



# MSDS

## 1 - COMMODITY AND COMPANY IDENTIFICATION

Product Name : **INKJET INKS – PIGMENT-BASED**

Manufacturer Name : **BCH Technologies LLC**

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## 2 - CHEMICAL COMPOSITION

Product Name	Symbol	% In Weight	Remark
Acid Dyes / Direct Dyes	NF(Non-Flammable), Xi (Irritant)	8.7 – 12.0	AcidY-23,ReactiveR-23 Direct Bl-199, Direct Bk-168
Polyalkyl Glycol	F (Flammable), Xi (Irritant)	6.3	
Glycol Derivation	F (Flammable), Xi (Irritant)	7.0	
Polyoxyethylene	Xn (NOCIIVE)	3.0	
Water	NF(Non-Flammable), NXi (Non-Irritant), Xn (Nocive)	71.7 – 75.0	

## 3 - HAZARDOUS INGREDIENTS

This product is not considered to be a hazardous substance under “OSHA’s” hazard communication standard ( 29 CFR 1910.1200 )

## 4 - HMIS INFORMATION

Health - 1 (NPCA)  
Flammability - 1 (NPCA)  
Reactivity - 0 (NPCA)

## 5 - PHYSICAL DATA

Melting point - Liquid form  $-15 \pm 5$  °C (H<sub>2</sub>O=0°C)  
Boiling point - 100°C (H<sub>2</sub>O=100°C)  
Specific gravity - 1.05 ± 0.10 (H<sub>2</sub>O=1)  
State - Liquid form  
Surface area - Unknown  
Vapor pressure - 17 mmHg at 20°C  
% volatile - 88 – 91.3 %  
Solubility in water - Miscible

pH	-	6.0 – 9.5
Viscosity ( cps )	-	1.8 – 2.5 for dye-based ink ;
Surface tension	-	28.0 – 32.0 (dyne/cm)
Appearance and odor	-	Color concentrated liquid, appreciable odor

## 6 - FIRE & EXPLOSION HAZARD

Flammability classification	-	non-flammable
Flash point	-	>93°C (>93.3°C pensky martens closed cup)
Extinguishing media	-	carbon dioxide, drychemicals, and foam
Protection of fire-fighters	-	wear individual breathing apparatus
Specific hazards	-	in case of fire or explosion, do not breath the fumes

## 7 - FIRST AID MEASURES

Skin contact	-	Wash in soap and water and rinse with water
Eye contact	-	Wash immediately with water, opening eyelids. If irritation continues, see an ophtalmologist
Ingestion	-	Call a doctor in case of doubt or if symptorns persist

## 8 - REACTIVITY DATA

Stability	-	Stable materials
Hazardous polymerization	-	Will not occur

## 9 - SPILL OR LEAK PROCEDURES

Spills	-	should be contained, absorbed and placed in suitable containers for disposal in a RCRA licensed facility
Waste disposal method	-	must be disposed of as a hazardous waste, as defined by EPA's EP toxicity specifications, at a RCRA licensed facility
Container disposal	-	empty containers with less than one inch of residue may be crushed and landfilled at a licensed facility

## 10 - SPECIAL PROTECTION METHOD

Respiratory protection	-	Niosh approved vapor respirators recommended.
Ventilation	-	Local exhaust ventilation or containment recommended
Protective groves	-	Recommended
Eye protection	-	Safty glasses recommended

## 11 - TOXICOLOGICAL INFORMATION

Acute toxicity	-	LD50	=	6000 mg/kg ( ORAL RAT)
Skin irritation	-	OCDE404	:	Non irritant
Eye irritant	-	OCDE405	:	Irritant

## 12 - ECOLOGICAL INFORMATION

Possible environment impact / ecotoxicity	-	Ames test	:	Negative
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### 13 - HANDLING AND STORAGE

Handling - handling without causing dust

Storage - product is stable under normal storage condition

### 14 - TRANSPORTATION REQUIREMENTS

D.O.T. hazard classification (49 CFR 172) - None / Non-hazardous

D.O.T. labels required : None

Hazardous waste : Yes

I.A.T.A. Dangerous Goods Regulations: Non D.G.

### 15 - SPECIAL PRECAUTIONS

FDA status - this product does not have FDA approval as a food additive

Label - Xn nocive

R36/37/38

S9

S16

S25

S33

### 16 - STABILITY

Heat stability test - > 30 days at 70°C

Freeze thaw test - > 6 cycles at -20°C

Room temperature - > 2 years

### 17 - OTHER INFORMATIONS

Uses - used in desktop and wide format plotter printers

Solvent system - water

### 18 - HEAVY METAL CONTENT

Test Results:

Item	Unit	RoHS Limit	A
Lead (Pb)	mg/kg	≤1000ppm	N.D.
Cadmium(Cd)	mg/kg	≤100ppm	N.D.
Mercury(Hg)	mg/kg	≤1000ppm	N.D.
Chromium(CrVI)	mg/kg	≤1000ppm	N.D.

-N.D. =not detected (<MDL)

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**Reported by:**

Company Name : BCH Technologies

Date: 7/13/2012

Authorized Person: Wen Dai

Signature: \_\_\_\_\_