

**SAFETY DATA SHEETS – RADOX**


according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Date of issue: 05/31/2018 Revision date: 01/05/2024 Printed: 01/05/2024 Version 3.1

**SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking**

- 1.1. Product identifier**  
 Product name : RADOX  
 Product form : Mixture
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
 Uses of the substance/mixture : Pet product  
 Use advised against : None identified
- 1.3. Details of the supplier of the safety data sheet**  
 Supplier : Amber NaturalZ, Inc.  
 1963 Pebble Circle  
 Lake Point, UT 84074  
 Tel: 1-801-966-8895
- 1.4. Emergency telephone number**  
 Emergency number : Amber NaturalZ, Inc.  
 M-F: 9 am – 5 pm (MST)  
 Tel: Toll Free: 1-877-727-8243  
 24/7 Line  
 Tel: 801-250-1205

**SECTION 2: Hazards Identification**

- 2.1. Classification of the substance or mixture**  
 Flammable liquid, 3
- 2.2. Label elements**  
**Labelling**  
 Hazard pictograms : 
- Signal word : Warning  
 Hazard statements : Flammable liquid and vapor
- Precautionary statements : Keep away from heat, open flames, sparks. – No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 If on skin (or hair): Take off immediately all contaminated clothing.  
 Rinse skin with water/shower  
 In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish  
 Store in a well-ventilated place. Keep cool  
 Dispose of contents/container to comply with applicable local, national, and international regulations.
- 2.3. Other hazards**  
 Other hazards which do not result in classification : Spills of this product present slipping hazard.
- 2.4. Unknown acute toxicity**

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Not applicable

**SECTION 3: Composition/Information on Ingredients**

**3.1. Substances**  
 Not applicable

**3.2. Mixture**

Name	Product identifier	% w/w
Ethanol	(CAS No) 64-17-5	<18

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1).

Trace ingredients (if any) are present < 1% concentration, (<0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

**SECTION 4: First-Aid Measures**

**4.1. Description of first aid measures**

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.
- First-aid measures after skin contact : Rinse skin with water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Call a POISON CENTER or doctor/physician if unwell.

**4.2. Most important symptoms and effects, both acute and delayed**

- Symptoms/injuries after eye contact : Direct contact may cause serious eye irritation. Symptoms include stinging, watering, redness, and swelling.

**4.3. Indication of any immediate medical attention and special treatment needed**

No additional information available.

**SECTION 5: Firefighting Measures**

**5.1. Extinguishing media**

- Suitable extinguishing media : Use fire-extinguishing media appropriate for surrounding materials. Use dry sand, dry chemical or alcohol -resistant foam to extinguish.
- Unsuitable extinguishing media : None known.

**5.2. Special hazards arising from the substance or mixture**

No additional information available

**5.3. Advice for firefighters**

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- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).

**SECTION 6: Accidental Release Measures**

- 6.1. Personal precautions, protective equipment and emergency procedures**  
 General measures : Stop leak if safe to do so. Special danger of slipping by leaking/spilling product. Avoid contact with eyes. Avoid breathing mist and spray. Evacuate unnecessary personnel. Equip cleanup crew with proper protection.
- 6.2. Environmental precaution**  
 Prevent entry to sewers and public waters.
- 6.3. Methods and material for containment and cleaning up**  
 Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect all waste in suitable and labelled containers and dispose according to local legislation. Ensure all national/local regulations are observed.
- 6.4. Reference to other sections**  
 No additional information available

**SECTION 7: Handling and Storage**

- 7.1. Precautions for safe handling**  
 Precautions for safe handling : Obtain special instructions before use. Ensure good ventilation of the workstation. Avoid contact with eyes. Wear personal protective equipment.  
  
 Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
- 7.2. Conditions for safe storage, including any incompatibilities**  
 Storage conditions : Keep out of reach of children. Keep only in the original container in well-ventilated place. Keep container closed when not in use. Keep away from incompatible materials. Keep away from sources of heat.  
  
 Incompatible materials : Strong oxidizing agents. Rubber packagings.
- 7.3. Specific end use(s)**  
 No additional information available

**SECTION 8: Exposure Controls/Personal Protection**

**8.1. Control parameters**

<b>Ethanol (64-17-5)</b>		
ACGIH	ACGIH STEL (ppm)	1000 ppm
ACGIH	Remark (ACGIH)	URT irr
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

**8.2. Exposure controls**

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Appropriate engineering controls	:	Ensure good ventilation of the workstation. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.
Personal protective equipment	:	Handle in accordance with good industrial hygiene and safety practices. Avoid all unnecessary exposure. For certain operations, additional Personal Protection Equipment (PPE) may be required.
Hand protection	:	In case of repeated or prolonged contact wear gloves.
Eye protection	:	Wear goggles if splashing or spraying is anticipated.
Skin and body protection	:	In case of repeated or prolonged exposure: Personal protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling.
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory equipment.
Other information	:	Do not eat, drink or smoke during use.

