

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**MANUFACTURER:** PACE Technologies  
3601 E. 34<sup>th</sup> St.  
Tucson, AZ 85713

**INFORMATION PHONE:** 520-882-6598

**EMERGENCY PHONE:** CHEMTREC 800-424-9300 (US) Day or night  
International call collect CHEMTREC 202-483-7616

**TRADE NAME:** POLYCAST Hardener

**CHEMICAL FAMILY:** Methyl Ethyl Ketone Peroxide

**HMIS RATING:** HEALTH: 3      FLAMMABILITY: 2      REACTIVITY: 3

**HAZARD RATING:**

LEAST: 0      SLIGHT: 1      MODERATE: 2      HIGH: 3      EXTREME: 4

### SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	CAS REG.NO.	APPROX WT. %	ACGIH TWA/TLV	OSHA PEL	VAPOR PRESSURE (mm )Hg
*METHYL ETHYL KETONE PEROXIDE	1338-23-4	33	C 0.2ppm	C 0.7ppm	N/A
*DIMETHYLPHTHLATE	131-11-3	58	5 mg/m3	5 mg/m3	1 @ 212°F
2-ETHYLHEXYL ACETATE	103-09-3	7	N/A	N/A	0.4
HYDROGEN PEROXIDE	7722-84-1	2	1ppm	1ppm	5 @ 86°F

\*SUBJECT TO REPORTING REQUIREMENTS OF SARA TITLE III SECTION 313

### SECTION 3. HAZARDS IDENTIFICATION

**PHYSICAL AND  
CHEMICAL HAZARDS:**

Contact with combustible material may cause fire.

**HUMAN HEALTH:**

Corrosive. Prolonged contact causes serious eye and tissue damage. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure. Organic solvents may be absorbed into the body by inhalation and cause permanent damage to the nervous system, including the brain.

**ENVIRONMENT:**

The product contains a substance which has a photochemical ozone creation potential.

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### SECTION 4. FIRST AID MEASURES

**INHALATION:**

Move into fresh air and keep at rest. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure. Immediately call an ambulance.

**SKIN CONTACT:**

Remove contaminated clothes and rinse skin thoroughly with water.

**EYE CONTACT:**

Immediately flush with plenty of water. Remove any contact lenses and open eyes wide apart. Call an ambulance and continue flushing during transportation to hospital taking along these instructions.

**INGESTION:**

Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions. Do not induce vomiting.

**SECTION 5. FIRE-FIGHTING MEASURES**

**FLASH POINT:** > 200°F C.O.C. FLAMMABLE LIMITS: LEL: UNK UEL:  
UNK

**EXTINGUISHING MEDIA:** Extinguish with water fog. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May form toxic materials such as carbon dioxide, carbon monoxide, and various hydrocarbons.

**SPECIAL FIRE-FIGHTING PROCEDURES:** Water from a safe distance, preferably with a fog nozzle. Dry chemical combined with catalyst may reignite. Extinguished area must be thoroughly wet with water if dry chemical is used.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** The heat of decomposition of the peroxide adds to the heat of the fire. Dry chemical extinguishing agent may catalyze the decomposition. Containers may explode in fire.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**SAFEGUARDS (PERSONNEL):** Avoid inhalation of vapors and contact with skin and eyes. Avoid smoking and use of open fire. For personal protection, see section 8.

**ENVIRONMENTAL PRECAUTIONS:** Avoid discharge into drains, water courses or onto the ground.

**SPILL CLEAN UP:** Remove sources of ignition. Dam and absorb spillages with sand, earth or other noncombustible material. For waste disposal, see section 13.

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**SECTION 7. HANDLING AND STORAGE**

**HANDLING (PERSONNEL):** Avoid inhalation of vapors and contact with skin and eyes. Avoid smoking and use of open fire. Avoid eating, drinking and smoking when using the product. Observe good chemical hygiene practices.

**HANDLING (PHYSICAL ASPECTS):** Close container after each use. Ground container when pouring. Keep away from heat, sparks and flames.

**STORAGE:** Store in tightly closed original container in a well-ventilated place. Store at room temperature. Avoid contact with oxidizing agents.

**ENGINEERING CONTROLS:** Keep container tightly closed.

Observe label precautions.

Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.

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## **SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

**ENGINEERING MEASURES:** Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Provide easy access to water supply and eye wash facilities.

**PERSONAL PROTECTION:** Personal protection equipment should be chosen according to the CEN standards and in collaboration with the supplier of the personal protective equipment.

**RESPIRATORY EQUIPMENT:** In case of inadequate ventilation: Gas mask with organic vapor canister (chin-style or front or back-mounted.)

