



U.S. Material Safety Data Sheet

European Safety Data Sheet

MSDS Number: <b>60</b> Rev. <b>B</b>	Date: <b>November 15, 2007</b>
Product: <b>VersaPrint™ V400</b>	Page 1 of 5

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### Section 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Identifier: **V400 Black Ink Jet Ink**  
Manufacturer: TRIDENT an ITW Company  
1114 Federal Road  
Brookfield, CT 06804-1140  
Telephone: +1 203-740-9333 Fax: +1 203-740-3528  
Email: <mailto:hg@trident-itw.com>  
Emergency: Call CHEMTREC 1-800-424-9300 United States/ International 1-703-527-3887.

### Section 2: COMPOSITION/INFORMATION

Components	CAS #	% wt/wt	OSHA/ACGIH/NIOSH H PEL/TLV/REL	EU Classification 67/548/EEC
Triethylene glycol	112-27-6	40-60	N.E*	Xi, R36, 37, 38
Butoxytriglycol	143-22-6	20-30	N.E	Xi, R36, 37, 38
Solvent Black 29**	proprietary	1-5	N.E	none
Non Hazardous Components	proprietary	1-15	N.E	none

\*Not established

\*\* Trivalent chromium concentration in this complex is 5.8%. Trivalent chromium compounds usually have very low orders of toxicity, are not carcinogenic, and are not very harmful to the environment. Hexavalent chromium compounds, on the other hand, are highly toxic, usually carcinogenic, and very damaging to the environment. The trivalent chromium in this ink is safe when used as intended.

Refer to Section 16 for full text of the EU classification and R phrases

### Section 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Irritating to eyes, skin and respiratory tract. Avoid contact with eye and skin. Avoid breathing vapors.

NFPA Hazard Ratings: Health: 1 Flammability: 1 Reactivity: 0

POTENTIAL HEALTH AFFECTS:

EYE CONTACT: Can be irritating to the eye. May cause redness, and pain.  
SKIN CONTACT: Prolonged exposure may cause skin irritation  
INGESTION: May cause nausea and vomiting.  
INHALATION: May cause coughing, nausea, sore throat.  
CHRONIC: Prolonged skin contact may result in the absorption of potentially harmful amounts of material. May cause skin burns and blisters. Ingestion of very large amounts of the ink may cause reproductive problems (see section 11).

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<b>Section 4: EMERGENCY FIRST AID MEASURES</b>
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EYE CONTACT:	Do not remove contact lenses. Flush with copious amounts of water for 15 minutes. Seek medical advice immediately.
SKIN CONTACT:	Wash with soap and water. Remove contaminated clothing and launder before reuse.
INGESTION:	Swallowing less than an ounce will not cause significant harm and does not require any emergency treatment. Nothing should be administered orally to a victim who is losing consciousness, unconscious or convulsing. Do not induce vomiting for larger amounts, give one or two glasses of water to drink to a conscious patient. Seek medical advice.
INHALATION:	If exposed to excessive levels of vapor or mist, remove to fresh air. For breathing difficulty, give oxygen. If cough or other symptoms develop, seek medical advice. In any case of persistent irritation, seek medical advice.

<b>SECTION 5: FIRE FIGHTING MEASURES</b>
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FLASHPOINT AND METHOD:	>230°F (>110°C) PMCC (est.)
FLAMMABLE LIMITS:	None established.
AUTOIGNITION TEMPERATURE:	Not established
EXTINGUISHING MEDIA:	Dry chemical, Carbon dioxide, or regular foam.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear self-contained breathing apparatus and full turn-out gear. Dike liquids to prevent run-off to sewers and waterways. Collect for disposal.
UNUSUAL FIRE & EXPLOSION HAZARDS:	Frothing may occur when a solid stream of water or foam is directed into hot burning pools.
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxides of Carbon and Nitrogen.

<b>SECTION 6: ACCIDENTAL RELEASE MEASURES</b>
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GENERAL:	Wear appropriate protective clothing and equipment. Ensure disposal is in compliance with local, state and federal requirements. Notify the appropriate authorities, immediately. Take additional action as necessary to prevent and remedy the adverse effects of the spill.
SPILL:	Dike spill. Absorb with inert material and collect for disposal. Flush area with water, ensuring that none escapes into waterways.

