

SAFETY DATA SHEET

1. Identification

Product identifier	Castin' Craft Transparent Dye (Red, Blue, Green, Amber, Yellow)		
Other means of identification			
SDS number			
Product code	46428, 46438, 46432, 46430, 46436, 00525		
Recommended use	Coloring agent for Casting Resin, Castin Epoxy, and Epoxy Resin.		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/Distributor information			
Company name	Environmental Technology, Inc.		
Address	300 S. Bay Depot Road Fields Landing CA 95537		
Telephone	Telephone number	707-443-9323	
E-mail	mail@eti-usa.com		
Contact person	Technical Director		
Emergency phone number	CHEMTREC	800-424-9300	

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 4
Health hazards	Serious eye damage/eye irritation	Category 2B
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Warning
Hazard statement	Combustible liquid. Causes eye irritation.
Precautionary statement	
Prevention	Keep away from flames and hot surfaces. - No smoking. Wash thoroughly after handling. Wear protective gloves/eye protection.
Response	In case of fire: Use appropriate media for extinction. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Storage	Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Prolonged contact may cause dryness of the skin. Static Accumulating Liquid.
Supplemental information	
Not applicable.	

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Dipropylene glycol monomethyl ether	Proprietary	>50%
Acetone	67-64-1	<5%

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Copper Compound

Proprietary

<0.5%

The identities of the materials in this product are withheld as a trade secret (29CFR1910.1210(i)) and are available to a physician or paramedical personnel in an emergency situation.

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Move into fresh air and keep at rest. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

Skin contact Wash off with soap and water. Get medical attention if irritation develops or persists.

Eye contact Immediately flush with plenty of water for up to 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Do not induce vomiting. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Irritation of eyes and mucous membranes. Exposed individuals may experience eye tearing, redness, and discomfort. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Respiratory tract irritation. Defats the skin.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. First aid personnel must be aware of own risk during rescue.

5. Fire-fighting measures

Suitable extinguishing media Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. Take precautionary measures against static discharge. Static charges generated by emptying package in or near flammable vapor may cause flash fire. During fire, gases hazardous to health may be formed. Carbon oxides. Hydrocarbons.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Vapors are heavier than air and may spread near ground to sources of ignition. Move container from fire area if it can be done without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Vapors are heavier than air and may spread near ground to sources of ignition.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective clothing as described in Section 8 of this safety data sheet. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Ensure adequate ventilation. Avoid inhalation of vapors or mists. Avoid contact with skin and eyes. Keep unnecessary personnel away. Keep out of low areas. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Keep unnecessary personnel away. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see Section 13 of the SDS.

Environmental precautions Never return spills in original containers for re-use. Avoid discharge into storm drains, water courses or onto the ground.

7. Handling and storage**Precautions for safe handling**

Keep away from open flames, hot surfaces and sources of ignition. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. Take measures to prevent the build up of electrostatic charge. Bonding and grounding may be insufficient to eliminate the hazard from static-accumulating flammable liquids. See NFPA 77, Recommended Practice on Static Electricity (2007), for additional information. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Conditions for safe storage, including any incompatibilities

Follow rules for combustible liquids. Store locked up. Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Ground container and transfer equipment to eliminate static electric sparks.

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	PEL	2400 mg/m3	
Copper Compound (CAS Proprietary)	PEL	1000 ppm	Dust and mist.
		1 mg/m3	
Dipropylene glycol monomethyl ether (CAS Proprietary)	PEL	0.1 mg/m3	Fume.
		600 mg/m3	
		100 ppm	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Copper Compound (CAS Proprietary)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	
Dipropylene glycol monomethyl ether (CAS Proprietary)	STEL	150 ppm	Fume.
	TWA	100 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	590 mg/m3	Dust and mist.
		250 ppm	
Copper Compound (CAS Proprietary)	TWA	1 mg/m3	Dust and mist.
		900 mg/m3	
Dipropylene glycol monomethyl ether (CAS Proprietary)	STEL	150 ppm	Fume.
		600 mg/m3	
	TWA	100 ppm	

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines**US - California OELs: Skin designation**

Dipropylene glycol monomethyl ether (CAS Proprietary) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

Dipropylene glycol monomethyl ether (CAS Proprietary) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Dipropylene glycol monomethyl ether (CAS Proprietary) Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Dipropylene glycol monomethyl ether (CAS Proprietary) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Dipropylene glycol monomethyl ether (CAS Proprietary) Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide adequate ventilation and minimize the risk of inhalation of vapors. Provide easy access to water supply and eye wash facilities. Use explosion-proof equipment.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields or goggles.

