SAFETY DATA SHEET

Revision 1
Prepared 2018-07-25

Section 1. Identification

Product Code: 8-DE-6796
Product Name Metal-Clad® Industrial Enamel
Description: Black (Extreme High Gloss) / Solvent-Base
Product Type Liquid

Manufactured by:
P.F.I., Inc. - Paints For Industry
9215 Santa Fe Springs Road
Santa Fe Springs, CA 90670
Tel: (562) 946-6666
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PERS 24-Hour Hotline: (800) 633-8253

Section 2. Hazards Identification

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the Substance:
FLAMMABLE LIQUIDS - Category 2
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1

GHS Label Elements

Hazard Pictograms:

Signal Word: Danger

Hazard Statements:

H225	Flammable liquid and vapor
H300	Fatal if swallowed
H303	May be harmful if swallowed
H305	May be harmful if swallowed and enters airways
H313	May be harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H335	May cause drowsiness or dizziness

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves, eye protection, and face protection. Keep away from heat and hot surfaces, including sparks, open flames, and any other ignition sources. Do not smoke near or around this product. Use explosion-proof electrical, ventilation, lighting, and other material handling equipment. Use only non-sparking tools. Keep container tightly closed and use only outdoors or in well ventilated areas. Avoid static buildiup and discharge. Avoid inhaling product vapors. Wash hands and any contaminated clothing thoroughly after handling.

Response: Seek medical attention if you feel unwell, or are concerned about exposure. IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for

breathing. IF SWALLOWED: contact a poison control center or physician immediately. Do not induce vomiting. IN CASE OF SKIN OR HAIR CONTACT: remove all contaminated clothing, and wash skin with soap and water. If irritation or rash occurs, get medical attention. IF IN EYES: rinse with copious amounts of water for several minutes. Remove contact lenses, if present and easy to do so. If eye irritation persists, seek medical attention.

Storage & Disposal: Store in a locked and secure environment. Store in a cool, well ventilated area away from direct sunlight and heat. Dispose of contents and container in accordance with all local, regional, state, and federal regulations.

Supplemental Label Elements: Ensure adequate ventilation at all times when using this product and when sanding the dried film. Wear an appropriate, NIOSH approved particulate respirator. Follow all respirator manufacturer's directions for proper use. Abrading or sanding this product's dried film may release crystalline silica which has been shown to cause lung damage and may cause cancer following long term exposure. Rags, sandpaper, steel wool, and other abrading materials or waste containing this product may spontaneously combust when improperly disposed of. Product contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by concentrating and inhaling the contents of this product can be harmful or fatal. Do not transfer contents to another container.
PROPOSITION 65 WARNING: this product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
FOR INDUSTRIAL USE ONLY.

Hazards not otherwise classified: None known.

Section 3. Composition/Information on Ingredients

Chemical Name / CAS No

Naphtha
64742-89-8
10 to 20%
Vapor Pressure: 12 mmHg

Regular Mineral Spirits
64741-41-9
10 to 20%
Vapor Pressure: 2 mmHg

Xylene
1330-20-7
5 to 10%
Vapor Pressure: 1.06 kPa

Acetone
67-64-1
1 to 5%
Vapor Pressure: 30.796 kPA

Ethyl Benzene
100-41-4
1 to 5%
Vapor Pressure: 1.279 kPa

Carbon Black
1333-86-4
1 to 5%

Butyl Acetate - Normal
123-86-4
1 to 5%
Vapor Pressure: 8 hPa

Calcium Carboxylate
53988-05-9
1 to 5%

Section 4. First Aid Measures

Description of First Aid Measures

Eye Contact: Immediately flush eyes with copious amounts of water. Remove any contact lenses. Rinse for at least 10 minutes. Get medical attention.

Inhalation: Remove victim to fresh air and maintain in a rest position comfortable for breathing. If fumes are still present, all rescuers should wear appropriate respirators. If victim exhibits irregular breathing, trained personnel should provide artificial respiration or oxygen. Mouth-to-mouth resuscitation may be dangerous. If necessary, contact a poison control center or physician immediately. If victim is unconscious, place in a recovery position and seek medical help immediately. Maintain an open airway for the victim.