**HAND PROTECTION:** Wear protective gloves. Laminate (PE/EVOH) gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

**EYE PROTECTION:** Wear goggles/face shield.

**SKIN PROTECTION:** Wear apron or protective clothing in case of splashes.

**ENVIRONMENTAL EXPOSURE CONTROLS:** Not available.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**MELTING OR FREEZING POINT:** <-30 °F

**VAPOR DENSITY:** >1 (AIR=1)

**% VOLATILES:** Not available

**APPEARANCE AND ODOR:** Thin, water white liquid, slight characteristic odor

**FORM:** Liquid

**SPECIFIC GRAVITY:** 1.2

**EVAPORATION RATE:** Slower than Ethyl Ether

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## SECTION 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable

**CONDITIONS TO AVOID:** Store out of direct sunlight, below 80°F

**INCOMPATIBILITY:** Hot solvents, monomers, reducing agents, cobalt naphthenate and other promoters, dimethylaniline

**HAZARDOUS DECOMPOSITION PRODUCTS:** Burning product emits toxic fumes of carbon and nitrogen

**POYMERIZATION:** Will not occur

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## SECTION 11. TOXICOLOGICAL INFORMATION

**INHALATION:** Vapors are corrosive. After 24-36 hours, injured persons may develop serious shortness of breath and lung edema. Vapors of organic solvents have narcotic effect and may cause headache, fatigue, dizziness and nausea.

**OTHER POTENTIAL HAZARDS:** Frequent inhalation of even small concentrations may cause irritability, fatigue, memory failure and in time permanent damage to the nervous system, including the brain, and possibly liver and kidneys, too. Styrene is suspected to be carcinogenic.  
Carcinogenicity:  
National Toxicology Program (NTP): No.  
I.A.R.C. Monographs: No  
OSHA: No.

**SKIN CONTACT:** Corrosive. Prolonged contact causes serious tissue damage.

**EYE CONTACT:** Corrosive. Immediate first aid is necessary.

**INGESTION:** Harmful if swallowed. Corrosive. Even small amounts may cause serious damage.

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## SECTION 12. ECOLOGICAL INFORMATION

**MOBILITY:** The product is insoluble in water and will spread on the water surface.

**DEGRADABILITY:** The degradability of the product has not been stated.

**EXOTOXICITY:** The product contains phthalate which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment. The product contains a substance which has a photochemical ozone creation potential.

**BIOACCUMULATIVE POTENTIAL:** No data available on bioaccumulation.

**OTHER ADVERSE EFFECTS:** None known.

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## SECTION 13. DISPOSAL CONSIDERATIONS

Incineration is preferred method. Always dispose of in accordance with existing federal, state, and local environmental regulatory controls.

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## SECTION 14. TRANSPORTATION INFORMATION

### SHIPPING INFORMATION

CFR (Ground)	CONSUMER COMMODITY
IMDG (Ocean)	PROPER SHIPPING NAME: Organic Peroxide Type D, Liquid (Methyl ethyl ketone peroxide) CLASS: 5.2 PG: --
IATA (Air)	PROPER SHIPPING NAME: Organic Peroxide Type D, Liquid (Methyl ethyl ketone peroxide) CLASS: 5.2 PG: --

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**SECTION 15. REGULATORY INFORMATION**

EC REGULATIONS-  
EINECS:all chemical listed

EEC CLASSIFICATION:                   OXIDIZING AND CORROSIVE (contains Methyl ethyl ketone peroxide)

Symbol: Indication of Danger



Oxidizing



Corrosive

RISK PHRASES:                           R22. Harmful if swallowed  
R34. Causes burns.  
R8. Contact with combustible material may cause fire.

SAFETY PHRASES:                       S17. Keep away from combustible material.  
S24/25. Avoid contact with skin and eyes  
S26. In case of contact with eyes, rinse immediately with plenty of water and see medical advice.  
S27. Take off immediately all contaminated clothing.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S45. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).  
S60. This material and its container must be disposed of as hazardous waste.

SPECIFIC PROVISIONS:                TSCA: Listed  
As a general rule, persons under 18 years of age are not allowed to work with this product.

NATIONAL REGULATION:           Europe/USA:  
This Safety Data Sheet has been prepared according to the EU-regulation.  
Threshold Limit Values (2008), ACGIH, by the American Conference on Governmental Industrial Hygienists.  
The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and Health Standards, Air contaminants (OSHA), with amendments.

### SECTION 16. OTHER INFORMATION

Additional Information

NA = NOT APPLICABLE

NE = NOT ESTABLISHED

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