

MATERIAL SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, and European Community Standards

PART I *What is the material and what do I need to know in an emergency?*

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): **UV Absorbing WATER-BASED INKS**
CHEMICAL NAME/CLASS: Glycol Based Ink
SYNONYMS: Not Applicable
PRODUCT USE: Printing Operations
U.N. NUMBER: None Allocated
U.N. DANGEROUS GOODS CLASS/SUBSIDIARY RISK: None Allocated
SUPPLIER/MANUFACTURER'S NAME: **Chemence Inc**
ADDRESS: 185 Bluegrass Valley Parkway
Alpharetta, GA 30004, U.S.A.
INFORMATION PHONE: 01-770-664-6624
EMERGENCY PHONE: (800) 424-9300 (**CHEMTREC**)
INTERNATIONAL: 1-202-483-7616

Date prepared: August 6, 2009

2. COMPOSITION and INFORMATION ON INGREDIENTS

EU LABELING AND CLASSIFICATION: This product is considered to be dangerous according to current European Community Guidelines. This product meets the definition of EU hazard class Xn (Harmful).

EU CLASSIFICATION: Xn [Harmful]

EU RISK PHRASES: [R: 22]: Harmful if swallowed.

See Section 15 for full EU classification information of product and components.

CHEMICAL NAME	CAS #	EINECS #	% w/v	EU CLASSIFICATION FOR COMPONENTS
1,3-Propanediol	504-63-2	207-997-3	0-39%	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.
Black Colorant Mixture # 1	Proprietary		0-39%	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.
Diethylene Glycol	111-46-6	203-872-2	0-28%	HAZARD CLASSIFICATION: Xn [Harmful] RISK PHRASES: R: 22
Blue Colorant Mixture # 1	Proprietary		0-25%	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.
Black Colorant Mixture # 2	Proprietary		0-13%	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.
Aliphatic Diamide Compound	57-13-6	200-289-5	3-10%	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.
Butoxy Triglycol	143-22-6	205-592-6	0-10%	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.

NOTE: ALL Canadian WHMIS required information is included in appropriate sections based on the ANSI Z400.1-1998 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. The MSDS is also prepared to include all European Union required information under EU Directives.

2. COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	EINECS #	% w/v	EU CLASSIFICATION FOR COMPONENTS
Alkanolamine Compound	Proprietary		0-8%	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.
Aliphatic Triol Compound	Proprietary		1-7%	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.
Water and other components each present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens).			Balance	HAZARD CLASSIFICATION: Not applicable. RISK PHRASES: Not applicable.

See Section 15 for full EU classification information of product and components.

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3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is a clear liquid that has a mild odor and comes in a variety of colors (black, magenta, cyan, yellow). **Health Hazards:** The primary health hazard associated with this product is the potential for moderate irritation of contaminated tissue. Inhalation of high concentration levels or prolonged inhalation and ingestion may be harmful. Ingestion of this product may be harmful or fatal in large amounts. Ingestion or inhalation may cause central nervous system effects. The ink may stain skin, eyes, other contaminated tissue, and objects. **Flammability Hazards:** This product must be substantially preheated for ignition to become a potential hazard. **Reactivity Hazards:** This product is not reactive. **Environmental Hazards:** This product may have adverse effects when released into the environment. **Emergency Recommendations:** Emergency responders must wear the personal protective equipment suitable for the situation to which they are responding.

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of occupational overexposure are inhalation and contact with skin and eyes. The symptoms of overexposure to this product, via route of entry, are as follows:

INHALATION: This product does not normally present a significant inhalation hazard under anticipated circumstances of use. Inhalation of vapors, mists, or sprays of this product may irritate the nose, throat, and other tissues of the respiratory system. Symptoms of severe overexposure, especially as may occur in poorly ventilated areas, may include central nervous system effects (e.g., headaches, dizziness, anesthesia, drowsiness, and unconsciousness), coughing, nausea, abdominal pain and vomiting. Chronic inhalation exposure may cause headache, throat irritation, low backache, and symptoms described under "Other Health Effects".

CONTACT WITH SKIN or EYES: Due to the colorants, skin contact may discolor contaminated areas. Skin contact may cause redness, pain, or itching in sensitive individuals. Repeated or prolonged skin overexposure may cause dermatitis (dry, red skin). Eye contact with this product can moderately irritate the eyes, causing pain, tearing, and redness. Because the eye tissue may be stained, vision may be temporarily blurred. There are some reports that the Alkanolamine Compound component of this product may cause allergic skin reaction in susceptible individuals. Symptoms may include dryness, redness, itching, rash or welts.

SKIN ABSORPTION: The Alkanolamine Compound component of this product is suspected to be absorbed through the skin, especially if the skin is abraded or affected by dermatitis or eczema.

INGESTION: Though not anticipated to be a significant route of occupational exposure, ingestion of large quantities of this product may cause stomach pains, nausea, vomiting, and discoloration of the mouth, teeth, and tissues of the throat. Ingestion of large quantities can cause central nervous depression, nausea, vomiting, headache, diarrhea and abdominal pain. Chronic ingestion to this product can adversely affect the kidneys and liver.

INJECTION: Accidental injection of this liquid (as may occur by a puncture with a contaminated object) will cause local pain, irritation, and redness.



HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD	(BLUE)	2
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FLAMMABILITY HAZARD	(RED)	0
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PHYSICAL HAZARD	(YELLOW)	0
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PROTECTIVE EQUIPMENT

EYES	RESPIRATORY	HANDS	BODY
	SEE SECTION 8		SEE SECTION 8

For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe * = Chronic hazard

3. HAZARD IDENTIFICATION (Continued)

OTHER HEALTH EFFECTS: In acute poisoning from products containing glycols, such as the Diethylene Glycol component of this product, there is often renal injury, albuminuria (abnormal presence of serum albumin in the urine), and hematuria (presence of blood in the urine). Other symptoms of overexposure to products that contain Glycols may include nausea, vomiting, diarrhea, prominent headache, and delayed abdominal and lower back pain, Hydropic degenerative lesions in liver and kidney, pulmonary edema, pericardial hemorrhage and distension of leptomenigeal veins, slight jaundice, progressive coma, subnormal temperature, slow pulse, and moderate leukocytosis, hemorrhages into gastrointestinal tract and lungs and bronchopneumonia, enlargement of kidneys and, pain in the kidney region may also occur. Anuria from tubular degeneration may prove fatal within few days. In general, pathology observed in human victims consists primarily of degeneration of the kidney with lesser lesions in the liver. In fatal cases polyuria, and oliguria and anuria, drowsiness, slight edema are often present. Death in practically all these cases was due to renal insufficiency, colicky pain, convulsions, kidney toxicity (oxalate crystal formation), as well as liver toxicity.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms. In the event of overexposure, the following symptoms may be observed:

ACUTE: The ink may stain hair, skin, and other contaminated tissue. Acute exposure to low concentrations of this product via skin contact, eye contact, and inhalation may irritate contaminated tissue. Inhalation of higher levels may cause significant irritation and adverse effects on the central nervous system. Ingestion of small amounts will cause nausea, vomiting, abdominal pain, and adverse effects on the central nervous system. Ingestion of large amounts may be fatal or cause kidney failure.

CHRONIC: Chronic skin exposure to this product may cause dermatitis or allergic reaction in susceptible individuals. Chronic exposure to this product can adversely affect the kidneys and liver. Refer to Section 11 (Toxicology Information) for additional data.

TARGET ORGANS: ACUTE: Skin, respiratory system, eyes, kidneys. CHRONIC: Skin, liver, kidneys, renal system.
