

# Material Safety Data Sheet

## 1. PRODUCT AND COMPANY IDENTIFICATION

**DTG Textile 2 Ink Light CYAN**

Revision date: 04/26/2005

<b>Supplier</b>	Colman & Company 5409 S. West Shore Blvd. Tampa, FL 33611
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**For non-emergency information contact:** 800-891-1094

### Emergency telephone number

Non-Emergency / Colman & Company	800-891-1094 (9am-5pm M-F, USA-EST)
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Emergency / Chemtrec	800-424-9300 (24 hours USA)
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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Acrylic polymer(s) Not Hazardous		5.0 - 8.0%
C.I. Pigment Blue 15 147-14-8		0.5 - 2.0%
Residual monomers Not Required		< 500.0PPM
Aqua ammonia 1336-21-6		<= 0.2%
Ammonium Nitrate 6484-52-2		0.1 - 2.0%
Anionic / nonionic surfactant(s) Trade Secret		1.0 - 2.0%
Pyrrolidone 616-45-5		8.0 - 10.0%
Diethylene glycol 111-46-6		11.0 - 13.0%
Water 7732-18-5		66.0 - 69.0%

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

### Appearance

Form Translucent liquid

Colour Blue-green

**Odour** ammonia

**Hazard Summary Warning!** Inhalation of

vapor or mist can cause headache, nausea and irritation of the nose, throat and lungs. Causes severe eye irritation. Prolonged or repeated overexposure to the solvent(s) in this material can cause the following: liver damage kidney damage embryofetotoxic effects

### **Potential Health Effects**

**Primary Routes of Entry:** Inhalation Eye contact Skin contact

**Eyes:** Direct contact with material can cause the following:  
severe irritation  
tearing  
reddening

**Skin:** Material can cause the following:  
slight irritation

**Ingestion:** Material is possibly harmful if swallowed. Material can cause the following:  
abdominal pain  
vomiting  
nausea  
depression  
diarrhea  
gastrointestinal irritation  
dizziness

**Inhalation:** Inhalation of solvent vapor or mist can cause the following:  
irritation of nose, throat, and lungs  
headache  
nausea

**Chronic Exposure:** Prolonged or repeated overexposure to the solvent(s) in this material can cause the following:  
kidney damage  
liver damage  
embryofetotoxic effects

**C.I. Pigment Blue 15 IRIS** Not classified.

## **4. FIRST AID MEASURES**

**Inhalation:** Move to fresh air. Give artificial respiration if breathing has stopped. Consult a physician.

**Skin contact:** Wash with water and soap as a precaution. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.

**Eye contact:** Immediately flush eye(s) with plenty of water. Get prompt medical attention.

**Ingestion:** Drink 1 or 2 glasses of water. Consult a physician. Never give anything by mouth to

an unconscious person. If vomiting occurs spontaneously, keep airway clear.

## 5. FIRE-FIGHTING MEASURES

<b>Flash point</b> Noncombustible
<b>Lower explosion limit</b> not applicable
<b>Upper explosion limit</b> not applicable
<b>Thermal decomposition</b> Combustion generates toxic fumes of the following: nitrogen oxides (NO <sub>x</sub> ), Carbon oxides

**Suitable extinguishing media:** Use the following extinguishing media when fighting fires involving this material: polar solvent (alcohol) foam water spray dry chemical carbon dioxide (CO<sub>2</sub>)

**Specific hazards during fire fighting:** Dried product can burn. Material can splatter above 100C/212F.

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus and protective suit.

**Further information:** Remain upwind.  
Avoid breathing smoke.  
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations.

If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

### Methods for cleaning up

Keep spectators away.

Floor may be slippery; use care to avoid falling.

Avoid breathing vapor.

Ventilate the area.

Contain spills immediately with inert materials (e.g., sand, earth).

Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

## 7. Handling and storage

### Handling

Keep from freezing - product stability may be affected. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep container tightly closed. Store in a cool, dry, well ventilated place.

### Storage

**Storage temperature:** 5 - 25 °C (41 - 77 °F)

**Other data:** NOTE: Formaldehyde will be generated under acidic conditions. Maintain adequate ventilation under these conditions to prevent exposure to formaldehyde above the Rohm and

Haas Co. recommended ceiling of 0.3 ppm.

**Further information:**

Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required.

Improper disposal or re-use of this container may be dangerous and illegal. Refer to applicable local, state and federal regulations.

Dispose empty container in a sanitary landfill or by incineration as allowed by state and local authorities.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure limit(s)

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value
C.I. Pigment Blue 15	NIOSH/GUIDE REL Dust and mist. 1 mg/m3		

Component	Regulation	Type of listing	Value
Aqua ammonia	DTG		
	TWA 25 ppm		
	DTG		
	STEL 35 ppm		
	ACGIH TWA 17 mg/m3 25 ppm		
	ACGIH STEL 24 mg/m3 35 ppm		
	OSHA_TRANS PEL 35 mg/m3 50 ppm		

Component	Regulation	Type of listing	Value
Pyrrolidone	DTG		
	TWA 40 ppm		
	DTG STEL 120 ppm		

Component	Regulation	Type of listing	Value
Diethylene glycol	DTG		
	TWA 84 mg/m3		

**Eye protection:** Use chemical splash goggles (ANSI Z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.

**Hand protection:** Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Neoprene gloves. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

**Skin and body protection:** Use chemically resistant apron or other impervious clothing to avoid

prolonged or repeated skin contact.

