

Safety Data Sheet



Section 1: Identification

Product identifier

Product Name

- **Starbar E-Pro Adulticide Spray**

Synonyms

- 100209009; 100209010; 100209011; 100209012; EPA Reg. No.: 89459-66

Product Description

- Amber colored liquid.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use

- Insecticide.

Restrictions on use

- **KEEP OUT OF THE REACH OF CHILDREN.** Avoid contact with eyes, skin and clothing. Do not use or store near heat or open flame. Avoid release to the environment. Do not take internally.

Details of the supplier of the safety data sheet

Manufacturer

- Central Garden & Pet Company
1501 E. Woodfield Road, Suite 200W
Schaumburg, IL 60173
United States

www.central.com

Emergency telephone number

Manufacturer

- 1-800-424-9300 - CHEMTREC

Manufacturer (Transportation)

- 1-703-527-3887 - Chemtrec - Outside US collect calls accepted

Manufacturer

- 1-800-248-7763

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

- Aspiration 1
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
Eye Irritation 2A
Acute Toxicity Oral 4
Carcinogenicity 1A
Flammable Liquids 3
Acute Toxicity Inhalation 4
Specific Target Organ Toxicity Single Exposure 1

Label elements

OSHA HCS 2012

DANGER

- Hazard statements** • May be fatal if swallowed and enters airways
 May cause drowsiness or dizziness
 Causes serious eye irritation
 Flammable liquid and vapor
 May cause cancer.
 Harmful if swallowed
 Harmful if inhaled
 Causes damage to organs - nervous system.

Precautionary statements

- Prevention** • Wash thoroughly after handling.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Avoid breathing dust, fume, gas, mist, vapors and/or spray.
 Use only outdoors or in a well-ventilated area.
 Do not eat, drink or smoke when using this product.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Keep container tightly closed.
 Ground and/or bond container and receiving equipment.
 Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 Use explosion-proof electrical/ventilating/lighting/equipment.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
- Response** • IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 If skin irritation occurs: Get medical advice/attention.
 In case of fire: Use appropriate media dry chemical, CO₂, water spray or regular foam for extinction.
 Take off contaminated clothing and wash before reuse.
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 Do NOT induce vomiting.
 Rinse mouth.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 IF exposed or concerned: Get medical advice/attention.
- Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
 Store locked up.
 Store in a well-ventilated place. Keep container tightly closed.
 Keep cool.

Other hazards

OSHA HCS 2012

- This product is extremely toxic to fish and aquatic invertebrates and highly toxic to bees exposed to direct treatment or to residues on crop or weeds. Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition		
Chemical Name	Identifiers	%
Permethrin	CAS:52645-53-1	36.8%
Acetin, tri-	CAS:102-76-1	27.39%
Solvent naphtha	CAS:64742-94-5	21.9% TO 22.5%
Naphthalene	CAS:91-20-3	< 0.34%
Glycols, polyethylenepolypropylene, monobutyl ether (nonionic)	CAS:9038-95-3	> 3.06%
Other ingredients	NDA	Balance

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor for further treatment advice.

Skin

- IF ON SKIN: Wash with plenty of soap and water. If irritation or rash occurs, get medical advice/attention.

Eye

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

- IF SWALLOWED: Immediately call a poison control center or doctor. Aspiration hazard - if swallowed, do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

- Aspiration hazard, causes serious eye irritation, may cause dizziness and/or drowsiness if inhaled, harmful if inhaled, harmful if swallowed, may cause cancer, may effect the nervous system. Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

- Contains petroleum distillate vomiting may cause aspiration pneumonia. Treat symptomatically and supportively.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media** • LARGE FIRE: Water spray, fog or regular foam.
SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
- Unsuitable Extinguishing Media** • Avoid heavy hose streams.
- Firefighting Procedures** • Do not allow fire fighting water to escape into waterways or sewers.
LARGE FIRES: Dike fire control water for later disposal; do not scatter the material.
LARGE FIRES: Move containers from fire area if you can do it without risk.
Stay upwind.
Ventilate closed spaces before entering.
Do not breathe gas/fumes/vapor/spray.
- Special hazards arising from the substance or mixture**
- Unusual Fire and Explosion Hazards** • Containers may explode when heated.
- Hazardous Combustion Products** • Decomposes upon heating and may produce toxic vapors/gases.
- Advice for firefighters**
- Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Personal Precautions** • Do not walk through spilled material. Ventilate enclosed areas. Wear appropriate personal protective equipment, avoid direct contact.
- Emergency Procedures** • ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate closed spaces before entering. Avoid release into the environment.

Environmental precautions

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

- Containment/Clean-up Measures** • Absorb spills with an inert material, clay granules or other inert absorbent material and put in container for disposal.
All equipment used when handling the product must be grounded.
LARGE SPILLS: Dike far ahead of spill for later disposal.
Stop leak if you can do it without risk.

Section 7 - Handling and Storage

Precautions for safe handling

- Handling** • Keep away from fire - No Smoking. Avoid breathing fumes. Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact.

Conditions for safe storage, including any incompatibilities

- Storage** • Store locked up. Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources. Keep from freezing. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F Keep away from combustible material. Keep container tightly closed.

- Incompatible Materials or Ignition Sources** • Heat, sparks, open flame.

