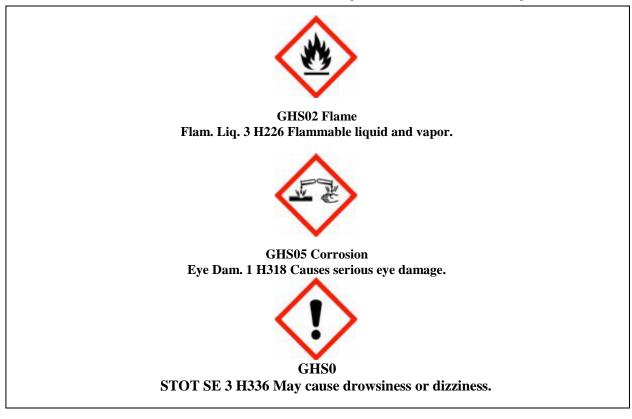
Section One: Identification			
Product Name:	Permanent Impression Marker (Black)		
Synonym:	PIM-FL4002 (Black)		
Chemical Name:	Alcohol-based Ink		
Manufacturer:	IFB Solutions		
Address:	7730 North Point Dr.		
	Winston Salem, NC 27106		
	800-242-7726		
Medical Emergency Call:	1-800-222-1222 (Poison Control Center)		
Recommended Use:	Alcohol Based Permanent Marker		

Section Two: Hazard(s) Identification

**This product is a consumer product and is not subject to the requirements of OSHA HCS/HazCom 2012. Warnings in this section are for the bulk inks and applicable only in workplace environments and not for the product itself under normal use and conditions. Nonetheless, this SDS is provided for the information of product users.



Label elements

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- Signal word Danger
- Hazard-determining components of labeling:

propan-1-ol 1-Methoxy-2-propanol

• Hazard statements Flammable liquid and vapor. Causes serious eye damage. May cause drowsiness or dizziness.

Precautionary Statements • Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Avoid breathing dust/fume/gas/mist/vapors/spray Wear protective gloves / eye protection / face protection. Wear eye protection / face protection. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use only outdoors or in a well-ventilated area. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of fire: Use for extinction: CO2, powder or water spray. Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local, state and federal regulations.

Section Three: Composition / Information on Ingredients

Chemical characterization: Mixtures

Mixture of the following substances, containing non-hazardous substances and coloring agents. **Description:** Mixture of substances listed below with nonhazardous additions. **Dangerous Components:**

Contains:	CAS	Concentration %
1-Methoxy-2-propanol	107-98-2	25-50%
Propan-1-ol	71-23-8	25-50%

Section Four: First-Aid Measures

Skin Exposure: If this material contaminates the skin, immediately begin decontamination with running water and soap. Remove exposed or contaminated clothing, taking care not to contaminate eyes. The contaminated individual must seek medical attention if any adverse effect occurs.

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- **Eye Exposure**: If this material enters the eyes, open the contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Have the contaminated individual "roll" eyes. Minimum flushing time is for 15 minutes. The contaminated individual must seek medical attention if any adverse effect occurs.
- **Inhalation**: If vapors, sprays or mists of this material are inhaled, remove the contaminated individual to fresh air. If not breathing, perform CPR immediately. Seek medical attention if adverse effect occurs.
- Ingestion:If this material is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR
MOST CURRENT INFORMATION. DO NOT INDUCE VOMITTING, unless directed by
medical personnel. Have victim rinse mouth with water if conscious. Never induce vomiting or
give diluents (water or milk) to someone who is unconscious, having convulsions, or unable to
swallow. If vomiting occurs, lean patient forward or place on left-side (head-down position if
possible) to maintain an open airway and prevent aspiration.

Medical Conditions Aggravated by Exposure:

Pre-existing dermatitis and other skin conditions may be aggravated by prolonged overexposure to this material.

Section Five: Fire-Fighting Measures

Flash Point: Not flammable

Fire Extinguishing Materials:

Water Spray:	YES (for cooling)
Foam:	YES
Halon:	YES
Carbon Dioxide:	YES
Dry Chemical:	YES
Other:	Any "ABC" Class

<u>Unusual Fire and Explosion Hazards</u>: When involved in a fire, this material may decompose and produce irritating vapors and toxic gasses such as Carbon Oxides (CO, CO_2 , NO_X).

Special Fire Fighting Procedures: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Due to the presence of colorants, the runoff water from these products can discolor contaminated objects. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas. If necessary, rinse fire-response equipment with

Section Six: Accidental Release Measures

soapy water before returning it to service.