**Respiratory protection:** A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Up to 10 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Up to 1000 ppm organic vapor: Wear a properly fitted NIOSH approved (or equivalent) full-facepiece, air-purifying respirator, OR full-facepiece, airline respirator in the pressure demand mode. Above 1000 ppm organic vapor or Unknown: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode, OR full-facepiece, airline respirator in the pressure demand mode with emergency escape provision. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) organic vapor cartridges and R95 or P95 filters.

**Protective measures:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Engineering measures:** Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

<b>Form</b>	Translucent liquid
<b>Colour</b>	Blue-green
<b>Odour</b>	ammonia
<b>pH</b>	7.5 - 9.5
<b>Boiling point/range</b>	100 °C (212.00 °F) Water
<b>Melting point/range</b>	0 °C (32 °F) Water
<b>Flash point</b>	Noncombustible
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Vapour pressure</b>	17.0 mmHg at 20 °C (68.00 °F) Water
<b>Vapour pressure</b>	22.6648 Pa at 20 °C (68.00 °F) Water
<b>Relative vapour density</b>	<1.0Water
<b>Water solubility</b>	Dilutable
<b>Relative density</b>	0.95 - 1.05
<b>Viscosity, dynamic</b>	2.500 - 4.000 mPa.s
<b>Viscosity, dynamic</b>	2.500 - 4.000 mPa.s
<b>Evaporation rate</b>	<1.00 Water
<b>Percent volatility</b>	66 - 69 % water

NOTE: The physical data presented above are typical values and should not be construed as a specification.

## 10. STABILITY AND REACTIVITY

**Hazardous reactions** This material is considered stable. However, avoid temperatures above 177C/350F, the onset of polymer decomposition. Thermal decomposition is

dependent on time and temperature.

**Materials to avoid** Avoid contact with acids, alkalis and strong oxidizing agents.

**Hazardous decomposition products** Thermal decomposition may yield acrylic monomers.,  
**polymerization** Product will not undergo polymerization.

## 11. TOXICOLOGICAL INFORMATION

The following toxicological data shown are those obtained from tests on products of similar composition.

**Skin irritation** rabbit slight irritation

**Sensitization** Patch test on human volunteers did not demonstrate sensitization properties.

Component: **C.I. Pigment Blue 15**

**Acute oral toxicity** LD50 rat > 5,000 mg/kg

Component: **Aqua ammonia**

**Acute oral toxicity** LD50 rat 350 mg/kg

Component: **Aqua ammonia**

**Acute oral toxicity** LDLo human 43 mg/kg

Component: **Ammonium Nitrate**

**Acute oral toxicity** LD50 rat 2,217 mg/kg

Component: **2,2'-oxybisethanol diethylene glycol**

**Acute oral toxicity** LD50 rat 10,000 mg/kg

Component: **2,2'-oxybisethanol diethylene glycol**

**Acute dermal toxicity** LD50 rabbit 10,000 mg/kg

## 12. ECOLOGICAL INFORMATION

There is no data available for this product.

### **2,2'-oxybisethanol diethylene glycol**

#### **Ecotoxicity effects**

**Toxicity to fish** LC50 >100 mg/l

**Toxicity to aquatic invertebrates** EC50

Daphnia magna 100 mg/l

## 13. DISPOSAL CONSIDERATIONS

### **Disposal**

**Waste Classification:** When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33. The toxicity characteristic (TC), however, has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

## DOT

Not regulated for transport

## IMO/IMDG

Not regulated (Not dangerous for transport)

*Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations*

## 15. REGULATORY INFORMATION

### Workplace Classification

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

**SARA Title III: Section 311/312 Categorizations (40CFR370):** Chronic Health Hazard  
Acute Health Hazard

### SARA Title III: Section 313 Information (40CFR372)

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

### CERCLA Information (40CFR302.4)

Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

**US. Toxic Substances Control Act (TSCA)** All components of this product are produced in compliance with the require and are either listed on or are exempt from listing on the Inventory. For certain polymeric substances, the Polymer Exemption cited at 40 CFR7

### Pennsylvania

Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

### California (Proposition 65)

This product contains trace levels of a component or components known to the state of California to cause cancer:

Components: Acrylonitrile\_107-13-1

Ethyl acrylate\_140-88-5

## 16. OTHER INFORMATION

### Hazard Rating

	<b>Health Fire Reactivity</b>
<b>HMIS</b>	2* 0 0

**Legend**

ACGIH American Conference of Governmental Industrial Hygienists
BAC Butyl acetate
OSHA Occupational Safety and Health Administration
PEL Permissible Exposure Limit
STEL Short Term Exposure Limit (STEL):
TLV Threshold Limit Value
TWA Time Weighted Average (TWA):
Bar denotes a revision from prior MSDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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