



MATERIAL SAFETY DATA SHEET

Product Name:
Polymer Thermal Solvent Inkjet Ink

Product Code:
POLYtj[®] (patent pending) V3.0i

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<i>Product Name</i>	Polymer Thermal Solvent Inkjet Ink
<i>Product Code</i>	POLYtj [®] (patent pending) V3.0i ink
<i>General Use</i>	Ink Jet Printing Ink
<i>Manufacturer</i>	Digital Ink Technologies Pty Ltd Factory 1&2, 74 Mason Street Campbellfield, Victoria, Australia Telephone: +613 93575533 Facsimile: +613 93575588
Business Hours: 8.30 am – 5.00pm (US time) Monday to Friday	
<i>Poison Information (24 hours)</i>	+613 93575533

2. COMPOSITION / INFORMATION ON INGREDIENTS

<i>Component</i>	<i>Amount</i>	<i>CAS Number</i>	<i>EU Classification</i>
Black Dye	2-8%	Mixture	N;R51-53
Alcohols	30% to 95%	Confidential	F;R11 T;R23/24/25 R39/23/24/25
2-Butanone	<8.0%	78-93-3	F;R11 Xi; R36 R66-67
Proprietary Components	<10%	Confidential	Xi; R38

The substances that are contained over 0.1% in this ink are not carcinogens

SPECIAL NOTE: This product is intended for industrial use only

3. HAZARDOUS INFORMATION

Product Definition: Mixture

Classification	Classification as per current EC lists & extended by company data and literature
R11	Highly Flammable
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin or swallowed
R36/38	Irritating to skin and eyes
R37	Irritating to respiratory system
R43	May cause sensitization by skin contact
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapors may cause drowsiness and dizziness
R51	Toxic to aquatic organisms
R53	May cause long term adverse effects in aquatic environment



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3.1 Label Elements



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4. FIRST AID MEASURES

<i>INHALATION</i>	Remove subject to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<i>EYE CONTACT</i>	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
<i>SKIN CONTACT</i>	Wash thoroughly with soap and water.
<i>INGESTION</i>	Rinse mouth well immediately and seek medical advice.

5. FIRE FIGHTING MEASURES

<i>FLASH POINT</i>	Unknown, treat as flammable liquid
<i>AUTO-IGNITION TEMP.</i>	Unknown
<i>FLAMMABLE LIMITS IN AIR % BY VOLUME</i>	Limits unknown, flammable Liquid and Vapor!
<i>FIRE EXTINGUISHING MEDIA</i>	Water, dry chemical or carbon dioxide.
<i>SPECIAL INFORMATION</i>	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from fire. Vapors can flow along surfaces to distant ignition source and flash back.
<i>UNUSUAL FIRE AND EXPLOSION HAZARDS:</i>	Alcohols can react vigorously with oxidizers.

6. ACCIDENTAL RELEASE MEASURES

Restrict access to area. Keep unprotected personnel upwind of spill. Remove sources of heat, sparks, and flames. Provide adequate ventilation. Contain spill. Prevent liquid from entering sewers and confined spaces. Use non-sparking tools and equipment. Follow federal, state, and local requirements for reporting spills and releases.	
<i>SMALL SPILLS</i>	Remove all sources of ignition. Increase ventilation. Evacuate all necessary personnel. Wear self-contained breathing apparatus. And full protective clothing to minimize skin and eye exposure.
<i>LARGE SPILLS</i>	Absorb with sand or other suitable material; transfer to suitable disposal container. Flush area with water.
<i>DISPOSAL</i>	Follow federal, state and local disposal requirements. Waste residues and liquids may be an ignitable hazardous waste.



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SAFEGUARDS (PERSONNEL):

Protect skin and eyes from exposure. Wear appropriate personal protective equipment. If vapors or mists are generated wear a NIOSH approved respirator.

7. HANDLING AND STORAGE

Store in tightly closed containers. Store in cool, dry, well-ventilated, fire resistant areas. Do not store at temperatures higher than 30 C. Store out of direct sunlight, away from oxidizing agents and sources of heat or ignition. Electrically bond and ground metal containers during liquid transfer.

