Polymer Thermal Solvent Inkjet Ink
Other Name: AMI QDX®

SECTION 1: IDENTIFICATION

Product Identifier:	**AMI QDX®**
Other Means of Identification:	**Polymer Thermal Solvent Inkjet Ink**
Recommended Use:	**Ink Jet Printing Ink**
Restrictions on Use:	**None known**
Supplier Identifier:	**Sterling Marking Products Inc., 349 Ridout Street North, London, ON Canada N6A 2N8 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)

Classificaton

Flammable Liquid, Class 1C – Category 1; Skin irritation – Category 3; Eye irritation – Category 2B; Acute Toxicity – Category 1

Label Elements:

Signal Word: Danger

Hazard Satements:

Highly Flammable Liquid
Toxic by inhalation, in contact with skin and if swallowed
Irritating to skin and eyes
Irritating to respiratory system
Repeated exposure may cause skin dryness or cracking
Vapours may cause drowsiness or dizziness
Toxic to aquatic organisms
May cause long-term adverse effects in aquatic environments

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
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 opthamologist.
If ingested, there is no specific antidote. Rinse mouth well. Do not induce vomiting. Seek prompt medical attention.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Percentage (%)	Other Identifiers
Black Dye	Mixture	2% - 8%	Not Applicable
Alcohols	Confidential	30% - 95%	Not Applicable
2-Butanone	78-93-3	< 8%	Not Applicable
Proprietary Components	Confidential	< 10%	Not Applicable

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.
The substances that are contained over 0.1% in this ink are not carcinogens. This product is intended for industrial use only.

SECTION 4: FIRST AID MEASURES

Eye Contact: 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.
Skin Contact: Immediately wash affected area with soap and water for at least 15. Remove contaminated clothing and launder before reuse.
Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Ingestion: Do **NOT** induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
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:

Isolate and restrict area access. Stay upwind. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Vapours are heavier than air and may accumulate in low areas. Vapours may travel along the ground to be ignited at distant locations. Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. Do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:

Wear appropriate protective equipment.

Environmental Precautionary Measures:

Prevent entry into sewers or streams, dike if needed.

Procedure for Clean-up:

Eliminate all ignition sources. Small spills can be flushed with large amounts of water; larger splills should be collected for disposal. Absorb with an inert dry material and place in an appropriate waste disposal container. Collect liquid with explosion-proof pumps.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Flammable. Keep away from heat, sparks and flame. 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. No smoking or open flame in storage, use or handling areas. Ensure proper electrical grounding procedures are in place. Use non-sparking tools. 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. Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion. This product is a poor conductor of electricity and can become electrostatically charged during handling and use (for example: during mixing, filtering or pumping). If this charge reaches a sufficiently high level, static discharges or sparks capable of causing ignition might occur.

Conditions for Safe Storage:

Store in a cool, dry, well-ventilated area, away from heat and ignition sources. Use explosion-proof ventilation to prevent vapour accumulation. Keep containers tightly closed. Store in the following material(s): Carbon Steel. Stainless Steel. Phenolic-lined steel drums. Do not store in aluminum, copper, copper alloys and galvanized containers. Storage Period: Bulk – 6 months, Plastic drums – 24 months. Store in accordance with good industrial practice.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Control Parameters

Chemical Name	Exposure Limit - ACGIH		Exposure Limit - OSHA		Immediately Dangerous to Life or Health - IDLH
	TWA	STEL	TWA	STEL	
1-methoxy-2-propanol	50 ppm	100 ppm	100 ppm 360 mg/m^3	150 ppm 540 mg/m^3	Not Available
2-methoxy-1-propanol	Not Available		Not Available		Not Available

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, examples of preferred glove barrier materials include: Butyl rubber gloves. Ethyl Vinyl Alcohol Laminate (EVAL). Examples of acceptable glove barrier materials include Natural rubber gloves. Neoprene gloves. Nitrile gloves. Polyvinylchloride (PVC) gloves. Viton gloves. **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.
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: Black
Odor: Slight Odor
pH: Not available
Specific Gravity: 0.81 (H_20 = 1)
Boiling Point: Not available
Freezing/Melting Point: Not available
Vapour Pressure: Not available
Vapour Density: Not available
% Volatile by Volume: Not available
Evaporation Rate: Not available
Solubility: Colourant insoluble
VOCS: Not available
Viscosity: Not available
Molecular Weight: Not available
Other: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity:
Not reactive.
Chemical Stability:
Stable.
Hazardous Polymerization:
Will not occur.
Conditions to Avoid:
Avoid contact with heat, sparks, open flame and static discharge.
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, Nitrogen oxides
Additional Information:
No additional remarks.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:
Ingestion:
Toxic. Small amounts swallowed may cause injury.
Skin Contact: Contact may cause skin irritation with local redness. Prolonged skin contact may cause dizziness or drowsiness. Repeated skin exposure may result in absorption of harmful amounts.
Inhalation: Exposure may cause adverse effects.
Eye Contact: Exposure may cause adverse effects.

Additional Information: Signs and symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

Acute Test of Product:
Acute Oral LD50: Alcohol: 5628 mg/Kg (rat), 2-Butanone: 2737 mg/Kg (rat)
Acute Dermal LD50: Alcohol: 20ml/Kg (rabbit), 2-Butanone: 6480 mg/Kg (rabbit)
Acute Inhalation LC50: Alcohol: 64000 ppm/4H (rat), 2-Butanone: 32000 mg/m^3/4H (mouse)

Carcinogenicity: Ames test negative
Carcinogenicity Comment: No additional information available.

Reproductive Toxicity/Teratogenicity/Embryotoxicity/Mutagenicity: Not known.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information:
Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Other Information:
None available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 14: TRANSPORT INFORMATION

DOT (U.S.):
DOT Shipping Name: Printing Ink - Flammable
DOT Hazardous Class: 3, Flammable Liquid
DOT UN Number: UN1210
DOT Label: Flammable
DOT Packing Group: III
DOT Reportable Quantity (lbs): Not available.
Note: No additional remarks.

Marine Pollutant: Yes.

TDG (Canada):
TDG Shipping Name: Printing Ink - Flammable
Hazard Class: 3
UN Number: UN1210
Packing Group: III
Note: No additional Remarks
Marine Pollutant: Yes

SECTION 15: REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.
Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.
Note: Not available.

WHMIS Hazardous Class:
Flammable Liquids, Acute Toxicity

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.

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End of SDS.