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Dark Brown
Odor	:	Aromatic, Bitter, Beet Aroma
Odor threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	112.28°F (44.6°C)
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapor pressure	:	< 59 hPa at 20°C (68°F) (estimated)
Relative vapor density at 20 °C	:	< 1.6 (estimated)
Relative density	:	< 1.0 (water=1)
Solubility	:	No data available
Log Pow	:	No data available
Log know	:	No data available
Viscosity, kinematic	:	No data available
Viscosity	:	Not applicable (water-like)
Explosive properties	:	Not applicable
Oxidizing properties	:	Not applicable

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Explosive limits : Not applicable

**9.2. Other information**

No additional information available

**SECTION 10: Stability and Reactivity**

**10.1. Reactivity**

Non-reactive.

**10.2. Chemical stability**

The product is stable at normal handling and storage condition.

**10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

Heat, direct sunlight, flames and sparks.

**10.5. Incompatible materials**

Strong oxidizing agents.

**10.6. Hazardous decomposition products**

Thermal decomposition products: Carbon monoxide. Carbon dioxide.

**SECTION 11: Toxicological Information**

**11.1. Information on toxicological effects**

Potential routes of entry : Inhalation, skin, ingestion

Acute toxicity : Not classified  
 No testing on this product is obtained. Toxicity endpoints and acute toxicity estimate (ATE) are evaluated according to the criteria of the third revision of the GHS.

**Ethanol (64-17-5)**

LC50 inhalation rat (mg/l)	124.8 mg/l 4h
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ATE (oral) : ca >2000 mg/kg (Estimated)

ATE (dermal) : ca >2000 mg/kg (Estimated)

ATE (inhalation-mist) : ca >5 mg/kg (Estimated)

ATE (inhalation-vapor) : ca >20 mg/kg (Estimated)

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified  
 (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified  
 (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified  
 (Based on available data, the classification criteria are not met)

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<b>Ethanol (64-17-5)</b>	
IARC	1- Carcinogenic to human
	There is sufficient evidence in humans for the carcinogenicity of alcohol consumption.

- Reproductive toxicity : Not classified  
(Based on available data, the classification criteria are not met)
- Specific target organ toxicity (single exposure) : Not classified  
(Based on available data, the classification criteria are not met)
- Specific target organ toxicity (repeated exposure) : Not classified  
(Based on available data, the classification criteria are not met)
- Aspiration hazard : Not classified  
(Based on available data, the classification criteria are not met)
- Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms include stinging, watering, redness, and swelling.

**SECTION 12: Ecological Information**

- 12.1. Toxicity**  
 Ecology – general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
- 12.2. Persistence and degradability**  
 No additional information available
- 12.3. Bioaccumulative potential**  
 No additional information available
- 12.4. Mobility in soil**  
 No additional information available
- 12.5. Other adverse effects**  
 Effect on ozone layer : No additional information available  
 Effect on the global warming : No additional information available

**SECTION 13: Disposal Considerations**

- 13.1. Waste treatment methods**  
 Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with applicable local, national and international regulations.
- Ecology – waste materials : Avoid release to the environment.

**SECTION 14: Transport Information**

**In accordance with DOT**  
 Not regulated when transported

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According to the 49 CFR 173.150(e)(2), the subject product is not regulated for transport since aqueous solution containing 24 percent or less alcohol by volume and no other hazardous material.

Marine pollutant : NO

**ADR**

No additional information available

**Transport by sea**

No additional information available

**Air transport (IATA)**

Special Provision A58 – An aqueous solution containing 24% or less alcohol by volume is not subject to these Regulations.

**SECTION 15: Regulatory Information**

**15.1.** All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**15.2. International regulations**

No additional information available

**15.3. Fire Code Compliance**

Store this product in accordance with applicable regulations enforced at the site of storage by the governing code authority.

**15.4. US State regulations**

California Proposition 65 – NOTE: This product has NOT evaluated against the latest requirements of the California Proposition 65 to meet the safe harbor warning requirements introduced by the office of Environmental Health Hazards Assessment (OEHHA), during it OSHA hazards classification evaluation. However, this product contains ethanol, which is found in alcoholic beverages and known to the State of California to cause cancer.

<b>Ethanol (64-17-5)</b>				
U.S. – California – Proposition 65 – Carcinogens List	U.S. – California – Proposition 65 – Developmental Toxicity	U.S. – California - Proposition 65 – Reproductive Toxicity – Female	U.S. – California – Proposition 65 – Reproductive Toxicity – Male	Non-significant risk level (NSRL)
Yes	Yes	No	No	

**SECTION 16: Other Information**

Indication of changes : 14- Transport Information  
 15- Regulatory Information

Revision date : V3.0: 10/23/2020

Revision date : V3.1: 01/05/2024

Indication of change : 1- Identification of the Substance/Mixture and of the Company/Undertaking: Emergency Telephone Number.

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*