

SAFETY DATA SHEET

1. Identification

Product identifier	Castin' Craft Catalyst		
Other means of identification			
SDS number	7806910		
Product code	46361, 46388, 56362, 34016, 34032, 34128, 46392, MICHAELS SKUs: 558155, 10415456		
Recommended use	Casting Resin Catalyst Agent		
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	Organic peroxides	Type D
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	Heating may cause a fire. Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep/Store away from clothing and other combustible materials. Keep only in original container. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection.
Response	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If swallowed: Rinse mouth. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. Specific treatment (see this label).
Storage	Store locked up. Store at temperatures not exceeding 25°C / 77°F. Keep cool. Store away from other materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Benzenedicarboxylic Acid Derrivative	Proprietary	10-50

Methyl Ethyl Ketone Peroxide	Proprietary	5-40
Butanone Compound	Proprietary	<10
Diluent	Proprietary	< 10

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 a 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	Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Get medical attention if symptoms occur.
Skin contact	Immediately flush with plenty of water for at least 15 minutes. Take off immediately all contaminated clothing. Get medical attention immediately. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	Rinse mouth. Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth to a victim who is unconscious or is having convulsions. Call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Contact with this material will cause burns to the skin, eyes and mucous membranes. May have a corrosive effect on the digestive canal.
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.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing agent suitable for type of surrounding fire.
Unsuitable extinguishing media	Water. Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contains an organic peroxide. Strong oxidizer - contact with other material may cause fire. Heat may cause the containers to explode. During fire, gases hazardous to health may be formed. The heat of decomposition of the peroxides adds to the heat of the fire. Dry chemical fire extinguishing agent may catalyze the decomposition.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Wear protective clothing as described in Section 8 of this safety data sheet. Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not breathe mist or vapor. Do not get in eyes, on skin, on clothing. Keep out of low areas. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	This product is miscible in water. Refer to attached safety data sheets and/or instructions for use. Ventilate area. Extinguish or remove all ignition sources. Remove or isolate flammable and combustible materials. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. 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. Never return spills to original containers for re-use. Collect and dispose of spillage as indicated in section 13 of the SDS.
Environmental precautions	Never return spills in original containers for re-use. Avoid discharge into drains, water courses or onto the ground. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Avoid discharge into storm drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Provide adequate ventilation. Avoid breathing mist or vapor. Do not get in eyes, on skin, on clothing. Keep away from all ignition sources including heat, sparks and flame. When using spray equipment, never spray raw MEKP into curing or in to raw resin of flues. Keep out of reach of children. Wear appropriate personal protective equipment (See Section 8). Wash hands thoroughly after handling. Observe good industrial hygiene practices. Do not handle roughly. Avoid shock, dropping and dragging etc.

Conditions for safe storage, including any incompatibilities

Avoid contact with combustible materials (hay, grain, diesel, etc.). Keep out of the reach of children. Keep only in the original container. 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. Store locked up. Keep away from heat, sparks and open flame. Protect from direct sunlight.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value
Benzenedicarboxylic Acid Derivative (CAS Proprietary)	PEL	5 mg/m ³
Butanone Compound (CAS Proprietary)	PEL	590 mg/m ³
Diluent (CAS Proprietary)	PEL	200 ppm 1.4 mg/m ³ 1 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Benzenedicarboxylic Acid Derivative (CAS Proprietary)	TWA	5 mg/m ³
Butanone Compound (CAS Proprietary)	STEL	300 ppm
Diluent (CAS Proprietary)	TWA	200 ppm
Methyl Ethyl Ketone Peroxide (CAS Proprietary)	TWA	1 ppm
	Ceiling	0.2 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Benzenedicarboxylic Acid Derivative (CAS Proprietary)	TWA	5 mg/m ³
Butanone Compound (CAS Proprietary)	STEL	885 mg/m ³
Diluent (CAS Proprietary)	TWA	300 ppm 590 mg/m ³ 200 ppm
Methyl Ethyl Ketone Peroxide (CAS Proprietary)	TWA	1.4 mg/m ³ 1 ppm
	Ceiling	1.5 mg/m ³ 0.2 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Butanone Compound (CAS Proprietary)	2 mg/l	MEK	Urine	*

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

Exposure guidelines

Use personal protective equipment as required. Keep working clothes separately.

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. Eye wash facilities and emergency shower must be available when handling this product. Provide adequate ventilation and minimize the risk of inhalation of vapors.

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.
Other	Wear appropriate chemical resistant clothing. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or 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. Wash at the end of each work shift and before eating, smoking and using the toilet.

9. Physical and chemical properties

Appearance	Water white liquid.
Physical state	Liquid.
Form	Liquid.
Color	Clear.
Odor	Slight.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	200.0 °F (93.3 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
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	> 1
Relative density	1.1
Solubility(ies)	
Solubility (water)	Slightly soluble in water.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
VOC (Weight %)	3.7 %

10. Stability and reactivity

Reactivity	May form peroxides. Read and follow manufacturer's recommendations.
Chemical stability	Stable under recommended storage and use conditions. Please read and follow all instructions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials. Heat, sparks, flames, elevated temperatures. Protect against direct sunlight.
Incompatible materials	Nitrates. Strong oxidizers, strong acids, and strong bases. Reducing agents. Sulfur compounds. Metal salts.

