container Avoid contact with incompatible materials.

Materials to Avoid/Chemical Incompatibility: Peroxides Strong acids Strong oxidizing agents Polymerization catalysts

8. Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Chemical Component	OSHA PEL	ACGIH TLV-TWA	ACGIH STEL
Styrene	100 ppm	20 ppm	40 ppm STEL; 170 mg/m3 STEL
Titanium dioxide	15 mg/m3	10 mg/m3	No data available
Zinc Phosphate	15 mg/m3 Total Dust	No data available	No data available

Appropriate engineering controls: No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort. General or local ventilation or isolation may prove adequate to keep airborne exposures below exposure limits. Explosion proof exhaust ventilation should be used.

Individual protection measures, such as personal protective equipment:

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses. Splash proof chemical goggles are recommended to protect against the splash of product.

Skin Protection: Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene and wear a barrier cream and/or impervious surgical style gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Protective gloves and proper clothing should be worn to prevent skin contact. Gloves should be made of neoprene or natural rubber. To prevent repeated or prolonged skin contact, wear impervious clothing and boots A barrier cream may be used for additional skin protection.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. Use a NIOSH approved respirator designed to remove particulate matter and organic solvent vapors.

Other Protective Equipment: Splash proof chemical goggles are recommended to protect against the splash of product. Protective gloves and proper clothing should be worn to prevent skin contact. Gloves should be made of neoprene or natural rubber. To prevent repeated or prolonged skin contact, wear impervious clothing and boots A barrier cream may be used for additional skin protection.

9. Physical and chemical properties

Appearance (physical state, color, etc.):	
Appearance (physical state):	Liquid
Color:	Green
Odor:	Aromatic
Odor threshold:	No data available
pH:	Neutral
Melting Point/Freezing Point (°C):	No data available
Initial Boiling Point and Boiling Range (°C):	145
Flash Point (°C):	31
Evaporation Rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	
Upper Flammable/Explosive Limit (%):	6.1
Lower Flammable/Explosive Limit (%):	1.1
Vapor Pressure:	No data available
Vapor Density:	Heavier than air. Vapors that evolve from this product will tend to settle and accumulate near the floor.
Relative Density:	0.96
Solubility(ies):	Insoluble
Partition coefficient: n-octanol/water:	1.36
Auto-ignition Temperature (°C):	No data available
Decomposition Temperature:	No data available
Viscosity:	20,800 - 25,600
VOC (as packaged-less exempts and water):	1.85 lbs/gal or 221 g/L
VOC (as applied*- 2% by wt hardener- less exempts and water):	0.98 lbs/gal or 117 g/L
Percent Solids by weight – as packaged:	76.90 76.900000000000006
Percent Solids by weight – as applied* - 2% by wt hardener:	87.90 87.900000000000006
VHAP Content by weight – as packaged:	21
VHAP Content by weight – as applied* - 2% by weight hardener:	11.1

10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	No data available
Conditions to avoid (e.g., static discharge, shock, or vibration):	Contamination

Incompatible materials:	Peroxides Strong acids Strong oxidizing agents Polymerization catalysts
Hazardous decomposition products:	Carbon dioxide Carbon monoxide Styrene oxide Hydrocarbons

11. Toxicological information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):	Ingestion, Skin contact, Eye contact, Absorption
Symptoms related to the physical, chemical and toxicological characteristics:	No data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation:	Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. Excessive inhalation of vapors may cause nasal and respiratory irritation, acute nervous system depression, fatigue, weakness, nausea, headache and dizziness. Airborne overexposure well above the PEL may result additionally in eye irritation, headache, chemical bronchitis, asthma-like findings or pulmonary edema.
Inhalation Toxicity:	Harmful! Can cause systemic damage (see "Target Organs)
Skin Contact:	Can cause minor skin irritation, defatting, and dermatitis.
Skin Absorption:	No absorption hazard in normal industrial use. Causes skin irritation. Contact may cause irritation and possible dermatitis or sensitization. Symptoms may include redness, burning, drying and cracking of skin, and skin burns
Eye Contact:	Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue. Contact with liquid or vapor may result in irritation, redness, tearing, and blurred vision.
Ingestion Irritation:	Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Causes gastrointestinal tract irritation, nausea, vomiting, diarrhea and possible ulcerations to mucous membranes. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.
Ingestion Toxicity:	Harmful if swallowed. May cause systemic poisoning.

