

# Material Safety Data Sheet

## Hazardous Materials Information System (HMIS) Ratings

Health = 2

Flammability = 1

Reactivity = 1

Protective Equipment = C

Revision Date 03/27/2012

Version 1 . 1

### Section 1. Chemical product and company identification

**Material Description :** ColorBond UV FBM R3 Ink - Black (1Ltr)

**Manufacturer Name :** ITW Trans Tech

**Manufacturer Address :** 475 North Gary Ave., Carol Stream, IL 60148

**24 Hour Emergency Phone :** (352) 323- 3500

**General Assistance Phone:** (630) 752-4000

### Section 2. Hazards Identification

**Physical state :** liquid

**OHSA/HCS Classification :** Irritating material, Sensitizing material

**Emergency overview :** WARNING! CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED. May be harmful if absorbed through skin or if swallowed.

Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

#### Potential acute health effects

**Skin contact :** Harmful in contact with skin. Irritating to skin. May cause sensitization by skin contact.

**Inhalation :** Irritating to respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Ingestion :** Harmful if swallowed.

#### Potential chronic health effects

**Chronic effects :** Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity :** Contains IARC 2B classified carbon black. IARC classifies carbon black as a 2B carcinogen based rat inhalation tests performed on high dust exposures. IARC concluded that "there is inadequate evidence in humans for the carcinogenicity of carbon black". There is no human dust exposure to carbon black when using a finished ink product containing carbon black.

**Mutagenicity :** No known significant effects or critical hazards.

**Teratogenicity :** No known significant effects or critical hazards.

**Fertility effects :** No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye/face :** Adverse symptoms may include the following: pain or irritation watering redness

**Skin :** Adverse symptoms may include the following: irritation redness

**Inhalation :** Adverse symptoms may include the following: respiratory tract irritation coughing

**Ingestion :** No specific data.

**Medical conditions aggravated by over-exposure:** Pre-existing skin disorders may be aggravated by over-exposure to this product.

### Section 3. Composition / Information on Hazardous Ingredients

Chemical name	CAS #	Weight %
Multi-functional Monomer		30.0000 - 60.0000
Monofunctional Monomer		15.0000 - 40.0000
Monofunctional Monomer		
Date of issue 4/19/2012 Specification 000000208979		1 of 5

		10.0000 - 30.0000
1-Vinylhexahydro-2H-azepin-2-one	2235-00-9	3.0000 - 7.0000
Diacrylate Oligomer		3.0000 - 7.0000
Carbon Black	1333-86-4	1.0000 - 5.0000
Amine Modified Acrylate Oligomer		1.0000 - 5.0000
Diacrylate Monomer		1.0000 - 5.0000
bis(2-ethylhexyl) maleate	142-16-5	1.0000 - 5.0000

#### Section 4. First aid measures

**Eye contact:** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

**Skin contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

**Inhalation:** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Ingestion:** Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Notes to physician:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

#### Section 5. Fire-fighting measures

**Flash point:** Not Measured. Material is not expected to flash.

**Fire hazard:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Extinguishing media (Suitable) :** Use an extinguishing agent suitable for the surrounding fire.

**Extinguishing media (Not suitable) :** None known.

**Hazardous combustion products :** Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides

#### Section 6. Accidental release measures

**Personal precautions :** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Environmental precautions :** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Large spill :** Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

**Small spill :** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

**Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

**Monitoring methods and references** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### Carbon Black

ACGIH TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level	3.5 mg/m <sup>3</sup>
OSHA PEL: Permissible Exposure Level	3.5 mg/m <sup>3</sup>
NIOSH Time Weighted Average (TWA)	3.5 mg/m <sup>3</sup>
NIOSH Time Weighted Average (TWA)	

### Protective Equipment

**Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

**Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Section 9. Physical and chemical properties

<b>State of Matter</b>	liquid
<b>Color</b>	Black.
<b>Density</b>	1.004 g/cm <sup>3</sup> 8.37 lb/gal 1004 g/l
<b>Flash point</b>	Not Measured. Material is not expected to flash.

