## Material Safety Data Sheet

MSDS No : 2010/03/10 DX5 - Date: 2010/03/10

## Section 1. Article and Company Identification

- Product: Xtreme Colors IJ 2000 - Cyan/Magenta/Yellow /Black/Light Cyan/Light Magenta
- Distributor: Signs International Distributor Corp. 7956 NW 14th Street - Miami, FL 33126 (305) 715 - 0017

# Section 2. Composition Information

Solvent Based Inkjet printing Fluid available in various colours such as Cyan , Magenta, Yellow , Black and other Spot colours.

XTREME COLORS

Section 3. Hazards Identification				
GHS- Labelling Hazard Symbols				
Signal Word	Warning			
Hazard Statements	May cause respiratory irritation May cause severe skin irritation May cause severe eye irritation Ingestion may be harmful or fatal			
Precautionaty Statements	Do not eat, drink or smoke when using this product. Keep away from flames and hot surfaces. Use only in a well-ventilated area Wash hands after handling Wear protective gloves and eye/face protection Wear protective gloves/clothing <b>IF INHALED:</b> Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.			

IF ON SKIN: Immediately flush skin with plenty of water for at least
15 minutes, while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.
IF ON EYE: Immediately flush eyes with plenty of water for at least
15 minutes. Call a physician.
IF SWALLOWED: Seek medical advice; and attention if stomach continues to be upset.
Store in a cool, dry place
Avoid freezing or extended storage in high temperatures Avoid exposure to moisture
Dispose of contents/container in accordance with local regulation

## Section 3. Composition/Information on ingredients

Ingredients	CAS-Nº	EINECS	Symbol	Percent
Resin	Not Hazardous Trade Secret	Not Hazardous Trade Secret	-	1% - 6%
Pigment	Trade Secret	Trade Secret	-	1% - 8%
Dipropylene Glycol Derivative	Trade Secret	Trade Secret	-	40% - 50%
Dipropylene Glycol Monomethyl Ether	34590-94-8	252-104-2	-	1% - 5%
2-Ethoxy Ethyl Ether	112-36-7	203-963-7	-	5% - 10%
y-Butyrolactone	96-48-0	202-509-5	Xn; R22/36 Warning: 3.1.O/4, 3.1.I/4, 3.3/2	10% - 20%
Ethylene Glycol Monobutyl Ether Acetate	112-07-2	203-933-3	Xn; R20/21 Warning: 3.1.D/4, 3.1.I/4	10% - 20%
Surfactant	Not Hazardous Trade Secret	Not Hazardous Trade Secret	-	0.1% - 1.0%

## Section 4. First Aid Measures

INHALATION	nhaled, remove to fresh air. If not breathing, give artificial respiration. reathing is difficult,give oxygen. Call a physician.	
SKIN CONTACT	In case of contact, immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.	
EYE CONTACT	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.	
INGESTION	If swallowed, Seek medical advice; and attention if stomach continues to be upset.	

## Section 5. Fire Fighting Measures

### Flammability

Flash point: approx. 72 °C

### Suitable extinguishing media

Water spray, CO2, dry chemical or alcohol foam.

## Extinguishing media which shall not be used for safety reasons

High volume water jet

### **Fire Fighting Instructions**

Hazardous gases/vapors produced in fire are carbon monoxide, carbon dioxide, oxides of nitrogen.Wear self-contained breathing apparatus (SCBA) and full protective equipment.

### Section 6. Accidental Release Measures

**Personal Protections:** Remove the person of the leeward. Keep away the person from periphery of the place of the leakage. Ventilate sufficiently during clean-up in case of inside of a house.

Environmental Precautions: Do not flush into surface water or sanitary sewer system.

**Method for Cleaning up:** If a spill occurs, use sponges to wipe-up ink, and then rinse area withdamp cloth. Place waste in closed container for disposal. Do not disposal of waste to the sewer.Wash hands with soap and water.

### Section 7. Precautions for Safe Handling and Storage

Handling: Use proper ventilation and no fire in work place. Put protection wear that has electrical conductivity in case of work. Keep out of reach of children and do not drink ink.

**Storage:** Store in a cool, dry place. Avoid freezing or extended storage in high temperatures. Avoid exposure to moisture.

**Specific use(s):** No information.

### Section 8. Exposure Controls and Personal Protection

Occupational exposure controls:

Components
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ACGIH: TWA

20 ppm

Ethylene Glycol Monobutyl Ether Acetate **Engineering Controls** Use only with adequate ventilation. **Personal Protective Equipment** 

### **EYE/FACE PROTECTION**

Wear safety glasses, or where splash potential exist wear chemical splash goggles.

### RESPIRATORS

Where the potential exists for airborne exposure, wear NIOSH approved respiratory protection.

### **PROTECTIVE CLOTHING**

Where there is potential for skin contact, have available and wear as appropriate impervious gloves, apron or smock.