Skin Contact: Wash affected areas with soap and water. Remove contaminated clothing and shoes. Continue to rinse the affected area for at least ten minutes. Get medical attention if discomfort continues. Avoid further exposure in the event of any symptoms or complaints.

Ingestion: If product is ingested, contact a poison control center or a physician immediately. Do not induce vomitting. Rinse mouth with water and remove dentures, if any. Remove victim to fresh air and keep at rest in a comfortable position to facilitate breathing. If the victim is conscious and the product has been swallowed, provide small quantities of water to drink. Cease if the victim feels sick, as vomitting may be dangerous. Aspiration hazard if swallowed. This product can enter the lungs and cause damage. If vomitting occurs, the head should be kept low so that vomit does not enter the lungs. Never administer anything by mouth to an unconscious person. If unconscious, place in a recovery position while medical attention is sought. Maintain an open airway for the victim.

Potential Acute Health Effects

Eye Contact: Causes serious eye irritation.

Inhalation: Can cause central nervous system depression. May cause drowsiness and dizziness as well as respiratory irritation.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion: Can cause central nervous system depression. May be fatal if swallowed and allowed to enter airways. Irritating to mouth, throat and stomach.

Over-Exposure Signs & Symptoms

Eye Contact: Adverse symptoms may include: pain or irritation, watering, redness.

Inhalation: Adverse symptoms may include: respiratory tract irritation, coughing, nausea or vomiting, headache, drowsiness or fatigue, dizziness or vertigo, unconsciousness.

Skin Contact: Adverse symptoms may include: irritation, redness.

Ingestion: Adverse symptoms may include: nausea, vomiting.

Indication of immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically. Contact poison treatment specialists if large quantities have been ingested or inhaled.

Specific Treatments: None specified.

Protection of First Aid Providers: No action should be taken involving any personal risk or without proper training. If fumes are still present, rescuers should wear appropriate respirators or a self contained breathing apparatus. Mouth-to-mouth resuscitation may be dangerous for the first aid provider. Wash all contaminated clothing with soap and water before removal.

Section 5. Fire Fighting Measures

Extinguishing Media

Suitable Media: Dry chemical, CO_2, water spray (fog), foam, dry sand.

Unsuitable Media: Do not use water jet.

Specific Hazards: The material contains flammable liquid and vapor. Closed containers may explode when exposed to extreme heat as a result of buildup of steam. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed and isolate from heat, electrical equipment, sparks, and open flames. No unusual fire or explosion hazards noted.

Special Firefighting Procedures: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from safe distance. Containers may explode when heated. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

Section 6. Accidental Release Measures

Environmental Precautions: Avoid dispersal of spilled material and runoff from contacting soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution.

Steps to be Taken if Material is Released or Spilled: Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Eliminate all ignition sources and use explosion-proof equipment. Place material in a container and dispose of according to local, regional, state, and federal regulations. Ventilate area and remove product with inert absorbent and non-sparking tools. Do not incinerate closed containers.

Small Spills: Stop leak if doing so can be done without risk. Remove containers from spill area. Use non-sparking tools. Dilute with water and mop up if water-soluble. If not water-soluble, absorb with inert dry material and place in appropriate waste container. Dispose of via a licensed waste disposal contractor.

Large Spills: Stop leak if doing so can be done without risk. Remove containers from spill area. Use non-sparking tools. Approach the release from upwind. Prevent entry into sewers, waterways, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows: contain and collect spillage with inert absorbent materials and place in a container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. See Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and Storage

Handling: Wash thoroughly after handling. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Wash hands and face before eating or drinking. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied, as it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin, and clothing.

Storage: Store in a dry, cool, well ventilated place. Keep container tightly closed while not in use. Isolate from heat, electrical equipment, sparks, and open flame. Do not store above 120 degrees Fahrenheit. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids. Protect from heat, moisture, and foreign materials.