Long-Term (Chronic) Health Effects:

Carcinogenicity:	Suspected of causing cancer. The International Agency for Research on Cancer (IARC) has classified styrene as a group 2B carcinogen (possibly carcinogenic to humans).
Reproductive and Developmental Toxicity:	May damage fertility or the unborn child.
Mutagenicity:	Suspected of causing genetic defects.
Inhalation:	Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. Harmful! Can cause

	systemic damage upon prolonged and/or repeated exposure (see "Target Organs)
Skin Contact:	Upon prolonged or repeated contact, can cause minor skin irritation, defatting, and dermatitis.
Skin Absorption:	Upon prolonged or repeated exposure, no hazard in normal industrial use.

Numerical measures of toxicity (such as acute toxicity estimates)
Component Toxicology Data

Chemical Component	Oral LD50	Dermal LD50	Inhalation LC50
Styrene	Oral LD50 Rat 5000 mg/kg		Inhalation LC50 (4h) Rat 24 g/m3
Acid anhydride	Oral LD50 Rat 5410 mg/kg		

Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA

Chemical Name	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen
Styrene	N	Y	Y
Titanium dioxide	N	Y	N

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available):	Toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life. Styrene is toxic to aquatic organisms and should not be released to sewage, draining systems or any body of water exceeding concentrations of approved limits under applicable regulations and permits.
Persistence and degradability:	No data available
Bioaccumulative potential:	No data
Mobility in soil:	No data available
Other adverse effects (such as hazardous to the ozone layer):	No data available

Ecological Toxicity Data

Chemical Component	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
Titanium dioxide	Aquatic EC50 (48h) Daphnia > 1000 ml/l		Aquatic LC50 (96h) > 1000 MG/L

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Description of waste residues: Spent or discarded material is a hazardous waste.
Safe Handling of Waste: This material as supplied, if discarded, would be regulated as a hazardous waste under RCRA (40 CFR 261).
Waste treatment methods (including packaging): Dispose of by incineration following Federal, State, Local, or Provincial regulations.
Waste Disposal Code(s): D001

14. Transport information

UN number: UN3269
UN proper shipping name: POLYESTER RESIN KIT
Transport hazard class(es): 3
Packing group: III

The shipper is responsible for following all applicable regulations. The transportation classification provided is based on ITW Evercoat original packaging, which is suitable for domestic ground transport only.

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

TSCA Status: The intentional ingredients of this product are listed.

Regulated Components

Chemical Component	CAS number and other unique identifiers	CERCLA	SARA EHS	SARA 313	California Prop 65
Styrene	100-42-5	N	N	Y	Y
Titanium dioxide	13463-67-7	N	N	Y	Y
Acetone	67-64-1	N	N	Y	N
Crystalline Silica (Quartz)	14808-60-7	N	N	N	Y
1,4-Naphthoquinone	130-15-4	N	N	Y	N
Styrene Oxide	96-09-3	N	N	Y	Y
Carbon black	1333-86-4	N	N	N	Y

16. Other information, including date of preparation or last revision.

Revision Date: 08-19-2016
Revision Number: 11

Disclaimer: NOTICE: The information accumulated herein is believed to be correct as of the date issued from sources, which are believed to be accurate and reliable. Since it is not possible to anticipate all circumstances of use, recipients are advised to confirm, in advance of need, that the information is current, applicable and suitable to their circumstances