



P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 3033-23-6

FEMA #: 3236 COE #: 2269

MF: C10H18O

EC NO: 221-217-9

Minimum Purity: 99.0% (sum of isomers)

Additives: synthetic alpha tocopherol @ 0.10%

#### SYNONYM(S)

2H-Pyran, tetrahydro-4-methyl-2-

(2-methyl-1-propenyl)-, (2S-cis)-

(\* Alt. CAS #) CAS: 16409-43-1; Rose Oxide

FEMA CAS: 16409-43-1

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### SECTION 4. FIRST-AID MEASURES

INHALATION EXPOSURE: Remove to fresh air. Give oxygen and call a physician.

EYE CONTACT: Flush with water for 15 min. Seek medical help if necessary.

SKIN CONTACT: Wash area well with water. Seek medical help if necessary.

INGESTION: Administer water and call a physician or poison control center immediately. Do not induce vomiting.

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### SECTION 5. FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA

CO2, FOAM, DRY CHEMICAL

#### SPECIAL FIRE FIGHTING PROCEDURES

Use standard fire fighting procedures.

#### UNUSUAL FIRE AND EXPLOSION HAZARDS:

None.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Standard absorbents can be used.

WASTE DISPOSAL METHOD: Incineration or sanitary landfill in accordance with local, state, and federal regulations.

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### SECTION 7. HANDLING AND STORAGE

#### HANDLING

Observe all warnings and precautions listed for the product.

Use in accordance with good manufacturing and industrial hygiene practices. Use product in a properly ventilated work

area. Do not eat, drink or smoke while handling product.

#### STORAGE

Store tightly sealed under inert gas in a cool, well-ventilated area.

#### FIRE PROTECTION

Keep away from heat, sparks, and open flame.

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### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Local exhaust preferred. General ventilation required.

RESPIRATORY: Usually not required. Avoid inhaling concentrated vapors.

SKIN: Avoid skin contact. Use chemical resistant gloves.

EYES: Splash-proof safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Safety shower, eye wash

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

APPEARANCE: colorless liquid

ODOR DESCRIPTION: clean floral, green rosy, geranium

BOILING POINT: 194.97 C (EPI 4.0)

VAPOR PRESSURE : 0.456 mmHg (20C, EPI 4.0)

VAPOR DENSITY (Air = 1): > 1

SPECIFIC GRAVITY @ 25C (water = 1): 0.8650:0.8730

SOLUBILITY IN WATER: Insoluble in water; soluble in alcohol.

FLASH POINT (CC): 150 F 66 C

LOGP : 3.580

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### SECTION 10. STABILITY AND REACTIVITY

#### INCOMPATIBILITIES

CONDITIONS TO AVOID: Presents no special reactivity hazard.

MATERIALS TO AVOID: Strong oxidizing agents

#### HAZARDOUS COMBUSTION PRODUCTS

CO, CO<sub>2</sub>, water

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### ACUTE EFFECTS

Most likely route of entry is through the skin.

Full strength may be irritating to skin and eyes.

#### IRRITATION DATA

2% in petrolatum produced no irritation or sensitization in humans.

Eye Rabbit: irritant effects and eye effects at 1.25%.

Skin Human: no irritant effects at 2%.

Skin Human: no irritant effects at 3%.

Skin Rabbit: Test mat'l shows a skin irritation potential. The average score (24-72 hours) for irritation was calculated to be 3.1 for erythema and 1.0 for edema.

#### TOXICITY DATA

Ames assay: S. typhimurium strains TA1535, TA1537, TA1538, TA98, TA100

and TA102 w/ & w/o S9 activation. Direct plate method, solvent DMSO. Result:

test mat'l is not mutagenic.  
Ames assay: S. typhimurium strains TA1535, TA1537, TA1538, TA98, TA100  
and  
TA102 w/ & w/o S9 activation. Preincubation method, solvent DMSO. Result:  
test mat'l is not mutagenic.  
LD50 Dermal (rabbit) > 5 g/kg.  
LD50 Oral (rat) 4.3 g/kg.  
THRESHOLD LIMIT VALUE (TLV): Not established  
OSHA PERMISSABLE EXPOSURE LIMIT (PEL): Not established  
LISTED AS CARCINOGEN BY NTP, IARC, OR OSHA?: NO

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## SECTION 12. ECOLOGICAL INFORMATION

### GENERAL

Prevent contamination of soil, ground- and surface water.

### ECOTOXIC EFFECTS

Acute Toxicity LC50 (Zebrafish) the LC50 at 24, 48, 72 and 96 hours was  
77.6 mg/l with confidence interval of 56.6 - 106.5 mg/l. The NOEC after  
96  
hours was 12.5 mg/l.  
Biodegradation test (OECD 302C): 30 mg/l inherently biodegradable.  
biodegradation started on day 7 and exceeded 70% on day 11. 95%  
biodegradation after 31 days; 92% after 28 days.  
EC50 Daphnia magna: 33.2 mg/l at 48 hours. 103 mg/l at 24 hours. 48 hours  
EC0: 22 mg/l. 24 hour EC0: 50 mg/l.

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## SECTION 13. DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD: Incineration or sanitary landfill in  
accordance with local, state, and federal regulations.

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## SECTION 14. TRANSPORT INFORMATION

	Class	Pack Group	Sub. Risk	UN No.
Road(U.S.-DOT):	not regulated.			
Air (IATA):	not regulated.			
Sea (IMDG):	not regulated.			

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## SECTION 15. REGULATORY INFORMATION

### REVIEWS, STANDARDS, AND REGULATIONS

This chemical is listed on the following inventories:  
TSCA AICS CHINA DSL EINECS(221-217-9) ENCS PICCS  
LISTED AS CARCINOGEN BY NTP, IARC, OR OSHA?: NO

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## SECTION 16. OTHER INFORMATION

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