

**1. Identification**

<b>Product identifier</b>	<b>CHP Hardener</b>
<b>Other means of identification</b>	Not available.
<b>Recommended use</b>	Not available.
<b>Recommended restrictions</b>	None known.

**Manufacturer/Importer/Supplier/Distributor information**
**Manufacturer**

<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
	Aspiration hazard	Not classified
<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**


<b>Signal word</b>	Danger
<b>Hazard statement</b>	Toxic to aquatic life with long lasting effects. Flammable liquid and vapor. May cause respiratory irritation. Harmful in contact with skin. May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer. Causes severe skin burns and eye damage.
<b>Prevention</b>	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. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid release to the environment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Ground/bond container and receiving equipment. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Keep container tightly closed.

<b>Response</b>	IF exposed or concerned: Get medical advice/attention.
<b>Storage</b>	Store in accordance with local/regional/national/international regulation. Store in a well-ventilated place. Keep cool. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of contents/container (in accordance with related regulations).
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	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

<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get medical attention immediately.
<b>Skin contact</b>	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.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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.
<b>Most important symptoms/effects, acute and delayed</b>	Not available.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	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

<b>Suitable extinguishing media</b>	Water spray. Dry chemical. Foam. Water spray should be used to cool containers.
<b>Unsuitable extinguishing media</b>	Halons.
<b>Specific hazards arising from the chemical</b>	Container may explode in heat of fire. Fire may produce irritating, corrosive and/or toxic gases.
<b>Special protective equipment and precautions for firefighters</b>	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.
<b>Fire-fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus. Avoid breathing fire vapors.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	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.
<b>Methods and materials for containment and cleaning up</b>	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.

## 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. AIHA 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

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.

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

#### Eye/face protection

Chemical goggles and face shield are recommended.

#### 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.

<b>Thermal hazards</b>	Not available.
<b>General hygiene considerations</b>	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

<b>Appearance</b>	Clear to yellow liquid
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Clear to yellow
<b>Odor</b>	Sharp Aromatic
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-140.8 °F (-96 °C) estimated
<b>Initial boiling point and boiling range</b>	Decomposes  306.32 °F (152.4 °C) estimated
<b>Flash point</b>	133.0 °F (56.1 °C)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	0.9 % estimated  1.1 %
<b>Flammability limit - upper (%)</b>	6.5 % estimated  6.1 %
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	1 mm Hg @ 20 deg C
<b>Vapor density</b>	5.4
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Slightly soluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	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.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Specific gravity</b>	1.05 estimated 1.03 @ 25 deg C
<b>VOC (Weight %)</b>	92.54 % estimated 100 %

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	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.

<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
<b>Incompatible materials</b>	Avoid contact with oxidizers or reducing agents. Strong acids. Copper Iron. Rust. Vermiculite. Transition metal salts/ions. Accelerators.
<b>Hazardous decomposition products</b>	Phenol. Acetone. Flammable vapor.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May be harmful if swallowed.
<b>Inhalation</b>	May be harmful if inhaled.
<b>Skin contact</b>	Causes skin burns.
<b>Eye contact</b>	Not available.

**Symptoms related to the physical, chemical and toxicological characteristics** Not available.

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
CHP Hardener (CAS Mixture)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	66999.4297 ppm, 7 Hours estimated 827.443 mg/l, 2 Hours estimated 227.1187 mg/l, 4 Hours estimated

Components	Species	Test Results
ACETOPHENONE (CAS 98-86-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Guinea pig	> 20 ml/kg
<i>Oral</i>		
LD50	Rat	0.81 g/kg
<i>Other</i>		
LD50	Mouse	200 mg/kg
Alpha-Cumyl Alcohol (CAS 617-94-7)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	1 ml/kg
<i>Oral</i>		
LD50	Mouse	1.95 g/kg
	Rat	1.07 ml/kg
CUMENE (CAS 98-82-8)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	2000 ppm, 7 Hours 24.7 mg/l, 2 Hours
	Rat	8000 ppm, 4 Hours
<i>Oral</i>		
LD50	Rat	1400 mg/kg
Cumene Hydroperoxide (CAS 80-15-9)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	0.5 ml/kg

