

SECTION 1 Identification**1.1. Product identifier**

Product form : Mixture
Trade name : BUGGINS Insect Repellent X

1.2. Other means of identification

Other means of identification : EPA Reg No. 67867-8

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Pesticides
Recommended use : Insect Repellent (intended to be applied to the skin)
Restrictions on use : None known

1.4. Supplier's details

Bugg Products LLC
14505 21st Ave N Ste 214
Plymouth, MN 55447
T (866) 720-2844

1.5. Emergency phone number

Emergency number : (866) 720-2844

SECTION 2 Hazard Identification**2.1. Classification of the substance or mixture****GHS US classification**

Flammable liquid, Category 3	H226	Flammable liquid and vapor.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Full text of H statements : see section 16		

2.2. Label elements**GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H226 - Flammable liquid and vapor
H319 - Causes serious eye irritation

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.

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P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P370+P378 - In case of fire: Use dry extinguishing powder, carbon dioxide (CO₂), alcohol resistant foam to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

None known

2.4. Hazards not otherwise classified

Other hazards which do not result in classification : None known.

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Ethanol	CAS-No.: 64-17-5	10 – 30
Hydroxyethyl Isobutyl Piperidine Carboxylate	CAS-No.: 119515-38-7	20

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur.

First-aid measures after skin contact : Insect Repellent (intended to be applied to the skin). No first aid should be needed. If skin irritation occurs: Discontinue use. Take off contaminated clothing. Wash skin with plenty of water. Get medical advice if skin irritation persists.

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 irritation persists.

First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.

Skin : No adverse effects expected under normal conditions of use.

Eyes : Causes serious eye irritation.

Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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Chronic symptoms : No chronic health hazards are likely for this material.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Not required. Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray, dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor. Keep away from ignition sources. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂).

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ventilate spillage area. Remove ignition sources. Avoid contact with eyes. Do not touch or walk on the spilled product. Keep unprotected persons away.

For non-emergency personnel

Emergency procedures : Ventilate spillage area. No flames, no sparks. Eliminate all sources of ignition. Avoid contact with skin and eyes. Wear suitable protective clothing. Keep unnecessary and unprotected personnel away from the spillage. Stop leak if safe to do so. Only qualified personnel equipped with suitable protective equipment may intervene.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Absorb with an inert material and place in an appropriate waste disposal container. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site. Refer to product label for additional information on use and handling.

For further information refer to section 8: "Exposure controls/personal protection", For disposal of contaminated materials refer to section 13 : "Disposal considerations"

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling
- : Read and understand the entire label before using. Use only according to label directions. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with eyes. Wear proper protective equipment.
- Hygiene measures
- : Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

- Technical measures
- : Take precautionary measures against static discharge. Use explosion-proof ventilating, lighting, electrical equipment.
- Storage conditions
- : Store away from strong oxidizers, strong bases, strong acids. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Refer to product label for additional information on use and handling.
- Specific end uses
- : Insect Repellent (intended to be applied to the skin).

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Ethanol (64-17-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethanol
ACGIH® TLV® STEL	1000 ppm
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Ethyl alcohol (Ethanol)
OSHA PEL (TWA)	1900 mg/m³
	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

- Appropriate engineering controls
- : Provide adequate general and local exhaust ventilation.
- Environmental exposure controls
- : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:
None under normal conditions. Handling product in bulk: Protective gloves recommended.
Eye protection:
None under normal conditions. Handling product in bulk: Use suitable eye protection

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Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

No respiratory protection needed under normal use conditions. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Thermal hazard protection:

Not applicable.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Transparent. Colorless liquid.
Color	: Colorless
Odor	: Characteristic pleasant
Odor threshold	: Not determined
pH	: 7 – 9
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 100 °F
Flash point	: 82 °F
Flammability (solid, gas)	: Flammable liquid.
Vapor pressure	: Not determined
Relative vapor density at 20°C	: No data available
Relative density	: Not determined
Solubility	: Miscible with water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: Not determined
Explosion limits	: Lower explosion limit: 3.3 vol % Ethanol Upper explosion limit: 19 vol % Ethanol
Explosive properties	: Vapors may form flammable and explosive mixture with air.
Oxidizing properties	: Not oxidizing.
Particle characteristics	: Particle characteristics : Not applicable

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor. The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

Keep away from oxidizers, strong acids and strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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LD50 dermal rat	> 2000 mg/kg
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Hydroxyethyl Isobutyl Piperidine Carboxylate (119515-38-7)

LD50 oral rat	4743 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 4.364 mg/l air

Ethanol (64-17-5)

LD50 oral rat	15010 mg/kg body weight
LD50 oral	8300 mg/kg body weight
LC50 Inhalation - Rat (Vapors)	≈ 116.9 mg/l/4h

Skin corrosion/irritation : Not classified. No adverse effects expected under normal conditions of use.
pH: 7 – 9

Serious eye damage/irritation : Causes serious eye irritation.
pH: 7 – 9

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified. This product does not contain any component that is considered a carcinogen by IARC, ACGIH, OSHA or NTP.

