

Material Safety Data Sheet

Issuing Date March 27, 2012

1. PRODUCT AND COMPANY IDENTIFICATION

| Product Name | ColorBond UV Ink Red |
|-----------------|---------------------------------------|
| Product Code(s) | D-831-0026 (Revision 1) |
| Recommended Use | lnk. |
| Distributor: | ITW Trans Tech |
| | 475 N. Gary Ave |
| | Carol Stream, IL 60188 |
| | General Assistance PH: (630) 752-4000 |

Emergency Telephone Number: 24 hour emergency PH: (352) 323-3500

| 2. HAZARDS IDENTIFICATION | | | | | |
|---|---|------------------|--|--|--|
| WARNING! Appearance Red | Physical State Liquid | Odor Slight | | | |
| OSHA Regulatory Status | This material is considered hazardous by the OSHA Hazard Communication SCFR 1910.1200). | Standard (29 | | | |
| Potential Health Effects Principle Routes of Exposure | Eye contact, Skin contact, Inhalation, Ingestion. | | | | |
| Acute Toxicity Eyes Skin Inhalation Ingestion | Irritating to eyes. Avoid contact with eyes May cause sensitization by skin contact. Irritating to skin. Avoid contact with Irritating to respiratory system. May be harmful if inhaled. May be harmful if swallowed. Do not taste or swallow. | skin. | | | |
| Chronic Effects Aggravated Medical Conditions | Skin disorders. Gastrointestinal track. Preexisting eye disorders. Respiratory | disorders. | | | |
| Environmental Hazard | Toxic to aquatic organisms, may cause long-term adverse effects in the aqua | tic environment. | | | |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % |
|---|-------------|----------|
| Tripropylene glycol diacrylate | 42978-66-5 | 25 - 50 |
| Propylene carbonate | 108-32-7 | 1 - 25 |
| Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)- | 162881-26-7 | 0.1 - <1 |

Additional Notes

Remaining components are either not hazardous or below threshold limits.

4. FIRST AID MEASURES

| Eye Contact | In case of accidental skin or eye contact, avoid exposure to ultra-violet light. Seek |
|--------------------|--|
| | immediate medical attention/advice. Rinse immediately with plenty of water, also under the |
| | eyelids, for at least 15 minutes. |
| Skin Contact | Wash off immediately with soap and plenty of water for at least 15 minutes while removing |
| | all contaminated clothing and shoes. Consult a physician if necessary. |
| Inhalation | Move to fresh air in case of accidental inhalation of vapors. Consult a physician. |
| Ingestion | Rinse mouth with water and afterwards drink plenty of water or milk. Consult a physician. |
| - | Do NOT induce vomiting. |
| Notes to Physician | Eye Contact - Emergency Medical Treatment Procedures: |
| - | Some photoinitiators cure in the near UV and visible light range. |
| | Keep overhead lighting OFF as a precaution. Flush eyes for an |
| | additional 15-30 minutes prior to examination under light. DO NOT |
| | use UV light with fluorescent stain to examine injured eye without |
| | copious irrigation of the eve. |

5. FIRE-FIGHTING MEASURES

| Explosion Data NFPA | Health Hazard 2 | Flammability 1 | Stability 2 | Physical and Chemical Hazards - |
|--------------------------|-----------------|--|-------------|--|
| Suitable Extinguishing N | | ay. Carbon dioxide (CO ₂) ntil well after fire is out. Us | , | Cool containers with flooding quantities |
| Flash Point | > 95 °C | | | |

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

7. HANDLING AND STORAGE

Handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Refer to Section 8.

Storage Keep away from open flames, hot surfaces and sources of ignition. Keep tightly closed in a dry and cool place. Keep away from heat. Keep away from direct sunlight. Store at ambient conditions. Keep away from amines. Avoid contamination from any source, including metals, dust and organic material. Use with adequate ventilation. Keep away from copper, copper alloys. Do not store or mix with strong acids or alkali. Do not store near strong oxidizing chemicals. Violent polymerization may occur at elevated temperatures. It is best to avoid energy sources such as heat, light, gamma or X-rays during transportation and storage. Overexposure to these types of energy may cause pre-mature gellation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|-----------|----------|------------|
| Tripropylene glycol diacrylate 42978-66-5 | | | |
| Propylene carbonate 108-32-7 | | | |
| Phosphine oxide,phenylbis (2,4,6-trimethylbenzoyl)- 162881-26-7 | | | |

Engineering Measures

Process enclosure and/or ventilation systems.