Section 8. Exposure Controls/Personal Protection

Chemical Name / CAS No	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Naphtha 64742-89-8 10 to 20% Vapor Pressure: 12 mmHg	500 ppm	300 ppm	
Regular Mineral Spirits 64741-41-9 10 to 20% Vapor Pressure: 2 mmHg	100 ppm	100 ppm	
Xylene 1330-20-7	100 ppm	100 ppm	

Vapor Pressure: 1.06 kPa

Acetone 67-64-1 1 to 5% Vapor Pressure: 30.796 kPA	1,000 ppm	500 ppm
Ethyl Benzene 100-41-4 1 to 5% Vapor Pressure: 1.279 kPa	100 ppm	100 ppm
Carbon Black 1333-86-4 1 to 5%	3.5 mg/m3	3.5 mg/m3
Butyl Acetate - Normal 123-86-4 1 to 5% Vapor Pressure: 8 hPa	150 ppm	150 ppm
Calcium Carboxylate 53988-05-9 1 to 5%		

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor, or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, and other engineering modifications to the process equipment may be required to reduce emissions to acceptable levels.

Respiratory Protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respiratory protection programs that meet OSHA 1910.134 and ANSI Z88.2 requirements must be followed when workplace conditions warrant a respirator's use. A NIOSH/MSHA approved respirator with an organic vapor cartridge may be permissible under circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure, air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious, chemical resistant gloves to prevent prolonged skin contact and absorption of material through the skin. Nitrile or neoprene gloves may afford adequate protection. Personal protective equipment for the body should be selected based on the task being performed and the risks involved, and should be approved by a specialist before handling this product. Where there is a risk of ignition from static electricity, wear anti-static protective clothing. For best protection, the clothing should include anti-static boots, gloves, and overalls. Appropriate footwear should always be used.

Eye Protection: Safety eyewear, such as splash goggles or a full face shield, should be worn at all times to protect against splashes of liquids.

Hygienic Measures: Wash thoroughly with soap and water before eating, drinking, or smoking. Remove contaminated clothing immediately and launder before reuse.

Section 9. Physical and Chemical Properties

Physical State:	Liquid
Odor:	Solvent odor
Vapor Density	Heavier than air
Vapor Density	3.87

Vapor Pressure	8 mmHg
Evaporation Rate	Slower than ether
Boiling Range	56 to 157 C
Specific Gravity (SG)	0.945
Material VOC (Lb / Gal)	3.37
Material VOC (g / L)	403.52
Coating VOC (Lb/Gal)	3.49
Coating VOC (g/L)	418.46
Flash Point:	32 C (90 F)
Autoignition:	Will not occur
LEL:	1.0 %
UEL:	12.8 %
Partition Coefficient, n-octanol/water:	Not available
Auto-ignition temperature:	Not available

Section 10. Stability and Reactivity

Conditions to Avoid: Avoid temperatures above 120 degrees Fahrenheit. Avoid all possible sources of ignition. Do not pressurize, cut, weld, braze, drill, or expose containers to heat. Do not allow vapor to accumulate in low or confined areas. Avoid contact with strong acid and strong bases.

Incompatibility: Incompatible with strong oxidizing agents.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, product emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: The product is stable.

Section 11. Toxicological Information

Effects of Over-Exposure

Eye Contact: Causes serious eye irritation.

Skin Contact: Prolonged or repeated skin contact may cause irritation. Allergic reactions are possible.

Inhalation: Harmful if inhaled. High gas, vapor, mist, or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. May cause headaches and dizziness. High vapor concentrations are irritating to the eyes, nose, throat, and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

Ingestion: Harmful or fatal if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

Chronic Hazards: High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, burred vision) and damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Contains carbon black pigment. Chronic inflammation, lung fibrosis, and lung tumors have been observed in experimental tests involving rats exposed to excessive concentrations of carbon black and several insoluble dust particles for long periods of time. Tumors have not been observed in other species under similar circumstances. Epidemiological studies of North American workers show no evidence of clinically significant negative health effects from occupational exposure to carbon black. Carbon black is listed as a Group 2B - Possibly Carcinogenic to Humans, by IARC and is proposed to be listed as A4 - Not Classified as a Human Carcinogen by the American Conference of Governmental Industrial Hygienists. Significant exposure is unlikely during typical application of this product by roller or brush. Risk of overexposure depends on the duration and level of exposure to dust from such processes as repeated sanding of dried surfaces, or

inhalation of spray mist, and the actual concentration of carbon black in the product formula.

