

IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information onto employees, customers and users of this product.

24 HOUR EMERGENCY TELEPHONE NUMBER: 800-424-9300
INTERNATIONAL EMERGENCY TELEPHONE NUMBER: 703-527-3887

SECTION I - PRODUCT IDENTIFICATION

Product Name: Green Steel Marking Ink
CAS Number: Mixture
Pannier Code: IJ060-5028-0xG
Material: Ink jet ink
Hazard Rating: Health: 2 Fire: 3 Reactivity: 0 PPI: H

SECTION II - INGREDIENT AND HAZARD INFORMATION

Ingredient Name	CAS Number	Percent	TSCA
ETHANOL NATURAL	64-17-5	30 - 60 .	Y
HMIS Health: 1 Fire:3	Reactivity:0	PPI:H	
\$ METHANOL	67-56-1	3 - 8	Y
HMIS Health: 1 Fire:3	Reactivity:0	PPI:H	
ETHYL ACETATE	141-78-6	1-5	Y
HMIS Health: 1 Fire:3	Reactivity:0	PPI:H	
ISOPROPANOL 99% ANHY	67-63-0	2 - 4	Y
HMIS Health: 1 Fire:3	Reactivity:1	PPI:H	

*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory

Additional Information

SECTION 313 SUPPLIER NOTIFICATION: this product may contain Toxic chemicals subject to the reporting requirements of section 313 of the emergency planning and community right to know act of 1986 and 40 CFR 372.

CAUTION: This product may become a dust nuisance when removed by sanding, abrading or sandblasting. Dust masks should be worn during these operations.

NE = not established NA = not available NR = not regulated

This product does not contain polycyclic organic material solvents.

All components of this mixture are listed on the tsca inventory.

SECTION III - PHYSICAL DATA

Form: LIQUID
Appearance/Color: GREEN
Odor: ALCOHOL
pH Value: N/A
Boiling Range: 170.6°F - 173.°F (77.°C - 78.33°C)
Vapor Pressure (mmHg): Not Available
Melting Point: Not Available
Evaporation Rate: Slower than n-Butyl Acetate
Vapor Density: Heavier than air
Partition Coefficient: Not Applicable
% Volatile Weight: 58.18%
% Volatile Volume: 85.54%
Specific Gravity: 1.01816
VOC: 5.79
Molecular Weight: N/A
Heavy Elements (ppm): 0.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class IC
Flash Range: 24.1°F - 65.3°F (-4.39°C - 18.5°C) Tag Closed Cup
Explosive Range: Not Available

EXTINGUISHING MEDIA: Carbon Dioxide---Dry Chemical---Foam---Water Fog

Use water for cooling material stored in vicinity of fire.

SPECIAL FIREFIGHTING PROCEDURES: Use self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive pressure mode. Wear protective clothing.

UNUSUAL FIRE & EXPLOSION HAZARDS: Vapors are heavier than air and may travel along the ground to an ignition source some distance from material handling point. Ignition sources include pilot lights, smoking, heaters, electric motors, sparks from electrical switches and static discharges.

CAUTION: Never use cutting torch on empty containers! Residual solvent vapor in empty container may explode. Application to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain Medical Attention.

SECTION V - HEALTH HAZARD DATA

Route	Species	Exposure and Dose
ISOPROPANOL	99% ANHY	LC50 1500. PPM LD50 6.2 PPM LD50 16.4 PPM

PERMISSIBLE EXPOSURE LEVEL: Refer to Section II

EFFECTS OF OVEREXPOSURE:

EYES: Can cause redness, irritation, swelling and blurred vision.

SKIN: Prolonged or repeated contact can cause moderate irritation, defatting, dermatitis.

BREATHING: Excessive inhalation of vapors and/or spray mist can cause respiratory irritation, dizziness, weakness, fatigue nausea, headache, unconsciousness and even asphyxiation.

SWALLOWING: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea; aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

FIRST AID:

EYES: Flush with large amounts of water for 15 minutes. Lift eyelids occasionally, get prompt medical attention.

SKIN: Wash thoroughly with soap and water, remove contaminated clothing promptly; wash clothing before reuse. Consult a physician if irritation persists.

SWALLOWING: Since this product may contain materials which can cause lung damage if aspirated into the lungs, the decision whether to induce vomiting must be made by a physician after careful consideration of all materials ingested.

INHALATION: Move affected person to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention. Consult a physician.

SECTION VI - REACTIVITY DATA

Stability: This product is stable Hazardous Polymerization: Hazardous polymerization will not occur

INCOMPATIBILITY Avoid contact with strong oxidizers (e.g. nitric acid)

CONDITIONS TO AVOID: Keep away from heat and open flame.

HAZARDOUS DECOMPOSITION PRODUCTS: May form carbon monoxide and dioxide, various hydrocarbons, etc.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

PANNIER CORPORATION
207 SANDUSKY STREET, PITTSBURGH, PA 15212-5833 U.S.A.
MATERIAL SAFETY DATA SHEET

Green Steel Marking Ink

DATE: 04/17/2014

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SMALL SPILL: Absorb liquid with rags, floor absorbent, vermiculite or other absorbent material and transfer to hood.

LARGE SPILL: Eliminate all ignition sources---dike area of spill to prevent spreading---ventilate area if indoors---pump liquid into salvage tank---remaining liquid may be taken up with sand, floor absorbent or other absorbent material and shoveled into containers---prevent run-off to sewers and bodies of water--- notify proper authorities as required by local, state and federal regulations.

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Occupational Exposure Limits

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
ETHANOL NATURAL	1000.00 PPM	N/est	N/est	N/est	N/est
\$ METHANOL	200.00 PPM	N/est	250.00 PPM	N/est	200.00 PPM
ETHYL ACETATE	400.00 PPM	N/est	N/est	N/est	N/est
ISOPROPANOL 99% ANHY	400.00 PPM	N/est	N/est	500.00 PPM	N/est

RESPIRATORY PROTECTION: In outdoor or open areas with unrestricted ventilation use approved chemical/mechanical filters designed to remove a combination of particulates and vapor.

VENTILATION: Provide sufficient ventilation in volume and pattern to keep air contaminant concentration below current applicable OSHA permissible exposure limit or ACGIH TLV limit, and volatiles below lower explosive limit. Heavy solvent vapors should be removed from the lower levels of area, and all ignition sources (non-explosion proof equipment) should be eliminated if flammable mixtures will be encountered. Remove decomposition products formed during welding or flame cutting of surfaces coated with this product. For baking finishes - vent vapors emitted on heating.

PROTECTIVE GLOVES: Wear resistant gloves such as: nitrile rubber

EYE PROTECTION: Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other types of safety glasses. (Consult your safety equipment supplier)

OTHER PROTECTIVE EQUIPMENT: Normal protective clothing. Wash contaminated clothing before reuse.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Do not drop containers. Avoid heat, sparks, and open flame. Store large quantities only in buildings designed to comply with OSHA 1910.106. Never use pressure to empty. Avoid breathing sanding dust. Do not handle until the manufacturers safety precautions have been read and understood.

OTHER PRECAUTIONS: The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

SECTION X - ADDITIONAL REGULATORY INFORMATION

SARA TITLE III SECTION 313: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

Ingredient Name	CAS Number	Percent
\$ METHANOL	67-56-1	5.60
PROP 65 (CARCINOGEN): N/A		
PROP 65 (TERATOGEN): N/A		
PROP 65 (BOTH CARCINOGEN AND TERATOGEN): N/A		

SECTION XI OTHER INFORMATION

DISCLAIMER OF LIABILITY

THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS 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 THE PRODUCT