BSF – White Pigmented Solvent-Based Ink Cartridge

SECTION 1: IDENTIFICATION

Product Identifier:	**BSF – White Pigmented Solvent-Based Ink Cartridge (Fast-Dry for Non-Porous Substrates)**
Other Means of Identification:	
Part Number:	**100-1505-208**
Recommended Use:	**Ink Solvent**
Restrictions on Use:	**None known**
Supplier Identifier:	**Sterling Marking Products Inc., 1147 Gainsborough Road, London, ON N6H 5L5 Canada 1-800-265-5957, 519-434-5785**
Emergency Phone Number:	**CANUTEC (613) 966-6666, Cellular *666**

SECTION 2: HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the U.S. Hazardous Communication Standard (HCS 2012)
Flammable Liquids 3
Serious Eye Damage/Eye Irritation 1
Specific Target Organ Toxicity, Single Exposure 3

Signal Word: Danger
Hazard Statements:
H226 Flammable Liquid & Vapour
H318 Causes Serious Eye Damage
H335 May Cause Respiratory Irritation
Precautionary Statements:
Use only out of doors or in a well-ventilated area
Keep container tightly closed
Keep away from heat, hot surfaces, sparks, open flames or other ignition sources. No smoking.
Avoid breathing vapours
Wear protective gloves and eye protection
Wash hands and skin thoroughly after handling
Supplementary Precautionary Statements
In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Dispose of contents/container in accordance with local regulations.
Supplemental label information
Repeated exposure may cause skin dryness or cracking.

If in eyes, flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur consult a physician, preferably an ophthalmologist.
If ingested, there is no specific antidote. Do not induce vomiting. Seek prompt medical attention.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Percentage (%)	Other Identifiers
Ethyl lactate	97-64-3	50 - 60%	None known
2-methoxy-1-methylethyl acetate	108-65-6	10 – 20%	None known

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.

SECTION 4: FIRST AID MEASURES

General information.
Inhalation:
Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.
Ingestion:
NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! DO NOT INDUCE VOMITING! Get medical attention immediately!
Skin contact:
Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
Eye contact:
Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Immediately transport to hospital or eye specialist.
Most important symptoms and effects, both acute and delayed.
General information:
The severity of the symptoms described will vary dependent of the concentration and the length of exposure.
Inhalation:
Vapours may cause coughing, tightness of the chest and irritation of the respiratory system and shortness of breath. Seek medical attention.
Ingestion:
Is irritating to the respiratory tract and may cause damage to the central nervous system, cause nausea and vomiting. Seek medical attention.
Skin contact:
Prolonged contact may cause redness, irritation and dry skin.
Eye contact:
May cause severe irritation to eyes. Seek medical attention.
Indication of any immediate medical attention and special treatment needed:
No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!
Notes to Physician: No specific antidote. Treatment based on sound judgement of physician and individual reactions of patient. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media.

Suitable Extinguishing Media:

Water fog or fine spray, carbon dioxide, dry chemical, foam. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function but much less effectively.

Unsuitable Extinguishing Media:

Do not use direct water stream, which will spread fire.

Specific Hazards arising from the Product:

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards:

Take precautionary measures against static discharges.

Specific Hazards:

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2)

Hazardous Decomposition/Combustion Materials (under fire conditions):

The smoke may contain unidentified toxic and/or irritating compounds. Carbon monoxide. Carbon dioxide.

Special Protective Equipment:

Fire fighters should wear full protective clothing including self-contained breathing equipment.

Special Fire Fighting Procedures:

Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

Use water to keep fire exposed containers cool and disperse vapours. Move container from fire area if it can be done without risk.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:

Wear appropriate protective equipment.

Environmental Precautionary Measures:

Prevent entry into sewers or streams, dike if needed.

Methods and material for containment and cleaning up:

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Clean-up personnel should use respiratory and/or liquid contact protection.

Runoff or release to sewer, waterway or ground is forbidden.

Small Spillages: Collect with absorbent, non-combustible material into suitable containers.

Large Spillages: Absorb in vermiculite or dry sand and dispose of at a licensed hazardous waste collection point.

Inform Authorities if large amounts are involved.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing vapour. Keep the containers closed when not in use. Use with adequate ventilation. Never use air pressure for transferring product. Containers, even those that have been emptied, will retain product residue and vapour and should be handled as if they were full until they have been cleaned.

