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MATERIAL SAFETY DATA SHEET

#1055-VSD SOLVENT
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IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to employees, customers and users of this product.

24 HOUR EMERGENCY TELEPHONE NUMBERS: DOMESTIC US/NORTH AMERICA 800-424-9300
INTERNATIONAL (OUTSIDE US): 703-527-3887

SECTION I - GENERAL INFORMATION

Product Name:	#1055-VSD SOLVENT
Generic Name:	Flexographic Ink Solvent
Chemical Family:	Glycol Ether
DOT Hazardous Materials Proper Shipping Name:	None
DOT Hazard Class:	Non-Restricted
UN/NA ID NO.:	NONE

SECTION II - COMPOSITION

Components	CAS Number	Percentage	TLV Exposure Limites
Diehtylene glycol monobutyl ether	112-34-5	100	None established.

SECTION III - PHYSICAL DATA

BOILING POINT:	Typical 225-234 °C/437-453 °F
SPECIFIC GRAVITY:	0.95 -0.96@ 20 °C/68 °F
VAPOR PRESSURE:	5.5 Pa @ 20 °C/68 °F
VAPOR DENSITY:	5.62
SOLUBILITY IN WATER:	At 20 °C/68 °F Completely Miscible
APPEARANCE:	Colorless Liquid
ODOR:	Ethereal
VOLATILE ORGANIC CARBON CONTENT:	100%

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	105 °C/221 °F (Abel)
FLAMMABLE LIMITS IN AIR:	0.9-5.9%(V)
AUTO IGNITION TEMPERATURE:	225 °C/437 °F (ASTM D-2155)
SPECIFIC HAZARDS:	Carbon monoxide may be evolved if incomplete combustion occurs. The vapor is heavier than air, spreads along the ground and distant ignition is possible.
FIRE EXTINGUISHING MEDIA:	Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.
UNSUITABLE EXTINGUISHING MEDIA:	Do not use water in a jet.
FIREFIGHTING EQUIPMENT:	Wear full protective clothing and self-contained breathing apparatus.
ADDITIONAL ADVICE:	Keep adjacent containers cool by spraying water.

SECTION V - REACTIVITY DATA

STABILITY:	Stable under normal conditions of use. Reacts with strong oxidizing agents.
CONDITIONS TO AVOID:	High Temperature. Avoid heat, sparks, open flames and other ignition sources.
INCOMPATIBILITY (MATERIALS TO AVOID):	Aluminum. Strong oxidizing materials. Acids. Strong bases. Salts of strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS:	Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal oxidative degradation.
HAZARDOUS REACTIONS:	Hygroscopic.

SECTION VI - HEALTH HAZARD DATA

SKIN CONTACT:	May cause moderate irritation to skin. Repeated exposure may cause skin dryness or cracking.
EYE CONTACT:	Irritating to eyes.
SIGNS AND SYMPTOMS:	Eye: May include a burning sensation, redness, swelling, and/or blurred vision. Skin: May include a burning sensation, redness, swelling, and/or blisters.
AGGRAVATED MEDICAL CONDITION:	Pre-existing medical conditions of the eyes may be aggravated by exposure to this material.

SECTION VII – FIRST AID MEASURES

GENERAL INFORMATION:	In general, no treatment is necessary, however, obtain medical advice.
INHALATION:	Remove to fresh air.
SKIN CONTACT:	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
EYE CONTACT:	Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Transport to nearest medical facility for additional treatment.
INGESTION:	If swallowed, do not induce vomiting; transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
ADVICE TO PHYSICIAN:	Consult a Poison Control Center for guidance.

SECTION VIII – ACCIDENTAL RELEASE MEASURES

PROTECTIVE MEASURES:	Avoid contact with spilled or released material. Immediately remove all contaminated clothing. Shut off leaks, if possible. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapor or to direct flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment. Monitor area with combustible gas indicator.
CLEAN UP METHODS:	For large liquid spills (greater than one drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. For small liquid spills (less than one drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely.

SECTION IX – HANDLING AND STORAGE

GENERAL PRECAUTIONS:	Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling.
HANDLING:	Handling temperature: Ambient.
STORAGE:	Must be kept inhibited during storage and shipment as material can polymerize. Storage temperature: Ambient.
PRODUCT TRANSFER:	Keep containers closed when not in use. Do not use compressed air for filling, discharging or handling.
RECOMMENDED MATERIALS:	For containers or container linings use mild steel, stainless steel.
UNSUITABLE MATERIALS:	Aluminum
CONTAINER ADVICE:	Do not cut, drill, grind, weld or perform similar operations on or near containers.
ADDITIONAL ADVICE:	Glycol ethers can be peroxide formers.

SECTION X – EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:	Select respiratory protection equipment suitable for specific conditions of use and meeting relevant legislation.
HAND PROTECTION:	Longer term: PVC, Nitrile rubber.
EYE PROTECTION:	Chemical splash goggles.
PROTECTION CLOTHING:	Use protective clothing and safety shoes which are chemical resistant to this material.

SECTION XI – TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY:	Low toxicity: LD50>2000 mg/kg, Rat
ACUTE DERMAL TOXICITY:	Low toxicity: LD50>2000 mg/kg, Rabbit
ACUTE INHALATION TOXICITY:	Low toxicity: LD50> near saturated vapor concentraion./1 hours, Rat.
SKIN IRRITATION:	Prolonged/repeated contact may cause defatting of skin which can lead to dermatitis.
EYE IRRITATION:	Irritant.
SENSITIZATION:	Not a skin sensitizer.
REPEATED DOSE TOXICITY:	Blood: causes haemolysis of red blood cells and/or anemia in animals but not considered relevant for humans.
MUTAGENICITY:	Not mutagenic.

SECTION XI - REGULATORY INFORMATION

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372.		
CHEMICAL	CAS NUMBER	CONCENTRATION % PER GALLON
None		

DISCLAIMER OF LIABILITY

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