

## 1. Identification

**Product identifier** WISDOM TC Flowable

**Other means of identification**

**SDS number** 317

**Synonym(s)** WISDOM® Flowable

**Recommended use** Pyrethroid type insecticide/miticide.

**Recommended restrictions** Keep out of the Reach of Children!

**Product registration number** 5481-519; 5481-520

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** AMVAC Chemical Corporation

**Address** 4100 E Washington Blvd  
Los Angeles, CA 90023 USA

**Telephone** AMVAC Chemical Corp 323-264-3910  
AMVAC Chemical Corp 323-268-1028 (FAX)

**Website** www.Amvac-Chemical.com

**E-mail** CustServ@Amvac-Chemical.com

**Emergency phone number**

Medical	888-681-4261
CHEMTREC® (USA+Canada)	800-424-9300
Product Use	888-462-6822
CHEMTREC® (Outside USA)	+1-703-527-3887

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

Acute toxicity, oral	Category 4
Acute toxicity, inhalation	Category 3
Sensitization, skin	Category 1
Carcinogenicity	Category 2
Reproductive toxicity (fertility)	Category 2
Specific target organ toxicity, repeated exposure	Category 1

**Environmental hazards**

Hazardous to the aquatic environment, acute hazard	Category 1
Hazardous to the aquatic environment, long-term hazard	Category 1

**OSHA defined hazards** Not classified.

#### Label elements



**Signal word**

Warning

**Hazard statement**

Harmful if swallowed. May cause an allergic skin reaction. Toxic if inhaled. Suspected of causing cancer. Suspected of damaging fertility. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

## Precautionary statement

### Prevention

Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

### Response

If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor. Rinse mouth. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Collect spillage.

### Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Hazard(s) not otherwise classified (HNOC)

None known.

### Supplemental information

United States Environmental Protection Agency Labeling Requirements: This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

CAUTION. Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with eyes, skin, and clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove and launder contaminated clothing before reuse.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds. To protect the environment, do not allow the pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. See the label for more complete information. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not apply water-based dilutions of Wisdom TC Flowable to electrical conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of the possible shock hazard.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Bifenthrin		82657-04-3	7.9
PROPYLENE GLYCOL, Industrial Grade		57-55-6	<10.0
Silicone oil		556-67-2	< 0.2
Preservative		2634-33-5	< 0.1

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.

### Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

### Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

<b>Ingestion</b>	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
<b>Most important symptoms/effects, acute and delayed</b>	May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

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

Components	Type	Value	Form
PROPYLENE GLYCOL, Industrial Grade (CAS 57-55-6)	TWA	10 mg/m3	Aerosol.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	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.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	If contact is likely, safety glasses with side shields are recommended.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
<b>Other</b>	Wear appropriate chemical resistant clothing (see label).
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	Not available.
<b>General hygiene considerations</b>	Keep away from food and drink. 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. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

<b>Appearance</b>	Opaque beige liquid
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Opaque beige
<b>Odor</b>	Bland
<b>Odor threshold</b>	None established
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	28 °F (-2 °C)
<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Flash point</b>	210 °F (99 °C) estimated
<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	2.6 % estimated
<b>Flammability limit - upper (%)</b>	12.6 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	1.81E-07 mm Hg @ 25°C (a.i.)
<b>Vapor density</b>	Heavier than air
<b>Relative density</b>	1.024 g/cm <sup>3</sup> @ 20°C
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Dispersible
<b>Auto-ignition temperature</b>	700 °F (371 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Bulk density</b>	8.53 lb/gal
<b>Flammability class</b>	Combustible IIIB estimated
<b>Percent volatile</b>	Not applicable
<b>pH in aqueous solution</b>	6.7 @ 25°C
<b>Specific gravity</b>	1.024 @ 20°C

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known. This product may emit hazardous fumes of hydrogen chloride, carbon oxides, and unidentified organic compounds when it is heated excessively or burned. WEAR SELF-CONTAINED BREATHING APPARATUS when these conditions are present.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Toxic if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation.
<b>Skin contact</b>	May cause an allergic skin reaction.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