Conditions for Safe Storage:

Store in a cool, dry, well-ventilated area. Keep containers tightly closed. Store in original container. Store in accordance with good industrial practice.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Control Parameters

Chemical Name	TLV	Toxicology
Ethyl Lactate		Oral LD_{50} >8,200 mg/kg (rat) Dermal LD_{50} >5,000 mg/kg (rabbit) Inhalation $LC_{50/4h}$ >no data available (rat)
2-methoxy-1-methylethyl acetate	WEL 8-hr limit ppm: 50 WEL 15 min limit ppm: 100	Oral LD50 >2,000 mg/kg (rat)

Appropriate Engineering Controls:
Local exhaust ventilation as necessary to maintain exposure to within acceptable limits.
Personal Protective Equipment
Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. For concentrations exceeding the recommended exposure limit, use NIOSH-approved air purifying respirator.
Gloves: Use gloves chemically resistant to this material. **NOTICE:** the selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/specifications provided by the glove supplier.
Skin Protection: The selection of personal protective equipment varies depending upon conditions of use. Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance. Impervious clothing. Impervious boots.
Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.
Environmental Exposure Controls: Keep container tightly sealed when not in use.
Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work station location.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Colour: White Opaque
Odor: Mild
pH: Not available.
Boiling Point: 110°C
Solubility: Immiscible in Water
Flash Point (°C): 40°C
Auto-Ignition Temperature: Not known
Other: Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:
No data available
Chemical Stability:

Stable.
Hazardous Polymerization:
Not Available.
Conditions to Avoid:
Avoid contact with heat, sparks, open flame.
Materials to Avoid:
Oxidizing materials. Strong acids or bases.
Hazardous Decomposition Products:
Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide.
Additional Information:
No additional remarks.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects.
Toxicological information: No information available.
Acute toxicity:

Chemical Name	TLV	Toxicology
Ethyl Lactate		Oral LD_{50} >8,200 mg/kg (rat) Dermal LD_{50} >5,000 mg/kg (rabbit) Inhalation $LC_{50/4h}$ >no data available (rat)
2-methoxy-1-methylethyl acetate	WEL 8-hr limit ppm: 50 WEL 15 min limit ppm: 100	Oral LD50 >2,000 mg/kg (rat)

Germ cell mutagenicity:
Genotoxicity - In Vitro:
Not determined.
Carcinogenicity:
Carcinogenicity:
Not determined.
Reproductive Toxicity:
Reproductive Toxicity – Fertility:
Not determined.
Specific target organ toxicity - single exposure:
STOT - Single exposure:
No information available.
Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure:
No information available.
Aspiration hazard:
May be fatal if swallowed and enters airways
Inhalation:
Vapours may cause coughing, tightness of the chest and irritation of the respiratory system and shortness of breath. Seek medical attention.
Ingestion:
Is irritating to the respiratory tract and may cause damage to the central nervous system, cause nausea and vomiting. Seek medical attention.
Skin contact:

Prolonged contact may cause redness, irritation and dry skin.
Eye contact:
May cause severe irritation to eyes. Seek medical attention.
Route of entry:
Ingestion. Inhalation.
Medical Symptoms:
NERVOUS SYSTEM.
Drowsiness, dizziness, disorientation, vertigo. Mild intoxication (incl. fatigue, lassitude, irritability, headache, nausea).

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:
No data on possible environmental effects have been found.
Toxicity:
Acute Fish Toxicity:
Avoid discharge to the aquatic environment.
Persistence and degradability:
Degradability:
There are no data on the degradability of this product.
Bioaccumulative potential:
Bioaccumulative potential:
No data available on bioaccumulation.
Mobility in soil:
Mobility:
The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.
Other adverse effects:
Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

General information:
Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.
Waste treatment methods:
Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

IATA Shipping (Air):
Printing ink
Packaging Instruction for Limited Quantity: Y344
Maximum Net Quantity (per outer package): 10L
Refer to Pkg. Inst. No. for inner packaging type and maximum quantity per inner package. DGR – 54th edition.

TDG Shipping Information:

Printing ink, UN1210
Class: 3 - Flammable Liquid
PG: III - Relatively Minor Danger

WHMIS Classification:
Flammable Liquids 3
Serious Eye Damage/Eye Irritation 1
Specific Target Organ Toxicity, Single Exposure 3

Signal Word: Danger
Hazard Statements:
H226 Flammable Liquid & Vapour
H318 Causes Serious Eye Damage
H335 May Cause Respiratory Irritation

SECTION 15: REGULATORY INFORMATION

Chemical Safety Assessment
No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Additional Information: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Risk Phrases In Full:

Hazard Statements In Full:
H304 May be fatal if swallowed and enters airways

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End of SDS.