8. EXPOSURE CONTROLS /PERSONAL PROTECTION

EXPOSURE CONTROLS (VENTILATION):	Local exhaust to minimize concentration of alcohol vapors recommended.
PERSONAL PROTECTION	
Respiratory:	None required under normal conditions of use.
Eye Protection	Face shield, chemical safety goggles or safety glasses with side shields.
Gloves	Butyl rubber, natural rubber, neoprene, nitrile rubber, polyethylene, Viton, or other compatible material.
Other	Appropriate protective clothing for the work situation to minimize skin contact. Eyewash stations and safety showers should be available in areas of handling and use.

9. PHYSICAL AND CHEMICAL PROPERTIES

<i>COLOUR</i>	Black	<i>VAPOUR PRESSURE</i>	No data available
<i>ODOUR</i>	Slight odour	<i>PERCENT VOLATILE</i>	No data available
<i>BOILING POINT</i>	Not available	<i>EVAPORATION RATE</i>	No data available
<i>SPECIFIC GRAVITY</i>	.81 (H ₂ O = 1)	<i>VAPOUR DENSITY</i>	No data available
<i>SOLUBILITY in water</i>	Colorant insoluble	<i>FLASH POINT</i>	-9°C

10. STABILITY AND REACTIVITY

<i>STABILITY</i>	Stable
<i>CONDITIONS TO AVOID</i>	Keep away from heat, sparks, flames
<i>INCOMPATIBILITY</i>	Capable of reacting vigorously with oxidizing agents, such as nitrates, perchlorates, peroxides, sulfuric acid, nitric acid, etc.
<i>HAZARDOUS THERMAL DECOMPOSITION PRODUCTS</i>	Carbon Dioxide (CO ₂), Carbon Monoxide (CO) and nitrogen oxides.
<i>HAZARDOUS POLYMERISATION</i>	Will not occur



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11. TOXICOLOGICAL INFORMATION

<i>CARCINOGENICITY</i>	Ames test negative		
<i>MUTAGENICITY</i>	None Known		
TOXICITY DATA: Oral LD50	Dermal LD50	Inhalant LC50	
Alcohol: 5628mg/Kg (rat)	Alcohol: 20ml/Kg (rabbit)	Alcohol: 64000ppm/4H (rat)	
2-Butanone: 2737mg/Kg (rat)	2-Butanone: 6480mg/Kg (rabbit)	2-Butanone: 32000mg/m ³ /4H (mouse)	

12. ECOLOGICAL INFORMATION

<i>ECOTOXICOLOGICAL INFORMATION</i>	Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
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13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Treat or dispose of waste in accordance with all local, state/provincial, and national requirements

14. TRANSPORT INFORMATION

<i>PRODUCT LABEL</i>	SOLVENT BLK Series - Beta
<i>D.O.T SHIPPING NAME</i>	Printing ink - flammable
<i>D.O.T HAZARD CLASS</i>	Class 3, Flammable Liquid
<i>UN NUMBER</i>	UN1210
<i>D.O.T LABEL</i>	Flammable
<i>BULK CLASS</i>	Not applicable
<i>PACKAGING CLASS</i>	111

15. REGULATORY INFORMATION

EU Notification: All ingredients are listed on EINECS
The ink preparation as a whole is classified Flammable and Toxic according to EU Derivatives.

RISK PHRASES	
R11	Highly Flammable
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
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SAFETY PHRASES	
S7	Keep container tightly closed.
S16	Keep away from sources of ignition - No smoking.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28	After contact with skin, wash immediately with plenty of soap and water.
S36/37/39	Wear suitable protective clothing, gloves, and eye/face protection.
S45	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).
S60	This material and its container must be disposed of as hazardous waste.
S61	Avoid release to the environment.

MISCELLANEOUS INFORMATION: This material or all of its components are listed on the Inventory of Existing Chemicals Substances under the Toxic Substance Control Act (TSCA).

16. OTHER INFORMATION

ADDITIONAL INFORMATION: The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process.

The information contained herein is, to the best of our knowledge and belief, accurate. Since the condition of handling and use Care beyond our control, we assume no liability for loss or injury resulting from the use of this product or the information herein. All chemicals may present unknown health hazards and should be used with caution. Safe use of this product is the responsibility of the user.

No representation or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunto with respect to the information contained herein or the product to which the information refers.