# **Environmental exposure control**

Not established

# Section 9. Physical and Chemical Properties of the product

1	Color	Cyan	
2	Odor	Mild odor	
3	Boling point/boiling range of link	176° C or higher	
4	Melting Point/Melting Range	No data available	
5	Flash point of ink	Approx. 72 °C	
6	Auto-Ignition Temperature	Not below 220 °C	
7	Flammability (solid, gas)	Not Applicable	
8	Explosive Properties	Lower limits: 0.6 vol% Upper limits: 13.0 vol% (Diethylene glycol diethyl ether) Lower limits: 0.8 vol% Upper limits: 8.5 vol% (Ethylene Glycol Monobutyl Ether Acetate)	
9	Vapor Pressure	0.5 hPa (20 °C, Diethylene glycol diethyl ether) 0.31 hPa (20 °C, Ethylene Glycol Monobutyl Ether Acetate)	
10	Specific Gravity	1.034 +/- 0.1 (20 °C)	
11	Solubility	No data available	
12	Water solubility	Easily soluble (Diethylene glycol diethyl ether)	
13	Viscosity	4 ~ 5 cps	
14	рН	Not applicable	
15	Oxidizing properties	No data available	
16	Vapor Density	Not applicable	

The Physical and chemical data given in Section 9 are typical values for this product and are not intended to be product specifications.

## Section 10. Stability and Reactivity

**Chemical Stability** 

Stability: Stable at normal temperatures

Conditions to avoid: High and freezing temperatures

Materials to avoid: Oxidizers and explosives

**Decomposition:** Thermal decomposition may produce carbon dioxide, carbon monoxide.

### Section 11. Toxicology and Health Hazards

Routes of Overexposure: Eye, skin, inhalation, and oral ingestion

**Acute Health Hazards:** Overexposure of the eye surface to ink may be mildly irritating. Overexposure of ink contact with the skin may cause irritation and in some people, swelling and redness. Intentional inhalation to ink vapors may result in respiratory tract irritation. Intentional or accidental oral ingestion may cause an upset stomach.

Chronic Health Hazards: No information available

Mugtagenicity: No information available

**Carcinogenicity:**This product contains Ni-compound (Yellow pigment). But this Ni-compound is not listed on theIARC carcinogenicity substances lists. Also, this Ni-compound shows the negative result on AMES test.

### **Toxicity Data:**

• Diethylene Glycol Derivative : LD50/LC50: Oral, rat: LD50 = 6500 mg/kg, Dermal, rabbit: LD50 = 7070 mg/kg

• Dipropylene Glycol Monomethyl Ether: LD50/LC50: Oral, rat: LD50 = 5130 mg/kg; Dermal, rabbit: LD50 = 9500 mg/kg

• 2-Ethoxy Ethyl Ether:

LD50/LC50: Draize test, rabbit, eye: 50 mg Moderate; Oral, rat: LD50 = 4970 mg/kg; Skin, rabbit: LD50 = 6700 uL/kg.

• γ-Butyrolactone: LD50/LC50: Dermal, guinea pig: LD50 = >5 gm/kg; Draize test, rabbit, skin: 500 uL Severe; Inhalation, rat: LC50 = >5100 mg/m3/4H; Oral, mouse: LD50 = 1460 mg/kg; Oral, rat: LD50 = 1540 mg/kg. • Ethylene Glycol Monobutyl Ether Acetate: LD50/LC50: Draize test, rabbit, eye: 500 mg/24H Mild; Oral, mouse: LD50 = 3200 mg/kg; Oral, rat: LD50 = 2400 mg/kg; Skin, rabbit: LD50 = 1500 mg/kg.

## Eye Irritating:

γ-Butyrolactone: Irritating to eyes. (rabbit eyes, OECD Guideline 405) Ethylene Glycol Monobutyl Ether Acetate: Eye irritating: 500mg/24hrs (Rabbit OECD405) mild irritating.

### Skin Irritating:

Diethylene Glycol Derivative: P.I.I 2.5 (Draiza) Ethylene Glycol Monobutyl Ether Acetate: Skin irritating : 500mg/24hrs (open@ Rabbit OECD404) mild irritating.

The information shown in SECION 3, Hazards identification, is based on toxicity profiles of similar materials or on the components present in this material.

### Section 12. Ecological Information

Ecotoxicity: No data available

Mobility: No data available

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Result of PBT assessment: Has not carried out PBT assessment

**Other Adverse Effects:** Disclosure of ink and abandonment has a possibility of affecting environment. Then, cautions are required for handing. It is necessary to cope with it so that especially a product or washing water may not flow to the ground, a river, and a drain.

### Section 13. Disposal Considerations

### Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

### Section 14. Transportation Information

General: Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID

IATA Proper shipping name: Not applicable

Hazard class: Not applicable

Packaging exceptions: None

Identification number: None

(UN) Packing group: N/A

### Section 15. Regulatory Considerations

### **US Regulation:**

TSCA Section 4(a) Final Test Rules Regulated: Not regulated.

TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR): Not regulated.

TSCA Section 8(a) Inventory Update Rule: All components on TSCA INVENTORY

TSCA Section 8(d) Health and Safety Study Reporting: Not regulated.

TSCA Section 12(b) One-Time Export Notification Regulated: Not regulated.

California Proposition 65: Not regulated.

SARA TITLE III: Section 313:

**Toxic Chemical: De minimis concentration** 

Diethylene Glycol Diethyl Ether1.0 % N230Ethylene Glycol Monobutyl Ether Acetate1.0 % N230

Label element according to the Global Harmonized System (GHS).

Pictogram or symbol



Working of Risk and Safety Phase: R20/21/22: Harmful by inhalation, in contact with skin and if swallowed R36: Irritating to eyes. S24/25: Avoid contact with skin and eyes S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## Section 16. Other Information

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

This information is based upon technical information believed to be reliable. It is subject to revisionas additional knowledge and experience is gained.