Date of issue [4/19/2012](#)

[Specification](#) 00000208979

3 of 5

<b>Boiling point</b>	Not determined.	
<b>Freezing point</b>	Not determined.	
<b>Volatile.</b>	14.71 %(m) Weight %	16.61 %(V) Volume %
<b>VOC %</b>	0.01 %(m) Weight %	0.01 %(V) Volume %
<b>Coating VOC</b>	0 lb/gal	0 g/l

## Section 10. Stability and reactivity

**Stability** : The product is stable.

**Conditions to avoid** : No specific data.

**Materials to avoid** : No specific data.

**Decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

Chemical name Test	Species	Dose	Exposure
<b>Multi-functional Monomer</b> Oral Toxicity dataLD50	Rat	4,890 mg/kg	
<b>Carbon Black</b> Oral Toxicity dataLD50	Rat	> 15,400 mg/kg	
<b>Carbon Black</b> Oral Toxicity dataLD50	Rat	> 15,400 mg/kg	
<b>Diacrylate Monomer</b> Oral Toxicity dataLD50	Rat	5,000 mg/kg	
<b>bis(2-ethylhexyl) maleate</b> Oral Toxicity dataLD50	Rat	14,000 mg/kg	

## Section 12. Ecological information

**Environmental effects** : No known significant effects or critical hazards.

**Fate and pathway** : No known significant effects or critical hazards.

Aquatic ecotoxicity				
Chemical name	Test	Result	Species	Exposure

## Section 13. Disposal considerations

**Disposal considerations** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

Regulatory information	Proper shipping name	UN - Number	Hazard classification	Packing group	Additional information
DOT Classification	Not Restricted.	-		-	
ADN/ADNR	Not Restricted.	-		-	
ADR	Not Restricted.	-		-	
IATA	Not Restricted.	-		-	
IMDG	Not Restricted.	-		-	

## Section 15. Regulatory information

Date of issue <a href="#">4/19/2012</a>	4 of 5
<a href="#">Specification</a> 000000208979	

**International regulations****Australia inventory (AICS)** : Not determined.**China inventory (IECSC)** : Not determined.**Japan inventory (ENCSC)** : Not determined.**Japan inventory (ISHL)** : Not determined.**Korea inventory (KECI)** : Not determined.**New Zealand Inventory of Chemicals (NZIoC)** : Not determined.**Philippines inventory (PICCS)** : Not determined.**Canada. Canadian Environmental Protection Act, 1999 Part 5 Sec. 66 (1)** : Not determined.**US. Toxic Substances Control Act as amended 15 U.S.C. 2606 Sec. 8 (b)** : All components are listed or exempted.**United States Regulation****SARA 302/304/311/312 extremely hazardous substances**

No products were found.

**SARA 302/304 emergency planning and notification**

No products were found.

**SARA 302/304/311/312 hazardous chemicals**

No products were found.

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification**

Multi-functional Monomer : Monofunctional Monomer : Monofunctional Monomer : Diacrylate

Oligomer : Isopropylthioxanthone Isomers : Carbon Black : 1333-86-4 Amine Modified Acrylate

Oligomer :

**SARA 313 - Form R - Reporting requirements**

Monofunctional Monomer :

**SARA 313 - Supplier Notification**

Monofunctional Monomer :

**California Prop. 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Toluene : 108-88-3

**HAP (if present above 0.1% by weight)****CASRN****Weight %****Density (lb/gal)**

Monofunctional Monomer

18.4668

8.33 lb/gal

**Section 16. Other information**

Disclaimer: The information provided herein is presented in good faith and complies with the OSHA Hazard Communication Standard, 29 CFR 1910.1200 (g). Nothing contained herein constitutes a specification nor does it guarantee warranty for said product.

Date of issue [4/19/2012](#)  
[Specification](#) 000000208979

5 of 5

**Trusted Partner for Your Product Decorating Needs**

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