

I. PRODUCT AND COMPANY IDENTIFICATION

Company:	Natural Advantage, LLC	Address:	1050 Cypress Creek Rd. Oakdale, La 71463
Telephone:	(318) 215-1456	Fax:	(318) 335-1579
Product Name:	I-cis-Rose Oxide, Natural 1% in OH	Chemical Name:	4-Methyl-2-(2- methylpropen-1-yl)-tetrahydropyran (1%) in Ethanol (99%)
Product Number:	NA3236-1OH	EMERGENCY 24 HOUR CONTACT: 1-800-424-9300 ChemTrec Contract # 219030	

II. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]

Flammable liquids	Category 2
Skin irritation	Category 2

NFPA Hazard Rating:	Health: 2	Fire: 3	Reactivity: 0
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Labeling according to Regulation (EC) No 1272/2008 [CLP]:

Pictogram:

**Signal word:** Danger**Hazard statement:**H225 Highly flammable liquid and vapor
H319 Causes serious eye irritation**Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash hands thoroughly after handling
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to an approved waste disposal plant.

III. COMPOSITION/INFORMATION ON INGREDIENTS

Product Name:	I-cis-Rose Oxide, Natural 1% in Ethanol	Chemical Name:	4-Methyl-2-(2- methylpropen-1-yl)-tetrahydropyran (1%) in Ethanol (99%)
Synonyms:	Tetrahydro-4-methyl-2-(2-methylpropen-1-yl)pyran; Rosenoxide; cis-Rose Oxide	CAS#:	64-17-5 (99%), 3033-23-6 (1%)
Formula:	C10H18O	EINECS#:	200-578-6 (99%), 221-217-9 (1%)
Molecular Wt.:	154.25 g/mol		

IV. FIRST AID MEASURES

Inhalation	Remove from the exposure to fresh air. Contact a physician as necessary. If breathing is irregular or has stopped, start resuscitation and administer oxygen if available.
Eye Contact	Flush immediately with clean water for at least 15 minutes. Contact a physician if irritation persists.
Skin Contact	Remove any contaminated clothing or shoes. Wash affected areas thoroughly with soap and water. If irritation persists, contact a physician.
Ingestion	Do NOT induce vomiting. Give water to dilute. Contact a physician immediately.

V. FIRE-FIGHTING MEASURES

Flashpoint (Method Used):	12°C (54°F) (CC)
Lower Flammable Limit (% by Volume):	Information Not Available
Upper Flammable Limit (% by Volume):	Information Not Available
Extinguishing Media:	Water spray, Alcohol-resistant foam, dry chemical or carbon dioxide.
Special Fire Fighting Procedures:	Self-contained breathing apparatus and protective clothing should be worn when fighting fires involving chemicals.
Unusual Fire and Explosion Hazards:	None
NFPA Hazard Rating:	Health: 2 Fire: 3 Reactivity: 0

VI. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled.	Eliminate all ignition sources. Ventilate area. Contain spill and recover free product. Report spill to appropriate authorities if required.
Waste Disposal Method	Place material into sealed containers and dispose of in accordance with current applicable laws and regulations.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

Precautions to be taken in handling and storing.	Avoid inhalation and contact with skin and eyes. Good personal hygiene practices should be used. Wash after any contact, before breaks and meals, and at the end of the work period. Contaminated clothing and shoes should be cleaned before re-use. Good manufacturing practices dictate that an eyewash fountain and/or safety shower should be available in the work area.
Other Precautions:	None.

VIII. CONTROL MEASURES

Occupational Exposure Limits	Ethanol (CAS# 64-17-5) 1000ppm TWA
Respiratory Protection:	None generally required. If desired use NIOSH approved respirator.
Ventilation:	Local exhaust meeting ACGIH criteria as needed.
Protective Gloves:	Use chemical resistant gloves.
Protective Eyewear:	Use splash goggles or face shield when eye contact might occur.
Other Protective Clothing or Equipment:	None required.

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customerservice@natadv.com

IX. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	Information Not Available	Specific Gravity (H ₂ O = 1):	0.7850 - 0.8250
Vapor Pressure (mm Hg):	Information Not Available	Flash Point:	12°C (54°F) (CC)
Vapor Density (AIR =1):	>1.0	Melting Point:	Information Not Available
Solubility in Water:	Soluble	Evaporation Rate:	Information Not Available
pH:	Information Not Available	Color:	Colorless to Pale Yellow
Flammability (solid, gas):	Information Not Available	Oxidizing properties:	Information Not Available
Upper/lower flammability or explosive limits:	Information Not Available	Odor:	Floral, Rose-like, Fruity
Autoignition temperature:	Information Not Available	Partition coefficient:	Information Not Available
Viscosity:	Information Not Available	Decomposition temperature:	Information Not Available
Appearance:	Mobile Liquid	Explosive properties:	Information Not Available

X. REACTIVITY DATA

Stability:	Chemically Stable under recommended storage conditions.	Conditions to Avoid: Heat, Flames, and Sparks
Incompatibility with other Substance (Materials to Avoid):	Strong oxidizing agents	
Hazardous Decomposition or Byproducts:	Carbon Oxides	
Hazardous Polymerization:	No	

XI. TOXICOLOGICAL INFORMATION

Acute toxicity: LD50 Oral - Rat - 4300 mg/kg		Skin corrosion/irritation:	May be harmful
Serious eye damage/eye irritation:	Mild irritation 24 h	Respiratory or skin sensitization:	May be harmful
Germ cell mutagenicity:	Information Not Available	Reproductive toxicity:	Information Not Available
Specific target organ toxicity (single exposure):	Information Not Available	Specific target organ toxicity (repeated exposure):	Information Not Available
Aspiration hazard:	May be harmful		
Carcinogenicity:	I-cis-Rose Oxide is not listed as carcinogenic by IARC, ACGIH, NTP, or OSHA.		

XII. ECOLOGICAL INFORMATION

Toxicity:	Information Not Available	Persistence and Degradation:	Information Not Available
Bioaccumulative potential:	Information Not Available	Mobility in soil:	Information Not Available
PBT and vPvB assessment:	Information Not Available	Other adverse effects:	Information Not Available

XIII. DISPOSAL CONSIDERATIONS

Product:	Observe all federal, state, and local environmental regulations in disposing this material.
Contaminated packaging:	Dispose of as unused product.

XIV. TRANSPORTATION INFORMATION

DOT (US)	UN Number: 1197	Class: 3	Packing Group: II
Proper Shipping Name:	Extracts, flavouring, liquid	Marine pollutant: No	Poison Inhalation Hazard: No
IMDG	UN Number: 1197	Class: 3	Packing Group: II
Proper Shipping Name:	Extracts, flavouring, liquid	Marine pollutant: No	
IATA	UN Number: 1197	Class: 3	Packing Group: II
Proper Shipping Name:	Extracts, flavouring, liquid		

XV. REGULATORY INFORMATION

OSHA Hazards	Flammable liquid, Irritant
US Federal	TSCA: CAS# 64-17-5 and CAS# 3033-23-6 are listed on the TSCA inventory. California Prop. 65: This product does not contain any chemicals known to cause cancer, birth defects, or any other reproductive harm.
SARA 311/312	Fire hazard, Acute health hazard.
Regulation	Complies with EC 1272/2008.

XVI. OTHER INFORMATION

MSDS Creation Date:	08/18/2010
MSDS Revision #:	4
Revision Date:	06/13/2018
Liability Statement:	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Natural Advantage, LLC shall not be held liable for any damage resulting from handling or from contact with the above product.

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