Persons involved in the use of this item should provide sufficient ventilation and wear protective equipment to prevent the contamination of skin, eyes, and clothing.

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For incidental spills (e.g., less than 1 L of liquid), wear rubber gloves, splash goggles, and appropriate body protection. Trained personnel following pre-planned procedures should handle <u>non-incidental releases</u> (e.g., 10 L of liquid leaking). In the event of a non-incidental spill, clear the area and protect people. The minimal personal protective equipment for response to a non-incidental spill is as follows: Rubber gloves, rubber boots, face shield, and Tyvek suit. The minimum level of personal protective equipment for releases in which the level of oxygen is less than 19.5% or is unknown must be **Level B: triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard hat, and Self-Contained Breathing Apparatus.** Absorb spilled liquid with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust) or other suitable absorbent materials. Ensure adequate ventilation. Rinse area thoroughly with soapy water after liquid has dried. Decontaminate the area thoroughly. If necessary, discard all stained response equipment or rinse with soapy water before returning such equipment to service. Place all spill residue in an appropriate container and seal. Dispose of in accordance with applicable U.S. Federal, State and local procedures.

Section Seven: Handling and Storage

<u>Work and Hygiene Practices</u>: As with all chemicals, avoid getting this material on you or in you. Wash thoroughly after handling this material. Do not eat, drink smoke or apply cosmetics while handling this material. Avoid breathing vapors or mists generated by this material. Use in a well-ventilated location. Remove contaminated clothing immediately.

Storage and Handling Practices: All employees who handle this material should be trained to handle it safely. Store product in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Minimize dust generation and accumulation. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Keep ignition sources away – Do not smoke. Protect against electrostatic charges. Keep receptacles tightly sealed.

Section Eight: Exposure Controls/Personal Protection

Ventilation and Engineering Controls: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided in this section. Use local exhaust ventilation. Normal office ventilation conforming to the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Standards is adequate under normal circumstances of use. Persons using this material should consult a qualified Ventilation Engineer and/or Industrial Hygienist if concerns about exposure arise. As with all chemicals, ensure proper decontamination equipment (e.g., eyewash/safety shower stations) is available near areas where this material is used as necessary.

Respiratory Protection: Respiratory protection is not generally needed when using this product. In instances where inhalable mists or sprays of product may be generated, and respiratory protection is necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Standard (29 CFR 1910.134), or equivalent U.S. State standards. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full face piece pressure/demand SCBA or a full face piece, SAR with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

Eye Protection: Depending on the use of this product, splash goggles or safety goggles may be worn. Use goggles or safety glasses for spill response, as stated in Section 6 (Accidental Release Measures) of this MSDS. If necessary, refer to U.S. OSHA 29 CFR 1910.133 for further information.

<u>Hand Protection</u>: Wear butyl rubber, neoprene, or nitrile rubber or latex gloves for routine use. If necessary, refer to U.S. OSHA 29 CFR 1910.138 for further information.

Body Protection: Use body protection appropriate for task, such as a lab coat.

Section Nine: Physical and Chemical Properties

Appearance, Odor and Color:	Fluid form. Color according to specification	
Odor Threshold:	Not established	
pH:	5.7	
1		
Boiling Point:	96° C (205 °F)	
Melting/Freezing Point:	Undetermined	
Decomposition Temperature:	Not determined	
Flash Point:	23 °C (73 °F)	
Flammability Limits:	Low: Not applicable Upper: Not applicable	
Auto-ignition Temperature:	Product is not self-igniting	
Ignition Temperature:	287 °C (549 °F)	
Flammability:	Not Applicable	
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
Explosive Limits:	Lower: 1.7 Vol % Upper: 13.5 Vol %	
Vapor Pressure (mm Hg):	14mm Hg (19 hPa)	
Vapor Density (Air = 1):	Not determined	
Relative Density	Not determined	
Density/Specific Gravity:	0.9 g/cm3 (7.511 lbs/gal)	
Evaporation Rate:	Not determined.	
Solubility in / Miscibility with Wa	ter: Fully miscible	
Partition Coefficient (n-Octanol/W	Vater): Not determined	
Viscosity:	4.5 mPas	
Solvent Content:	Organic solvents: 82.9%	
Solids Content:	15.0%	
Other Information:	The physical & chemical properties given in section 9 are rough data only which are partially derived from the component's data mixture. These data are not binding product specifications.	