Personal Protective Equipment Hygiene Measures

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance Physical State | Red Liquid | Odor | Slight |
|--------------------------------------|---|----------------------------|--------------------------|
| Flash Point Boiling Point/Range | > 95 °C No information available | Autoignition Temperature | >200 |
| 0 | | Flammability Limits in Air | No information available |
| Explosion Limits Specific Gravity | No information available | Solubility | No information available |
| Evaporation Rate Vapor Density | No information available No information available. | Vapor Pressure | No information available |

10. STABILITY AND REACTIVITY

Conditions to Avoid

Heat, flames and sparks.

Hazardous Decomposition Products Carbon oxides. Sulfur oxides.

Hazardous Polymerization

Hazardous polymerization may occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------------------|-------------------|----------------------|-----------------|
| Tripropylene glycol diacrylate | 3000 mg/kg (Rat) | 2 g/kg (Rabbit) | |
| Propylene carbonate | 29000 mg/kg (Rat) | 20000 mg/kg (Rabbit) | |

Chronic Toxicity

Target Organ Effects

Respiratory System

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not established.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Microtox | Daphnia Magna (Water Flea) |
|-----------------------------------|---------------------|--|--------------------------|-------------------------------|
| Tripropylene glycol diacrylate | EC50 > 28 mg/L 72 h | LC50 4.5-10 mg/L Leuciscus idus 96 h | EC50 > 10000 mg/L 30 min | = 88.7 mg/L EC50 |
| Propylene carbonate | | LC50= 5300 mg/L Leuciscus idus 96 h LC50> 1000 mg/L Cyprinus carpio 96 h | | > 500 mg/L EC50 |

Persistence and Degradability

No information available.

| Chemical Name | Log Pow |
|---------------------|--------------|
| Propylene carbonate | = 0.48 25 °C |

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOTNot regulatedIATANot regulatedIMDG/IMONot regulated

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL | EINECS/ELI NCS | ENCS | IECSC | KECL | PICCS | AICS | NZIOC |
|--|---------|-----|-------------------|--------------------|-------|----------|-------|------|-------|
| Tripropylene glycol diacrylate - 42978-66-5 | Present | Х | X | (7)-152 | Х | KE-23937 | Х | Х | Х |
| Propylene carbonate - 108-32-7 | Present | х | Х | (5)-524 (7)-737 | х | KE-23785 | Х | Х | х |
| Phosphine oxide, phenylbis(2,4,6-trime thylbenzoyl) 162881-26-7 | Ρ | Х | Х | (3)-4445 | Х | 97-3-613 | | Х | Х |

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

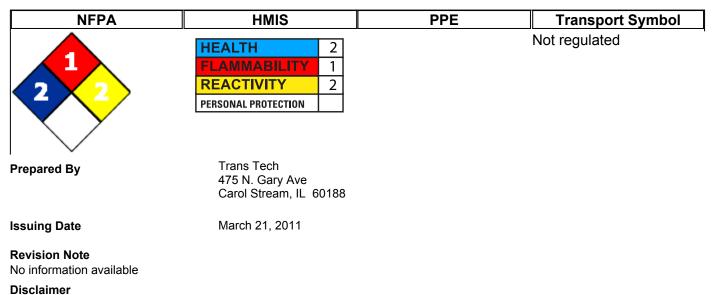
| SARA 311/312 Hazard Categories | |
|-----------------------------------|----|
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |
| Clean Water Act | |

| Chemical Name | CAS-No | Weight % | HAPS data | VOC Chemicals | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---------------------|----------|----------|-----------|---------------|----------------------------|----------------------------|
| Propylene carbonate | 108-32-7 | 1 - 15 | | Group V | | |

CERCLA

U.S. State Regulations California Proposition 65 This product contains the following Proposition 65 chemicals International Regulations Mexico - Grade No information available. Canada

16. OTHER INFORMATION



This product is intended to be used as a printing fluid. The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS

