



# MATERIAL SAFETY DATA SHEET

## 1 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**Trade Name** INK TYPE B/GL NT  
**MSDS Number** 359  
**Supplier** ITW TRANS TECH  
475 N. GARY AVENUE  
CAROL STREAM, IL 60188 USA

**Telephone Numbers - 24 Hour Emergency Assistance**  
Emergency (352)323-3500

**Telephone Numbers - General Assistance**  
Information (630)752-4000

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	Concentration	Exposure Limits / Health Hazards
CYCLOHEXANONE	108-94-1	5 - 10 %	ACGIH TLV: 100 mg/m3
4-HYDROXY-4-METHYLPENTAN-2-ONE	123-42-2	5 - 10 %	240 mg/m3
BUTYLGLYCOLATE	7397-62-8	5 - 10 %	ND
SOLVENT NAPHTHA, heave arom.	64742-94-5	5 - 10 %	100 mg/m3
*1,2,4-TRIMETHYLBENZENE	95-63-6	1 - 5 %	ACGIH TLV: 123 mg/m3
BISPHENOL-A (EPICHLORHYDRIN) ReactionProduct	25068-38-6	50 - 75 %	n.av.

## 3 HAZARDS IDENTIFICATION

### Potential Health Effects, Skin

Prolonged skin contact may lead to extraction of natural oils, with resultant dry skin, cracking, irritation and dermatitis.

### Potential Health Effects, Eye

Eye contact with liquid or vapor causes severe irritation, redness, tearing, blurred vision.

### Potential Health Effects, Inhalation

Excessive vapor concentration in air, especially in confined spaces, may cause asphyxiation. Excessive inhalation of vapors can cause nasal, throat and respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

### Potential Health Effects, Ingestion

Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### Signs & Symptoms of Short-Term (Acute) Exposure

Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

### Effects of Long-Term (Chronic) Exposure

Health studies have shown that many solvents pose potential human health risks which may vary from person to person.

As a precaution, exposure to liquids and vapors should be minimized.

-Prolonged or continuous inhalation of vapors may result in delayed lung damage.

-Repeated or prolonged inhalation of vapor may cause liver and kidney damage.

-Repeated inhalation of vapor in high concentration can change the blood picture.

## 4 FIRST AID MEASURES

### Skin

Wash skin with plenty of soap and water. DO NOT use solvents or thinners.

### Eye

Remove contact lenses, keep eyelids open. Flush with plenty of water (10-15 minutes). Call a physician.

### Inhalation

Take the casualty into the fresh air and keep warm. Irregular breathing/no breathing: artificial respiration. Call a physician.

### Ingestion

Do not induce vomiting. Call a physician. Keep at rest.

### Medical Conditions Aggravated by Exposure

ND

## 5 FIRE FIGHTING MEASURES

### Extinguishing Media

Suitable: alcohol resistant foam, CO<sub>2</sub>, powders, water spray.

Not suitable: water jet

### Basic Fire Fighting Procedures

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required.

### Unusual Fire & Explosion Hazards

Cool endangered containers with water in case of fire. Do not allow the quenching water into the sewage system.

**Flash Point** 43 °C

**Flammability Limits in Air, Lower, % by Volume** 0.6

**Flammability Limits in Air, Upper, % by Volume** 10

## 6 ACCIDENTAL RELEASE MEASURES

### Emergency Action

Remove sources of ignition. Ventilate area.

### Environmental Precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewer systems, inform appropriate authorities in accordance with local regulations.

### Spill or Leak Procedure

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations. Clean preferably with a detergent. Avoid use of solvents.

## 7 HANDLING & STORAGE

### Handling

Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Comply with the health and safety at work laws.

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Preparation may change electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used.

### Storage

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. Always keep in containers of same material as the original one. Avoid heating and direct sunlight.

### Ventilation

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient in maintaining concentrations of particles and solvent vapor below the OEL, suitable respiratory protection must be worn.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Eye Protection: Personal Protection Equipments (PPE)

Wear safety glasses.

### Skin Protection: Personal Protection Equipments (PPE)

Use protective gloves. After washing hands replace lost skin fat by bat containing skin creams.

Personal should wear anti static clothings made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact.

### Respiratory Protection: Personal Protection Equipments (PPE)

If workplace limits are exceeded, a gas mask approved for this particular job must be worn.

### General

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Unconsciousness: Lateral position - call a physician.

## 9 PHYSICAL & CHEMICAL PROPERTIES

### Odor and Appearance

Colored paste with odor of organic solvent

<b>Boiling Point</b>	153 - 200 °C
<b>Specific Gravity</b>	1.1 - 1.6
<b>Melting Point</b>	n.a.
<b>Percent Volatile</b>	29 - 36 %
<b>Vapor Pressure</b>	4.5 app.
<b>Evaporation Rate</b>	n.a.
<b>Vapor Density</b>	> 1
<b>Solubility In Water</b>	no

## 10 STABILITY & REACTIVITY

### Stability/Incompatibility

Stable under recommended storage and handling conditions

Materials to Avoid: Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

### Hazardous Reactions/Decomposition Products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

### Hazardous Polymerization

none.

## 11 TOXICOLOGICAL INFORMATION

### Routes of Exposure

Inhalation, ingestion, skin and eye contact.

## 12 ECOLOGICAL INFORMATION

### EcoToxicological Information

If the product contaminates lakes, rivers or sewer systems, inform appropriate authorities in accordance with local regulations.

## 13 DISPOSAL CONSIDERATIONS

### Waste Disposal

Dispose of in accordance with federal, state, and local pollution control requirements.

## 14 TRANSPORT INFORMATION

### Department of Transportation (DOT) Requirements:

#### General Transportation Information for Bulk Shipments

Proper Shipping Name	Printing Ink	UN/NA Code	1263
Hazard Class	3		
Packaging Group	Class III		
Labels Required	Flammable Liquid		

## 15 REGULATORY INFORMATION

### NFPA Ratings

Health	Flammability	Reactivity	Special Hazards
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### HMIS Ratings

Health 2	Flammability 2	Reactivity 1	Personal Prot. Equip. C
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## 16 OTHER INFORMATION

### Disclaimer

The details in this material safety data sheet satisfy national legislation. However, we have no knowledge or control over the individual user's working conditions. The product may not be used for any purpose other than that specified in the product data sheet unless written consent has been obtained.

Completed On	6/12/2008	Replaces Sheet Dated	8/13/2007
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Completed By