Hazardous decomposition products When heated to decomposition the product emits acrid smoke and irritating fumes.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Under normal conditions of intended use, this material does not pose a risk to health. May cause digestive tract burns. Harmful if swallowed.
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard. May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin burns.
Eye contact	Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics Contact with this material will cause burns to the skin, eyes and mucous membranes. May have a corrosive effect on the digestive canal.

Information on toxicological effects

Acute toxicity Harmful if swallowed. May cause digestive tract burns.

Components	Species	Test Results
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Benzenedicarboxylic Acid Derivative (CAS Proprietary)

Acute

Dermal

LD50	Rat	38000 mg/kg
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Oral

LD50	Rat	2400 mg/kg
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Butanone Compound (CAS Proprietary)

Acute

Dermal

LD50	Rabbit	> 8000 mg/kg
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Inhalation

LC50	Rat	11700 mg/l, 4 Hours
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Oral

LD50	Rat	2300 - 3500 mg/kg
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Methyl Ethyl Ketone Peroxide (CAS Proprietary)

Acute

Inhalation

LC50	Rat	200 mg/l, 4 Hours
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Oral

LD50	Rat	6.86 ml/kg
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* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Based on available data, the classification criteria are not met.

Skin sensitization Not classified as a sensitizer.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Diluent (CAS Proprietary) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

12. Ecological information

Ecotoxicity Expected to be harmful to aquatic organisms.

Components		Species	Test Results
Benzenedicarboxylic Acid Derrivative (CAS Proprietary)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	45.9 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	29 mg/l, 96 hours
Butanone Compound (CAS Proprietary)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	4025 - 6440 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	> 400 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

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)

Benzenedicarboxylic Acid Derrivative (CAS Proprietary)	1.6
Butanone Compound (CAS Proprietary)	0.29

Mobility in soil No data available.

Other adverse effects None known.

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

Benzenedicarboxylic Acid Derrivative (CAS Proprietary)	U102
Butanone Compound (CAS Proprietary)	U159
Methyl Ethyl Ketone Peroxide (CAS Proprietary)	U160

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

UN number	UN3105
UN proper shipping name	Organic peroxide type D, liquid (Methyl Ethyl Ketone Peroxide <40%)
Transport hazard class(es)	
Class	5.2
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	No
Special precautions for user	Not available.
Packaging exceptions	152
Packaging non bulk	225
Packaging bulk	None

IATA

UN number	UN3105
UN proper shipping name	Organic peroxide type D, liquid (Methyl Ethyl Ketone Peroxide <40%)
Transport hazard class(es)	
Class	5.2
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	No
ERG Code	5L

Special precautions for user Not available.

IMDG

UN number UN3105
UN proper shipping name ORGANIC PEROXIDE TYPE D, LIQUID (Methyl Ethyl Ketone Peroxide <40%)
Transport hazard class(es)
Class 5.2
Subsidiary risk -
Packing group Not applicable.
Environmental hazards
Marine pollutant No
EmS F-J, S-R
Special precautions for user Not available.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Benzenedicarboxylic Acid Derrivative (CAS Proprietary) LISTED
Butanone Compound (CAS Proprietary) LISTED
Methyl Ethyl Ketone Peroxide (CAS Proprietary) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
Diluent	Proprietary	1000	1000 lbs		

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Benzenedicarboxylic Acid Derrivative	Proprietary	10-50

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Benzenedicarboxylic Acid Derrivative (CAS Proprietary)

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

Butanone Compound (CAS Proprietary) 6714

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Butanone Compound (CAS Proprietary) 35 % weight/volumn

DEA Exempt Chemical Mixtures Code Number

Butanone Compound (CAS Proprietary) 6714

US state regulations

US. Massachusetts RTK - Substance List

Benzenedicarboxylic Acid Derrivative (CAS Proprietary)

Butanone Compound (CAS Proprietary)
Diluent (CAS Proprietary)
Methyl Ethyl Ketone Peroxide (CAS Proprietary)

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

Benzenedicarboxylic Acid Derrivative (CAS Proprietary)
Butanone Compound (CAS Proprietary)
Diluent (CAS Proprietary)
Methyl Ethyl Ketone Peroxide (CAS Proprietary)

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

Benzenedicarboxylic Acid Derrivative (CAS Proprietary)
Butanone Compound (CAS Proprietary)
Diluent (CAS Proprietary)
Methyl Ethyl Ketone Peroxide (CAS Proprietary)

US. Rhode Island RTK

Benzenedicarboxylic Acid Derrivative (CAS Proprietary)
Butanone Compound (CAS Proprietary)
Diluent (CAS Proprietary)
Methyl Ethyl Ketone Peroxide (CAS Proprietary)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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)	Yes
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).

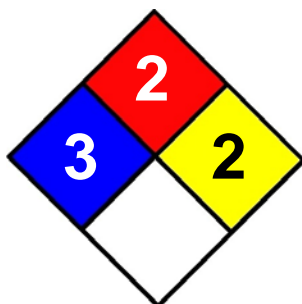
16. Other information, including date of preparation or last revision

Issue date 17-April-2014

Revision date -

Version # 01

NFPA Ratings



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.