

**1. Identification**

<b>Product identifier</b>	<b>CHP Hardener</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Not available.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Company Name</b>	ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc.
<b>Address</b>	2829 Lakeland Drive Jackson, MS 39232 USA
<b>After hours telephone number</b>	1-800-222-7122
<b>Normal work hours telephone number</b>	1-877-982-7667
<b>Website</b>	www.ergonarmor.com
<b>E-mail</b>	sds@ergon.com
<b>Emergency 24-hour telephone number</b>	CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887
<b>Information on operation hours</b>	8:00 a.m. to 5:00 p.m.

**2. Hazard(s) identification**

<b>Physical hazards</b>	Flammable liquids	Category 3
	Organic peroxides	Type F
<b>Health hazards</b>	Acute toxicity, dermal	Category 3
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Carcinogenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, repeated exposure	Category 2
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 2
<b>OSHA defined hazards</b>	Not classified.	

**Label elements**

**Signal word**

Danger

**Hazard statement**

Toxic in contact with skin. Toxic to aquatic life with long lasting effects. Flammable liquid and vapor. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer. Causes severe skin burns and eye damage.

## Precautionary statement

### Prevention

Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe mist or vapor. Use explosion-proof electrical/ventilating/lighting equipment. Avoid release to the environment. Use non-sparking tools. Take precautionary measures against static discharge. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Ground/bond container and receiving equipment. Keep container tightly closed.

### Response

IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER/doctor if you feel unwell. Specific treatment see Section 4 of this SDS. Take off immediately all contaminated clothing and wash it before reuse. IF exposed or concerned: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. In case of fire: Use appropriate media for extinction. 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. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### Storage

Store in accordance with local/regional/national/international regulation. Store locked up. 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)

None known.

### Supplemental information

None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Cumene Hydroperoxide		80-15-9	80-90
Alpha-Cumyl Alcohol		617-94-7	0-6
CUMENE		98-82-8	0-5
ACETOPHENONE		98-86-2	0-1

## 4. First-aid measures

### Inhalation

Move to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get medical attention immediately.

### Skin contact

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing separately before reuse. Destroy contaminated clothing and shoes. If skin irritation or an allergic skin reaction develops, get medical attention.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Do not rub eyes. Get medical attention immediately.

### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by mouth to a victim who is unconscious or is having convulsions.

### Most important symptoms/effects, acute and delayed

Not available.

### Indication of immediate medical attention and special treatment needed

Treat symptomatically.

### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Get medical attention if symptoms occur.

## 5. Fire-fighting measures

### Suitable extinguishing media

Water spray. Dry chemical. Foam. Water spray should be used to cool containers.

### Unsuitable extinguishing media

Halons.

### Specific hazards arising from the chemical

Container may explode in heat of fire. Fire may produce irritating, corrosive and/or toxic gases.

**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. Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection.

**Fire fighting equipment/instructions**

Firefighters should wear full protective clothing including self contained breathing apparatus. Avoid breathing fire vapors.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering them.

**Methods and materials for containment and cleaning up**

Wear appropriate protective equipment and clothing during clean-up. Do not allow the spilled product to enter public drainage system or open water courses. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean surface thoroughly to remove residual contamination.

**Environmental precautions**

Not available.

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

Contact with incompatible materials or exposure to temperatures exceeding SADT (See Section 9) may result in a self accelerating decomposition reaction with release of flammable vapors which may autoignite. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Use explosion-proof equipment. Do not reuse the empty container. Do not get in eyes, on skin, on clothing. Do not breathe gas/fumes/vapor/spray. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Do not taste or swallow.

**Conditions for safe storage, including any incompatibilities**

Store below 38°C (100°F) to maintain stability and active oxygen content. Detached storage is preferred. Keep container tightly closed in a cool, well-ventilated place. Do not store in direct sunlight. Store away from combustibles and incompatible materials.

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

Components	Type	Value
CUMENE (CAS 98-82-8)	PEL	245 mg/m <sup>3</sup> 50 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
ACETOPHENONE (CAS 98-86-2)	TWA	10 ppm
CUMENE (CAS 98-82-8)	TWA	50 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
CUMENE (CAS 98-82-8)	TWA	245 mg/m <sup>3</sup> 50 ppm

**US. Workplace Environmental Exposure Level (WEEL) Guides**

Components	Type	Value
ACETOPHENONE (CAS 98-86-2)	TWA	50 mg/m <sup>3</sup> 10 ppm
Cumene Hydroperoxide (CAS 80-15-9)	TWA	6 mg/m <sup>3</sup> 1 ppm

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

## Exposure guidelines

### US - California OELs: Skin designation

CUMENE (CAS 98-82-8)

Can be absorbed through the skin.