<b>SECTION 7: HANDLING AND STORAGE</b>
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Keep away from children. Avoid contact with skin and eyes. Keep containers closed. Store in a cool [40-120°F (4-49° C)], dry place away from heat and light. Keep from freezing.

<b>SECTION 8: EXPOSURE CONTROLS &amp; PERSONAL PROTECTION</b>
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EXPOSURE LIMITS:	No published exposure limits are available.
ENGINEERING CONTROLS(ventilation):	Normal room ventilation. Use local exhaust when application produces mists or aerosols.
PERSONAL PROTECTION:	
EYE PROTECTION:	Wear chemical splash goggles or shielded safety glasses. Shower and eye wash facilities should be nearby.
SKIN PROTECTION:	Wear impervious gloves for operations where contact can occur. Vinyl disposable gloves are acceptable for limited exposures.
RESPIRATORY:	Usually not required in well ventilated area.
OTHER:	Wear proper protective clothing to limit skin contact if risk of contact is significant.

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### SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: black liquid with characteristic odor.	FLAMMABLE LIMITS: None established.
FLASHPOINT AND METHOD: >230°F PMCC (est.)	AUTOIGNITION TEMPERATURE: N.E.
VAPOR PRESSURE: <1.0 mm Hg	EVAPORATION RATE(n-butyl acetate = 1): <1.0
SPECIFIC GRAVITY: 1.09 approx.	PERCENT VOLATILES: <90% est.
SOLUBILITY: somewhat soluble	BOILING POINT: >300°F.
pH= 6.6 approx.	VAPOR DENSITY: Approximately 5.5 (est.)
MELTING/FREEZING POINT: <-10°C	VISCOSITY: approx. 58 cps @ 25°C

### SECTION 10: STABILITY & REACTIVITY

STABILITY: stable	HAZARDOUS POLYMERIZATION will not occur.
CONDITIONS TO AVOID:	N.A.
INCOMPATIBILITY:	Alkalis (caustics) at elevated temperatures, acids and strong oxidizing agents.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS: Oxides of carbon and nitrogen

### SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: This ink has not been tested for acute toxicological effects.

COMPONENTS: Triethylene glycol: Oral: LD50(rat) >16.0 g/kg  
butoxitriglycol Oral: LD50(rat) 5.3 g/kg  
Azoamine salt Oral: LD50(rat) >2g/kg Dermal LD50(rat) >2 g/kg  
No other oral toxicity data available on components of this ink.

SUBCHRONIC EFFECTS: This ink has not been tested for subchronic toxicological effects.

CHRONIC EFFECTS/CARCINOGENICITY: This ink has not been tested for chronic effects.

COMPONENTS: Rats fed 4% triethylene glycol in their diet over a period of 2 years showed no apparent effect.

COMPONENTS LISTED AS CARCINOGENS BY REGULATORY AGENCIES:  
OSHA: NONE LISTED IARC: NONE LISTED NTP: NONE LISTED.

MUTAGENICITY: This ink has not been tested for mutagenic effects.  
COMPONENTS: Solvent Black 3 Ames Test - Positive  
Hamster and mouse micronucleus - not tested  
Chinese Hamster V79GHPRT not tested

In a case like this where the Ames test was positive, but all the subsequent mammalian studies were negative, the chemical is not considered a human mutagen.

REPRODUCTIVE EFFECTS: This ink has not been tested for reproductive effects.

### SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data available for the ink.

COMPONENTS Triethylene glycol : LC50>100mg/L  
Daphnia toxicity: not tested.

CHEMICAL FATE INFORMATION: No data available for the ink

COMPONENTS: Triethylene glycol ThOD = 1.6 p/p BOD(20 day) = 0.27 p/p

Note: p/p = units of oxygen needed per unit of material. ThOD is Theoretical Oxygen Demand.  
BOD is Biological Oxygen Demand.



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<b>SECTION 16: OTHER INFORMATION.</b>
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REVISION SUMMARY: Revision B: Update of all sections to reflect the changes in composition and to comply with current regulations. 11/15/2007

EU Classification and Risk Phrases from Section 2

Xi Irritant

R36 Irritating to eyes.

R37 Irritating to skin

R38 Irritating to respiratory system

The information contained and recommended in this document is based on data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to that information.

Written by: Trident an ITW Company

Telephone: 1-203-740-9333