**Acute toxicity** Toxic if inhaled. Harmful if swallowed. May cause an allergic skin reaction.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
WISDOM TC Flowable		
<u>acute</u>		
<b>dermal</b>		
LD50	rabbit	> 2000 mg/kg Tox Cat IV

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

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

<b>Irritation Corrosion - Skin</b>	
WISDOM TC Flowable	Result: Non irritating Species: rabbit Organ: skin

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

<b>Irritation Corrosion - Eye</b>	
WISDOM TC Flowable	, Tox Cat IV Result: irritating Species: rabbit Organ: eye Severity: Minimally

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	May cause an allergic skin reaction.
<b>Skin sensitization</b>	
WISDOM TC Flowable	, Not known to be a sensitizer Species: guinea pig Organ: skin

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

**Carcinogenicity** Suspected of causing cancer.

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

Not listed.

<b>Reproductive toxicity</b>	Suspected of damaging fertility.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Bifenthrin (CAS 82657-04-3)		
<b>Aquatic</b>		
Crustacea	LC50	Water flea (Ceriodaphnia dubia) 0 - 0.0002 mg/l, 48 hours
		Water flea (Daphnia magna) 0.0001 - 0.0009 mg/l, 48 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

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

WISDOM TC Flowable < 6, Bifenthrin

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international 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. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s. (Bifenthrin)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	8, 146, 335, IB3, T4, TP1, TP29
<b>Packaging exceptions</b>	155
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241

## IATA

<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s. (Bifenthrin)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	No limit
<b>Cargo aircraft only</b>	No limit

## IMDG

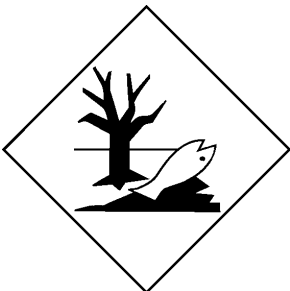
<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s. (Bifenthrin)
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	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.

**DOT; IATA; IMDG**



**Marine pollutant**



**General information** DOT Regulated Marine Pollutant. IMDG Regulated 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. This product is registered under EPA/FIFRA Regulations as a RESTRICTED USE PESTICIDE. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

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

Not regulated.

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

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**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 - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Bifenthrin	82657-04-3	7.9

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

Not regulated.

**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****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

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

Silicone oil (CAS 556-67-2)

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**Bifenthrin (CAS 82657-04-3)  
 PROPYLENE GLYCOL, Industrial Grade (CAS 57-55-6)**US. Pennsylvania Worker and Community Right-to-Know Law**

PROPYLENE GLYCOL, Industrial Grade (CAS 57-55-6)

**US. Rhode Island RTK**

Bifenthrin (CAS 82657-04-3)

**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.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No



Country(s) or region	Inventory name	On inventory (yes/no)*
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*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>	04-21-2015
<b>References</b>	ACGIH®: American Conference of Governmental Industrial Hygienists CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act EPA: Environmental Protection Agency FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act IARC: International Agency for Research on Cancer NTP: National Toxicology Program OSHA: Occupational Safety and Health Agency SARA: Superfund Amendments and Reauthorization Act TSCA: Toxic Substances Control Act DOT: Department of Transportation IMDG: International Maritime Dangerous Goods IATA: International Air Transport Association
<b>Version #</b>	01
<b>Further information</b>	Not available.
<b>HMIS® ratings</b>	Health: 3* Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 3 Flammability: 0 Instability: 0
<b>Disclaimer</b>	AMVAC Chemical Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.  ©2015 AMVAC Chemical Corporation. All Rights Reserved. AMVAC, WISDOM, and the Beaker Logo are trademarks owned by AMVAC Chemical Corporation. Chemtrec is a trademark of the American Chemistry Council, Inc. HMIS is a trademark of the American Coatings Association. NFPA is a trademark of the National Fire Protection Association, Inc. ACGIH is a trademark of the American Conference of Governmental Industrial Hygienists.
<b>Revision Information</b>	Product and Company Identification: Synonyms Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Transport Information: Proper Shipping Name/Packing Group