

SAFETY DATA SHEET

1. Identification

Product identifier	Castin' Craft Catalyst
Other means of identification	
SDS number	7806910
Product code	4636, 46388, 56362, 34016, 34032, 34128, MICHAELS SKUs:55815
Recommended use	Casting Resin Catalyst Agent
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	Environmental Technology, Inc.
Address	300 S. Bay Depot Road Fields Landing CA 95537, USA.
Telephone number	001 707-443-9323
E-mail	mail@eti-usa.com
Contact person	Technical Director
Emergency phone number	800-424-9300 (CHEMTREC)

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
Environmental 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 statements	
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 vapour. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	In case of fire: Use appropriate media to extinguish. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. Specific treatment (see this label).
Storage	Store locked up. Store at temperatures not exceeding 25°C / 77°F. Store in a well-ventilated place. Protect from sunlight. Store separately.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	None known.
Supplemental information	Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Dimethyl phthalate	131-11-3	10-50
Methyl ethyl ketone peroxide	1338-23-4	5-40
Hydrogen peroxide	7722-84-1	< 10
Methyl ethyl ketone	78-93-3	<10

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. Call a physician or poison control centre immediately.
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 centre 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. Water fog. Foam. Dry chemical powder. Dry sand. Carbon dioxide (CO ₂).
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. During fire, gases hazardous to health may be formed. Heat may cause the containers to explode. 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	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	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. 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	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Heating may cause a fire.

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 vapour. 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.
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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 vapours or divert vapour 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.

Never return spills in original containers for re-use.

Environmental precautions

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 vapour. Do not get in eyes, on skin, or 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. ACGIH Threshold Limit Values**

Components	Type	Value
Dimethyl phthalate (CAS 131-11-3)	TWA	5 mg/m ³
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm
Methyl ethyl ketone (CAS 78-93-3)	STEL	300 ppm
Methyl ethyl ketone peroxide (CAS 1338-23-4)	TWA	200 ppm
	Ceiling	0.2 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Dimethyl phthalate (CAS 131-11-3)	TWA	5 mg/m ³
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m ³
Methyl ethyl ketone (CAS 78-93-3)	STEL	885 mg/m ³
	TWA	300 ppm 590 mg/m ³
Methyl ethyl ketone peroxide (CAS 1338-23-4)	Ceiling	200 ppm 1.4 mg/m ³
		0.2 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Dimethyl phthalate (CAS 131-11-3)	TWA	5 mg/m ³
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Methyl ethyl ketone (CAS 78-93-3)	STEL	100 ppm
	TWA	50 ppm
Methyl ethyl ketone peroxide (CAS 1338-23-4)	Ceiling	0.2 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Dimethyl phthalate (CAS 131-11-3)	TWA	5 mg/m3
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm
Methyl ethyl ketone (CAS 78-93-3)	STEL	300 ppm
	TWA	200 ppm
Methyl ethyl ketone peroxide (CAS 1338-23-4)	Ceiling	0.2 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Dimethyl phthalate (CAS 131-11-3)	TWA	5 mg/m3
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm
Methyl ethyl ketone (CAS 78-93-3)	STEL	300 ppm
	TWA	200 ppm
Methyl ethyl ketone peroxide (CAS 1338-23-4)	Ceiling	0.2 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value
Dimethyl phthalate (CAS 131-11-3)	TWA	5 mg/m3
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m3
		1 ppm
Methyl ethyl ketone (CAS 78-93-3)	STEL	300 mg/m3
		100 ppm
	TWA	150 mg/m3
		50 ppm
Methyl ethyl ketone peroxide (CAS 1338-23-4)	Ceiling	1.5 mg/m3
		0.2 ppm

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value
Methyl ethyl ketone peroxide (CAS 1338-23-4)	Ceiling	0.2 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling time
Methyl ethyl ketone (CAS 78-93-3)	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 minimise the risk of inhalation of vapours.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield.
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 or using the toilet.

9. Physical and chemical properties

Appearance	Water white liquid.
Physical state	Liquid.
Form	Liquid.
Colour	Clear.
Odour	Slight.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	93.3 °C (200.0 °F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
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.
Vapour pressure	Not available.
Vapour 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

Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
VOC	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 polymerisation 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. Sulphur 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

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 severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Under normal conditions of intended use, this material does not pose a risk to health. May cause digestive tract burns. Harmful if swallowed.

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

Respiratory or skin sensitisation

Canada - Alberta OELs: Irritant

Dimethyl phthalate (CAS 131-11-3)	Irritant
Hydrogen peroxide (CAS 7722-84-1)	Irritant

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

Skin sensitisation Not classified as a sensitiser.

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.

ACGIH Carcinogens

Hydrogen peroxide (CAS 7722-84-1)	A3 Confirmed animal carcinogen with unknown relevance to humans.
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Canada - Manitoba OELs: carcinogenicity

Hydrogen peroxide (CAS 7722-84-1)	Confirmed animal carcinogen with unknown relevance to humans.
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IARC Monographs. Overall Evaluation of Carcinogenicity

Hydrogen peroxide (CAS 7722-84-1)	3 Not classifiable as to carcinogenicity to humans.
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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 an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	Expected to be harmful to aquatic organisms.
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)

Dimethyl phthalate (CAS 131-11-3)	1.6
Methyl ethyl ketone (CAS 78-93-3)	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.
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

TDG

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	No
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

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 available.
Environmental hazards	No
ERG Code	5L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

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 available.
Environmental hazards	
Marine pollutant	No
EmS	F-J, S-R
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

15. Regulatory information

Canadian regulations	This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.
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Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Methyl ethyl ketone (CAS 78-93-3) Class B

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Hydrogen peroxide (CAS 7722-84-1)

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
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	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**Issue date** 17-September-2017**Revision date** -**Version No.** 01

References

ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
HSDB® - Hazardous Substances Data Bank
JIS Z 7250: 2005 Safety data sheet for chemical products-Part 1:Content and order of sections
JCIA GHS Guideline, October 2008
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits

Disclaimer

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