### US - Minnesota Haz Subs: Skin designation applies

CUMENE (CAS 98-82-8)

Skin designation applies.

### US - Tennessee OELs: Skin designation

CUMENE (CAS 98-82-8)

Can be absorbed through the skin.

### US NIOSH Pocket Guide to Chemical Hazards: Skin designation

CUMENE (CAS 98-82-8)

Can be absorbed through the skin.

### US WEEL Guides: Skin designation

Cumene Hydroperoxide (CAS 80-15-9)

Can be absorbed through the skin.

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

CUMENE (CAS 98-82-8)

Can be absorbed through the skin.

### Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Chemical goggles and face shield are recommended.

#### Skin protection

##### Hand protection

Not available.

##### Other

Wear appropriate clothing to prevent any possibility of skin contact with solutions containing 10% or more of this chemical.

#### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

#### Thermal hazards

Not available.

### General hygiene considerations

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.

## 9. Physical and chemical properties

### Appearance

Clear to yellow liquid

#### Physical state

Liquid.

#### Form

Liquid.

#### Color

Clear to yellow

### Odor

Sharp Aromatic

### Odor threshold

Not available.

### pH

Not available.

### Melting point/freezing point

-140.8 °F (-96 °C) estimated

### Initial boiling point and boiling range

Decomposes

### Flash point

133.0 °F (56.1 °C)

### Evaporation rate

Not available.

### Flammability (solid, gas)

Not available.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** 1.1 %

**Flammability limit - upper (%)** 6.1 %

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

### Vapor pressure

1 mm Hg @ 20 deg C

### Vapor density

5.4

### Relative density

Not available.

**Solubility(ies)****Solubility (water)** Slightly soluble**Partition coefficient (n-octanol/water)** Not available.**Auto-ignition temperature** Not available.**Decomposition temperature** 180 °F (82.2 °C) SADT (5-gal container). Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction. This reaction will generate flammable vapors which may autoignite.**Viscosity** Not available.**Other information****Specific gravity** 1.03 @ 25 deg C**VOC** 100 %**10. Stability and reactivity****Reactivity** Not available.**Chemical stability** This material is chemically unstable and should only be handled under specified conditions. See HANDLING AND STORAGE section of this SDS for specified conditions. SADT - Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction. This reaction will generate flammable vapors which may autoignite. The length of time to generated a decomposition reaction, after the SADT has been reached or exceeded, is dependent upon how much the SADT has been exceeded and the length of time needed for the reaction exotherm (heat spike from increasing decomposition rate) to initiate a rapid decomposition reaction. Typically, SADT is inversely proportional to package size. Larger packages will have a lower SADT due to smaller ratio to heat transfer area to volume of product. Hazardous polymerization does not occur.**Possibility of hazardous reactions****Conditions to avoid** Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.**Incompatible materials** Avoid contact with oxidizers or reducing agents. Strong acids. Copper Iron. Rust. Vermiculite. Transition metal salts/ions. Accelerators.**Hazardous decomposition products** Phenol. Acetone. Flammable vapor.**11. Toxicological information****Information on likely routes of exposure****Inhalation** May be harmful if inhaled.**Skin contact** Causes skin burns. Toxic in contact with skin.**Eye contact** Causes serious eye damage.**Ingestion** May be harmful if swallowed.**Symptoms related to the physical, chemical and toxicological characteristics** Not available.**Information on toxicological effects****Acute toxicity**

Product	Species	Test Results
CHP Hardener		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	0.5678 ml/kg
<b>Inhalation</b>		
LC50	Rat	268000 mg/l
<b>Oral</b>		
LD50	Rat	34.86 g/kg
		14.34 ml/kg

Components	Species	Test Results
Alpha-Cumyl Alcohol (CAS 617-94-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Mouse	1.95 g/kg
CUMENE (CAS 98-82-8)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Mouse	24.7 mg/l, 2 Hours
Cumene Hydroperoxide (CAS 80-15-9)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Mouse	200 mg/l, 4 Hours

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

<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not available.
<b>Skin sensitization</b>	Causes skin burns. Harmful if absorbed through skin. May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Suspected of causing cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
CUMENE (CAS 98-82-8)	2B Possibly carcinogenic to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)</b>	
Not regulated.	
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>	
CUMENE (CAS 98-82-8)	Reasonably Anticipated to be a Human Carcinogen.
<b>Reproductive toxicity</b>	None known.
<b>Specific target organ toxicity - single exposure</b>	May cause irritation to the respiratory system.
<b>Specific target organ toxicity - repeated exposure</b>	Not available.
<b>Aspiration hazard</b>	Not available.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
ACETOPHENONE (CAS 98-86-2)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 155 mg/l, 96 hours
CUMENE (CAS 98-82-8)		
<b>Aquatic</b>		
Crustacea	EC50	Brine shrimp (Artemia sp.) 3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss) 2.7 mg/l, 96 hours

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

<b>Persistence and degradability</b>	Not available.
<b>Bioaccumulative potential</b>	Not available.