Components	Species	Test Results
<i>Inhalation</i>		
LC50	Mouse	200 mg/l, 4 Hours
<i>Other</i>		
LD50	Mouse	400 mg/kg

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

**Skin corrosion/irritation** Not available.

**Serious eye damage/eye irritation** Not available.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** Causes skin burns. Harmful if absorbed through skin. May cause an allergic skin reaction.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Contains a substance which has been shown to cause cancer in laboratory animals.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

CUMENE (CAS 98-82-8) 2B Possibly carcinogenic to humans.

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

Not listed.

**Reproductive toxicity** None known.

**Specific target organ toxicity - single exposure** May cause irritation to the respiratory system.

**Specific target organ toxicity - repeated exposure** Not available.

**Aspiration hazard** 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.

**Persistence and degradability** Not available.

**Bioaccumulative potential** 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

**US RCRA Hazardous Waste U List: Reference**

ACETOPHENONE (CAS 98-86-2) U004  
CUMENE (CAS 98-82-8) U055  
Cumene Hydroperoxide (CAS 80-15-9) U096

**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** -  
**Packing group** II  
**Special precautions for user** Not available.

### 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** II  
**Environmental hazards** No.  
**Special precautions for user** Not available.  
**Other information**  
**Passenger and cargo aircraft** Allowed.  
**Cargo aircraft only** Allowed.

### IMDG

**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** II  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** Not available.  
**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



## 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.

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

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312** No

### Hazardous chemical

### SARA 313 (TRI reporting)

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

### 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.

### US. Massachusetts RTK - Substance List

ACETOPHENONE (CAS 98-86-2)  
CUMENE (CAS 98-82-8)  
Cumene Hydroperoxide (CAS 80-15-9)

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

ACETOPHENONE (CAS 98-86-2) 500 LBS  
CUMENE (CAS 98-82-8) 500 LBS  
Cumene Hydroperoxide (CAS 80-15-9) 500 LBS

### US. Pennsylvania RTK - Hazardous Substances

ACETOPHENONE (CAS 98-86-2)  
CUMENE (CAS 98-82-8)  
Cumene Hydroperoxide (CAS 80-15-9)

### US. Rhode Island RTK

ACETOPHENONE (CAS 98-86-2)  
CUMENE (CAS 98-82-8)  
Cumene Hydroperoxide (CAS 80-15-9)

### US. California Proposition 65

### US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

CUMENE (CAS 98-82-8) Listed: April 6, 2010

### 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



Country(s) or region	Inventory name	On inventory (yes/no)*
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 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

<b>Issue date</b>	01-27-2015
<b>Revision date</b>	12-30-2015
<b>Version #</b>	02
<b>Further information</b>	HMIS® is a registered trade and service mark of the NPCA.

Active Oxygen Content = 9.25% min.

### References

ACGIH  
EPA: ACQUIRE database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203)  
Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1)  
Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 29)  
Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 30)  
Korea. Non-Toxic Chemicals List (National Institute of Environment Research (NIER) Public Notice No. 1997-10, as amended)  
Korea. Observational Chemicals (Ministerial Decree of TCCL Article 6)  
Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor (MOL) Public Notice No. 1986-45, as amended)  
Korea. Prohibited Chemical Substances (TCCL Article 11)  
Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended)  
Korea. Restricted Chemical Substances (TCCL Article 11)  
Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)  
Korea. Toxic Chemical Control Law (TCCL), pre-1997 List  
Korea. Toxic Chemicals (TCCL Article 10)  
Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)  
Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)  
Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended)  
Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)  
Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the Environmental Protection Administration)  
Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)  
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**

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**

Product and Company Identification: Product and Company Identification  
Physical & Chemical Properties: Multiple Properties  
Toxicological Information: Toxicological Data  
Ecological Information: Ecotoxicity  
GHS: Classification