Product contains titanium dioxide, which is listed as a Group 2B - Possibly Carcinogenic to Humans by IARC. No significant exposure to titanium dioxide is anticipated while using this product, in which titanium dioxide is bound to other materials including resin and other pigments, during brush or rolling application. Overexposure risks depend on duration and level of exposure to dust, such as from repeated sanding of this product's dried film, or inhalation of spray mist, and the actual concentration of titanium dioxide in the product formula. For additional information, refer to IARC Monograph, Volume 93, 2010.

Primary Routes of Entry: Eye contact, ingestion, inhalation, absorption through the skin, skin contact.

Acute Toxicity Values: Acute effects of this product have not been tested. Available data on individual components, if any, will be listed below.

Section 12. Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13. Disposal Information

Disposal Considerations: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions, and any by-products should at all times comply with relevant environmental protection regulations and waste disposal regulations, in addition to any local or regional restrictions which may be in effect. Surplus and non-recyclable products should be disposed of via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled whenever possible. Incineration or landfill should only be considered when recycling is not feasible. Take care when handling empty containers as they may retain some residual product. Vapor from residue may create a flammable or explosive atmosphere within the used container. Do not expose empty containers to heat or sparks, and do not weld, cut, or grind used containers unless they have been thoroughly cleaned. Avoid contact of spilled material with soil, waterways, drains, and sewer systems.

Section 14. Transport Information

	Domestic (US DOT)	International (IMDG)	Air (IATA)	Canada (TDG)
UN Number:	1263	1263	1263	1263
UN Shipping Name:	Paint	Paint	Paint	Paint
Hazard Class:	3	3	3	3
Packing Group:	II	II	II	II
Limited Quantity:	Yes	Yes	Yes	Yes

Special Considerations: The presence of a shipping description for a particular mode of transport does not indicate that the product is packaged suitably for that mode of transport. All packaging should be reviewed for suitability prior to shipment, so that compliance with applicable regulations can be ensured. Compliance with all applicable regulations is the sole responsibility of the person offering the product for transport. Persons loading and unloading dangerous goods should be trained in all the risks associated with the substances at hand, and on all actions to be taken in case of an emergency situation.

Section 15. Regulatory Information

U.S. Federal Regulations

CERCLA - SARA Hazard Category:

This product has been reviewed according to the EPA hazard categories promulgated by Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986, known as SARA Title III, and is considered to meet the following categories under applicable conditions:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 as well as 40 CFR Section 372:

100-41-4Ethyl Benzene 1.0 - 5%
1330-20-7 Xylene 5 - 10%

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

100-41-4Ethyl Benzene 1.0 - 5%

State Regulations

California Proposition 65:

WARNING: This product can expose you to chemicals including titanium dioxide, carbon black, and toluene, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov.

International Regulations

Canadian WHMIS:

This SDS has been prepared in accordance with Controlled Product Regulations except for the use of the 16 headings.

Section 16. Other Information

HMIS Rating

NON-WARRANTY: The information contained herein is based on the data available to us at the time of publication and is believed to be correct. The addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are beyond our control, P.F.I., Inc. makes no warranty, express or implied, regarding the accuracy of these data or the results to be obtained from the use thereof, and further makes no warranty or representation, express or implied, including without limitation any warranty of merchantibility or fitness for a particular purpose, and no warranty or representation shall be implied by law or otherwise. Any products sold by P.F.I., Inc. are not warranted as suitable for any particular purpose to the buyer. The suitability of any products for any purpose particular to the buyer is for the buyer to determine. P.F.I., Inc. disclaims responsibility for damage of any kind resulting from this information or this product.