**Partition coefficient n-octanol / water (log Kow)**

ACETOPHENONE	1.58
CUMENE	3.66

**Mobility in soil** Not available.

**Other adverse effects** Not available.

**13. Disposal considerations**

**Disposal instructions** Do not allow this material to drain into sewers/water supplies. Dispose of waste and residues in accordance with local authority requirements.

**Hazardous waste code** D003: Waste Reactive material

**Waste from residues / unused products** Avoid discharge into water courses or onto the ground.

**Contaminated packaging** Not available.

**14. Transport information****DOT**

**UN number** UN3109

**UN proper shipping name** Organic peroxide type F, liquid (Cumyl Hydroperoxide, <90%)

**Transport hazard class(es)**

**Class** 5.2

**Subsidiary risk** -

**Label(s)** 5.2

**Packing group** II

**Environmental hazards**

**Marine pollutant** NO

**Special precautions for user** Not available.

**Special provisions** IP5

**Packaging exceptions** 152

**Packaging non bulk** 225

**Packaging bulk** 225

**IATA**

**UN number** UN3109

**UN proper shipping name** Organic peroxide type F, liquid (Cumyl Hydroperoxide, <90%)

**Transport hazard class(es)**

**Class** 5.2

**Subsidiary risk** -

**Packing group** Not available.

**Environmental hazards** No.

**ERG Code** 5L

**Special precautions for user** Not available.

**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**UN number** UN3109

**UN proper shipping name** ORGANIC PEROXIDE TYPE F, LIQUID (Cumyl Hydroperoxide, <90%), MARINE POLLUTANT

**Transport hazard class(es)**

**Class** 5.2

**Subsidiary risk** -

**Packing group** Not available.

**Environmental hazards**

**Marine pollutant** Yes

**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.

DOT



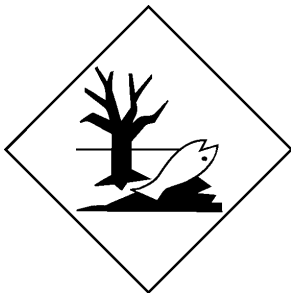
IATA



IMDG



Marine pollutant



## 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.

### CERCLA Hazardous Substance List (40 CFR 302.4)

ACETOPHENONE (CAS 98-86-2)

Listed.

CUMENE (CAS 98-82-8)

Listed.

Cumene Hydroperoxide (CAS 80-15-9)

Listed.

### SARA 304 Emergency release notification

Not regulated.



**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312** Yes**Hazardous chemical**

**Classified hazard categories** Flammable (gases, aerosols, liquids, or solids)  
 Organic peroxide  
 Acute toxicity (any route of exposure)  
 Skin corrosion or irritation  
 Serious eye damage or eye irritation  
 Carcinogenicity  
 Specific target organ toxicity (single or repeated exposure)

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
ACETOPHENONE	98-86-2	0-1
CUMENE	98-82-8	0-5
Cumene Hydroperoxide	80-15-9	80-90

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

ACETOPHENONE (CAS 98-86-2)

CUMENE (CAS 98-82-8)

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

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**California Proposition 65****California Proposition 65 - CRT: Listed date/Carcinogenic substance**

CUMENE (CAS 98-82-8)

Listed: April 6, 2010

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

ACETOPHENONE (CAS 98-86-2)

CUMENE (CAS 98-82-8)

**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 that all components of this product comply 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** 01-27-2015  
**Revision date** 07-14-2020  
**Version #** 04  
**Further information** HMIS® is a registered trade and service mark of the NPCA.

Active Oxygen Content = 9.25% min.

### References

ACGIH  
EPA: AQUIRE database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
HSDB® - Hazardous Substances Data Bank  
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

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of OSHA.

### Revision information

Hazard(s) identification: Response  
Hazard(s) identification: Disposal  
Hazard(s) identification: GHS Symbols  
Physical & Chemical Properties: Multiple Properties  
Toxicological Information: Toxicological Data  
Toxicological information: Eye contact  
Ecological Information: Ecotoxicity  
GHS: Classification