Section Ten: Stability and Reactivity

<u>Stability</u>: Stable under conditions of normal temperature and pressure.

Decomposition Products: No dangerous decomposition products known.

Materials with Which Substance is Incompatible: Strong oxidizers, water-reactive materials.

Hazardous Polymerization: Will not occur.

<u>Conditions to Avoid</u>: Exposure to or contact with extreme temperatures, dust, and incompatible chemicals.

<u>Hazardous Decomposition</u>: Under extreme heat and fire, this product may produce irritating vapors and toxic gasses such as Carbon Oxides (CO, CO2, NOX) as referenced in Section 5: *Fire-Fighting Measures*.

Section Eleven: Toxicological Information

Acute Toxicity Data:

LD/LC50 values that are relevant for classification:

71-23-8 propan-1-ol

Oral - LD50 - 8000mg/kg (rat)

Dermal - LD50 - 4000mg/kg (rab)

Inhalative - LD50/4 h - 9.8mg/l (rat)

Primary irritant effect:

On the Skin – no irritant effect

On the Eye – Strong irritant with the danger of severe eye injury.

Suspected Cancer Agent: The components of this product listed in Section 3 (*Composition and Information on Ingredients*) by CAS # are not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, not found to be a potential carcinogen in the National Toxicology Program (NTP) or found to be a potential carcinogen by OSHA-Ca.

<u>Sensitization to the Product</u>: This product is not currently known to be a sensitizer with prolonged or repeated use. <u>Irritancy of Product</u>: Acute exposure to this material via skin contact and eye contact have no irritating effect.

Section Twelve: Ecological Information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General Notes:

Water hazard class 1 (self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course, or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available.

Section Thirteen: Disposal Considerations

<u>**Preparing Wastes for Disposal**</u>: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations. This material, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

Do not discharge this material into drains, surface waters, or ground water.

Section Fourteen: Transport Information

UN-Number · DOT, ADR, IMDG, IATA UN proper shipping name	UN1263
· DOT · ADR	Paint 1263 Paint
· IMDG, IATA	PAINT

· Transport hazard class(es)





- · Class 3 Flammable liquids
- · Label 3

· ADR



- · Class 3 (F1) Flammable liquids
- · Label 3
- · IMDG, IATA



• Class 3 Flammable liquids • Label 3

Packing group • DOT, ADR, IMDG, IATA III

Environmental hazards:				
 Marine pollutant: 	No			
Special precautions for user	Warning: Flammable liquids			
Danger code (Kemler):	30			
EMS Number:	F-E, <u>S-E</u>			
Transport in bulk according to Annex II of				
MARPOL73/78 and the IBC Co	de: Not applicable.			
Transport/Additional information:				
· DOT				
· Quantity limitations On pass	senger aircraft/rail: 60 L			
On carg	go aircraft only: 220 L			
· ADR				
· Excepted quantities (EQ)	Code: E1			
	Maximum net quantity per inner packaging: 30 ml			
	Maximum net quantity per outer packaging: 1000 ml			
· IMDG				
 Limited quantities (LQ) 	5L			
 Excepted quantities (EQ) 	Code: E1			
	Maximum net quantity per inner packaging: 30 ml			
	Maximum net quantity per outer packaging: 1000 ml			
· UN "Model Regulation":	UN1263, Paint, 3, III			

Section Fifteen: Regulatory Information

Not determined.

Section Sixteen: Other Information

HMIS Code		
Health	N/A	
Flammability	N/A	
Reactivity	N/A	
Personal Protection	N/A	

The OSHA Hazard Communication Standard does not apply to the product described in this MSDS. The reason for the exemption is contained in 29 CFR 1910.1200 (b)(6)(ix), as amended July 1, 1994, per the Code of Federal Regulations. The information contained in this MSDS is forwarded to you for your information, but is not meant to imply that the product is covered by the Hazard Communication Standard, nor is the MSDS meant to comply with all the requirements of the Hazard Communication Standard.

0 = Minimal / 4 = Severe Hazard

The data in this Safety Data Sheet is true and accurate to the best of IFB Solutions knowledge. However, since data, safety standards, and government regulations are subject to change, conditions of handling, use, or misuse are beyond IFB Solutions control. IFB Solutions MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY

FOR RELIANCE THEREON. The user is required to comply with all laws and regulations relating to the purchase, use, storage, and disposal of the product. User must be familiar with and follow generally accepted safe handling procedures of chemicals, and is solely responsible for any effects caused by its misuse or mixing of this chemical with any other substance.