Ethanol (64-17-5)

IARC group	1 - Carcinogenic to humans
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Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Ethanol (64-17-5)

NOAEL (subchronic,oral,animal/male,90 days)	< 9700 mg/kg body weight
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Aspiration hazard : Not classified

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Viscosity, kinematic : Not determined

Inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.

Skin : No adverse effects expected under normal conditions of use.

Eyes : Causes serious eye irritation.

Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms : No chronic health hazards are likely for this material.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not applicable.

Hazardous to the aquatic environment, long-term (chronic) : Not applicable.

Hydroxyethyl Isobutyl Piperidine Carboxylate (119515-38-7)

LC50 - Fish [1] 173 mg/l

EC50 - Crustacea [1] > 103 mg/l

EC50 72h - Algae [1] 87.3 mg/l *Desmodesmus subspicatus*

NOEC (chronic) 50 mg/l

Ethanol (64-17-5)

LC50 - Fish [1] 14.2 g/l *Pimephales promelas* (Fathead minnow)

EC50 - Crustacea [1] > 100 mg/l

NOEC (chronic) 9.6 mg/l *Daphnia magna* (Water flea)

12.2. Persistence and degradability

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Persistence and degradability : No additional information available.

Hydroxyethyl Isobutyl Piperidine Carboxylate (119515-38-7)

Persistence and degradability : Not readily biodegradable.

Ethanol (64-17-5)

Persistence and degradability : Readily biodegradable.

12.3. Bioaccumulative potential

Hydroxyethyl Isobutyl Piperidine Carboxylate (119515-38-7)

Bioconcentration factor (BCF REACH) ≈ 19

Ethanol (64-17-5)

Bioaccumulative potential : Low bioaccumulation potential.

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Waste treatment methods : Refer to product label for additional information on use and handling.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Flammable vapors may accumulate in the container.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
UN1170	1170	1170
14.2. Proper Shipping Name		
Ethyl alcohol solutions	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethanol solution
14.3. Transport hazard class(es)		
3	3	3
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
UN-No. (DOT) : UN1170

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DOT Special Provisions (49 CFR 172.102)	: 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III. B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 4b;150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

IMDG

Special provision (IMDG)	: 144, 223
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colorless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19%. Miscible with water.

IATA

Special provision (IATA)	: A3, A58, A180
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
ERG code (IATA)	: 3L

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SECTION 15 Regulatory information

15.1. Federal regulations

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SARA Section 311/312 Hazard Classes	Refer to Section 2 for OSHA Hazard Classification.
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Hydroxyethyl Isobutyl Piperidine Carboxylate	CAS-No. 119515-38-7	20%
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This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis 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.

FIFRA Labelling

EPA Registration Number	67867-8
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This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

FIFRA Signal Word	Caution
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FIFRA Precautionary Statement	Keep out of reach of children.
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FIFRA Human Health Hazards	HAZARDS TO HUMANS - Causes moderate eye irritation. Avoid contact with eyes. Wash thoroughly with soap and water after handling, returning indoors, and before eating, drinking, chewing gum, using tobacco, or using the toilet.
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FIFRA Physical Hazard	PHYSICAL OR CHEMICAL HAZARDS - FLAMMABLE: Do not use or store near heat sources, sparks or open flame. Do not smoke while applying.
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FIFRA Other	STORAGE AND DISPOSAL PESTICIDE STORAGE: Store in a cool, dry place out of the reach of children. Keep away from heat, sparks and open flame. PESTICIDE DISPOSAL & CONTAINER HANDLING: Non-refillable container. Do not reuse or refill this container. If empty - Place in trash or offer for recycling, if available. If partly filled - Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.
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15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component

State or local regulations

Ethanol(64-17-5)	U.S. - New Jersey - Right to Know Hazardous Substance List
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SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 6/19/2025
Issue date : 6/19/2025

Full text of hazard classes and H-statements	
H226	Flammable liquid and vapor
H319	Causes serious eye irritation

Indication of changes:
New version.

Safety Data Sheet (SDS), USA

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