



160 Fenmar Drive
Toronto, Ontario M9L 1M6

HMIS RATING

Health *1
 Flammability 2
 Reactivity 0

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION AND USE

PRODUCT NAME: TYV-1010, 1020, 1040, 1050, 1060, 1140, 1220, 1240, 1250, 1300, 1320, 1340, 1420, 1450, 1480, 2250, 2350

PRODUCT USE: SCREEN PRINTING INK

EMERGENCY TELEPHONE NO: (613)996-6666

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%	CAS NUMBER	LD50 OF INGREDIENT (SPECIFY SPECIES & ROUTE)	LC50 (SPECIFY SPECIES)
DIACETONE ALCOHOL	30-60	123-42-2	4000 mg/kg rat oral	> 1500 ppm rat inhalation
ETHYLENE GLYCOL MONOPROPYL ETHER (GLYCOL ETHER EP)	10-30	2807-30-9	3100 mg/kg rat oral	1530 ppm mouse inhalation.
2-BUTOXY ETHANOL (BUTYL CELLOSOLVE)	10-20	111-76-2	470 mg/kg rat oral	450 ppm rat inhalation
LIGHT AROMATIC SOLVENT NAPHTHA	5-15	64742-95-6	8400 mg/kg rat oral	> 18,000 ppm rat inhalation
LEAD CHROMATE	10-30	7057-97-6	5000 mg/kg rat oral	Not available
LEAD SULPHATE	1-5	7748-14-2	2000 mg / kg rat oral	Not available

SECTION III - PHYSICAL DATA

PHYSICAL STATE VISCIOUS LIQUID	ODOR AND APPEARANCE MILD ODOR, VARIOUS COLOR	ODOR THRESHOLD (PPM) NOT AVAILABLE	VAPOR PRESSURE (mmHg) NOT AVAILABLE
VAPOR DENSITY HEAVIER THAN AIR	EVAPORATION RATE NOT AVAILABLE	BOILING PT (°C) > 145	
FREEZING PT. (°C) NOT AVAILABLE	SPECIFIC GRAVITY 0.98 – 1.30	COEFFI. WATER/ OIL DIST. NOT AVAILABLE	PH NOT AVAILABLE

SECTION IV - FIRE AND EXPLOSION DATA

FLAMMABILITY COMBUSTIBLE	CONDITIONS OF FLAMMABILITY HEAT, SPARKS AND OPEN FLAMES	EXTINGUISHING MEDIA DRY CHEMICAL, ALCOHOL FOAM, WATER FOG
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SPECIAL PROCEDURE: FIREFIGHTERS SHOULD WEAR ADEQUATE PROTECTIVE GEAR. SELF CONTAINED BREATHING APPARATUS REQUIRED. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINER.

AUTOIGNITION TEMP. (°C) NOT AVAILABLE	FLASH PT (°C) CLOSED CUP 52.0°C	LOWER FLAMMABLE LIMIT(% VOL) 1.2%	UPPER FLAMMABLE LIMIT (%VOL) 8.3%
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EXPLOSION DATA: SENSITIVITY TO STATIC DISCHARGE: NOT SENSITIVE
 SENSITIVITY TO MECHANICAL : NOT SENSITIVE

HAZARDOUS COMBUSTION PRODUCTS: CARBON MONOXIDE (CO), NITROGEN OXIDE (NO).

SECTION V - ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Remove all sources of ignition. Heat, flames and sparks. Ventilate the area. Avoid breathing dust or vapor. Avoid contact with skin, eyes and clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Methods for Cleaning Up:	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not use sparking tools.
Environmental Precautions:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION VI - HANDLING AND STORAGE

Handling:	Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Remove and wash contaminated clothing before re-use. Discard contaminated shoes. When using do not smoke. Take notice of labels and material safety data sheets for the working chemicals. Do not take internally. Harmful or fatal if swallowed.
Storage:	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep out of the reach of children. Keep away from heat and sources of ignition. Take notice of the directions of use on the label.

SECTION VII - STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat, flames and sparks.
Incompatible Products:	Strong acids. Strong bases. Strong oxidizing agents. Reducing agents.
Hazardous Decomposition Products:	Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO ₂). Carbon monoxide
Possibility of Hazardous Reactions:	None under normal processing

SECTION VIII - TOXICOLOGICAL INFORMATION

Sensitization:	No information available
Mutagenic Effects:	No information available
Reproductive Effects:	No information available
Developmental Effects:	No information available
Teratogenicity:	No information available
Chronic Effects:	Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effect, such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system.

SECTION IX - PREVENTIVE MEASURES

Engineering Measures:	Use only with adequate ventilation. Use ventilation adequate to keep exposures below recommended exposure limits. See MSDS. In case of insufficient ventilation, wear suitable respiratory equipment.
<u>Personal Protective Equipment:</u>	
Respiratory Protection:	Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Respirator with a vapor filter.
Eye Protection:	Ensure that eyewash stations and safety showers are close to the workstation location. Avoid contact with eyes. Safety glasses with side-shields. Goggles. Face-shield.
Skin Protection:	Wear protective gloves/clothing. Solvent-resistant apron and boots.
General Hygiene Considerations:	Handle in accordance with good industrial hygiene and safety practice. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before eating, drinking, or smoking. Remove and wash contaminated clothing before re-use. Regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection.
Waste Disposal:	Dispose of waste only on approved treatment facility.
Handling Procedures and Equipment:	Group and bond all equipment and containers. Use spark resistant tools. Smoking or eating should not be allowed before washing hands.
Storage Equipment:	Store in cool, ventilated area. Keep away from heat, sparks, and other sources of ignition.
Special Shipping Information:	Refer to local or federal regulation.

SECTION X - FIRST AID MEASURES

Specific Measures:

Eye:	Wash immediately with plenty of water for at least 15 minutes and get medical aid.
Skin:	Immediately wash the affected areas with plenty of soap and water. Get medical aid if symptoms persist. Remove contaminated clothing.
Ingestion:	Give two glasses of water to drink if patient is conscious. Do not induce vomiting. Get medical and immediately.
Inhalation:	Move patient to fresh air. Restore breathing if necessary. Keep patient warm and quiet and get medical aid.

SECTION XI - PREPARATION DATE OF MSDS

Prepared By:	Technical Department
Phone Number:	(416) 743 – 4111
Date:	05/01/2011