Skin protection**Hand protection**

Chemical resistant gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Other

Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves.

Respiratory protection

No protection is ordinarily required with adequate ventilation. Use an organic vapor respirator for concentrations exceeding the Occupational Exposure Limit.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Clear liquid.

Physical state

Liquid.

Form

Liquid.

Color

Various.

Odor

Ether-like.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

374 °F (190 °C)

Flash point

185.0 °F (85.0 °C) Closed Cup

Evaporation rate

Not available.

Flammability (solid, gas)

Combustible.

Upper/lower flammability or explosive limits**Flammability limit - lower (%)**

Not available.

Flammability limit - upper (%)

Not available.

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density

5.11

Relative density

Not available.

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Solubility(ies)

Solubility (water)	Soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Elevated temperatures. Contact with incompatible materials. Electrostatic discharge.
Incompatible materials	Acid. Aluminum. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information**Information on likely routes of exposure**

Ingestion	Ingestion may cause irritation and malaise.
Inhalation	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause respiratory tract irritation.
Skin contact	May cause redness and pain. Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Eye contact	Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Mild eye irritation. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity Ingestion may cause irritation and malaise. Vapors may cause drowsiness and dizziness.

Components	Species	Test Results
Acetone (CAS 67-64-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	20 ml/kg
<i>Inhalation</i>		
LC50	Rat	50 mg/l, 8 Hours
<i>Oral</i>		
LD50	Rat	5800 mg/kg
Dipropylene glycol monomethyl ether (CAS Proprietary)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	9.5 g/kg
<i>Oral</i>		
LD50	Rat	5.35 g/kg
Skin corrosion/irritation	Prolonged contact may cause dryness of the skin.	
Serious eye damage/eye irritation	Causes eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	No data available.	
Skin sensitization	No sensitizing effects known.	

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classified by IARC, ACGIH, NTP or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.
Reproductive toxicity	No test data available for the product.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Due to lack of data the classification is not possible.
Chronic effects	Prolonged inhalation may be harmful. May affect the nervous system and cause headache, nausea, vomiting, and narcosis.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Acetone (CAS 67-64-1)		
Aquatic		
Fish	LC50 Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Copper Compound (CAS Proprietary)		
Aquatic		
Crustacea	EC50 Water flea (Daphnia obtusa)	0.0076 - 0.026 mg/l, 48 hours
Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential	No data available on bioaccumulation.	
Partition coefficient n-octanol / water (log Kow)		
Acetone (CAS 67-64-1)		-0.24
Mobility in soil	No data available.	
Mobility in general	The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.	
Other adverse effects	The photochemical formation of ozone and other harmful substances in polluted air depends on emissions of all VOCs (man made and biogenic) and other compounds in a complex interaction with other factors such as meteorology.	

13. Disposal considerations

Disposal instructions	Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
US RCRA Hazardous Waste U List: Reference	
Acetone (CAS 67-64-1)	U002
Waste from residues / unused products	Dispose of in accordance with local regulations. Do not allow this material to drain into sewers/water supplies.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	Not regulated as dangerous goods. This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less. Since the dyes in the Dye Kit are in containers with a capacity of less than 119 gallons, they are not regulated for DOT purposes.
IATA	Not regulated as dangerous goods.

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IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1)	LISTED
Copper Compound (CAS Proprietary)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard	- Yes
Delayed Hazard	- No
Fire Hazard	- Yes
Pressure Hazard	- No
Reactivity Hazard	- No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1)	6532
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Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1)	35 %WV
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DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1)	6532
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US state regulations**US. Massachusetts RTK - Substance List**

Acetone (CAS 67-64-1)
Copper Compound (CAS Proprietary)
Dipropylene glycol monomethyl ether (CAS Proprietary)

US. New Jersey Worker and Community Right-to-Know Act

Acetone (CAS 67-64-1)
Copper Compound (CAS Proprietary)
Dipropylene glycol monomethyl ether (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law

Acetone (CAS 67-64-1)
Copper Compound (CAS Proprietary)
Dipropylene glycol monomethyl ether (CAS Proprietary)

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US. Rhode Island RTK

Acetone (CAS 67-64-1)

Copper Compound (CAS Proprietary)

US. California Proposition 65**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision**Issue date** 27-May-2016**Revision date** 21-July-2016**Version #** 02**HMIS® ratings**
Health: 2
Flammability: 2
Physical hazard: 0**References**
ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently available.