Other Information

- See product label for additional information.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines • No data available.

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Naphthalene (91-20-3)	TWAs	10 ppm TWA	10 ppm TWA; 50 mg/m ³ TWA	10 ppm TWA; 50 mg/m ³ TWA
	STELs	Not established	15 ppm STEL; 75 mg/m ³ STEL	Not established

Exposure Control Notations

ACGIH

- Naphthalene (91-20-3): **Skin:** (Skin - potential significant contribution to overall exposure by the cutaneous route)

Exposure Limits Supplemental

ACGIH

- Naphthalene (91-20-3): **TLV Basis - Critical Effects:** (cataracts; upper respiratory tract irritation; hemolytic anemia)

Exposure controls

Engineering

Measures/Controls

- Use adequate ventilation to remove vapors (fumes, dust, etc.)

Personal Protective Equipment

Pictograms



Respiratory

- In case of insufficient ventilation, wear suitable NIOSH approved respiratory protection.

Eye/Face

- Wear chemical splash safety goggles.

Hands

- Wear chemical resistant gloves.

Skin/Body

- It is recommended for handlers to wear appropriate clothing to prevent skin contact including long sleeves, long pants, socks and shoes.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Other Information

- See product label for specific use PPE instructions.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Amber liquid.
Color	Amber	Odor	Faint mild petroleum.
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available

Decomposition Temperature	No data available	pH	4.8 to 5 @ 20 °C(68 °F)
Specific Gravity/Relative Density	1.02 to 1.04 Water=1	Density	No data available
Water Solubility	Insoluble	Viscosity	No data available
Critical Temperature	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	118 °F(47.7778 °C)	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- Non-reactive under normal handling and storage conditions.

Chemical stability

- Stable

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Direct sunlight. Do not freeze. Excessive heat >110°F. Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

Incompatible materials

- Store away from oxidizers.

Hazardous decomposition products

- Carbon dioxide and possibly carbon monoxide.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Permethrin (36.8%)	52645-53-1	Acute Toxicity: Ingestion/Oral-Rat LD50 • 500 mg/kg; Inhalation-Rat LC50 • 2.65 mg/L 4 Hour(s); Skin-Rabbit LD50 • >2000 mg/kg; Irritation: Eye-Rabbit • Mild irritation; Skin-Rabbit • Essentially non-irritating

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation 4; Acute Toxicity - Oral 4
Skin corrosion/Irritation	OSHA HCS 2012 • Classification criteria not met
Serious eye damage/Irritation	OSHA HCS 2012 • Eye Irritation 2A

Skin sensitization	OSHA HCS 2012 • Classification criteria not met
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Aspiration 1
Carcinogenicity	OSHA HCS 2012 • Carcinogenicity 1A
Germ Cell Mutagenicity	OSHA HCS 2012 • Not classified - data lacking
Toxicity for Reproduction	OSHA HCS 2012 • Classification criteria not met
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 1; Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
STOT-RE	OSHA HCS 2012 • Classification criteria not met

Potential Health Effects

Inhalation

Acute (Immediate)

- Harmful if inhaled. Permethrin affects nervous system. Symptoms of overexposure to permethrin include diarrhea, salivation, tremors, convulsions, hyperactivity and hypersensitivity. May cause drowsiness and dizziness.

Chronic (Delayed)

- No data available

Skin

Acute (Immediate)

- Contact with Permethrin may cause reversible skin sensations (paresthesia) which may include numbing, burning or tingling.

Chronic (Delayed)

- No data available

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- No data available

Ingestion

Acute (Immediate)

- Aspiration hazard - small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Harmful if ingested. Permethrin affects nervous system. Symptoms of overexposure to permethrin include diarrhea, salivation, tremors, convulsions, hyperactivity and hypersensitivity.

Chronic (Delayed)

- No data available

Mutagenic Effects

- Permethrin was not mutagenic in a battery of in vitro and in vivo tests.

Carcinogenic Effects

- Permethrin is not classified as carcinogen by NTP, IARC and OSHA. Naphthalene is listed as a suspected human carcinogen by NTP and IARC.

Reproductive Effects

- Permethrin does not cause developmental or reproductive effects.

Section 12 - Ecological Information

Toxicity

Components		
Permethrin (36.8%)	52645-53-1	Aquatic Toxicity-Fish: 96 Hour(s) LC50 <i>Blue gill</i> 0.00079 mg/L [Acute] 96 Hour(s) LC50 <i>Atlantic silverside</i> 0.0022 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.0003 mg/L [Chronic] NOEC <i>Sheepshead minnow</i> 0.00083 mg/L [Chronic] Aquatic Toxicity-Crustacea: NOEC <i>Daphnia magna</i> 0.000039 mg/L [Chronic]

NOEC <i>Mysid shrimp</i> 0.000011 mg/L [Chronic] LC50 <i>Hexagenia bilineata</i> 0.0001 mg/L [Acute] 96 Hour(s) LC50 <i>Mysid shrimp</i> 0.000019 mg/L [Acute]
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Persistence and degradability

- No data available

Bioaccumulative potential

- No data available.

Mobility in Soil

- No data available

Other adverse effects**Potential Environmental Effects**

- This product is extremely toxic to fish and aquatic invertebrates and highly toxic to bees exposed to direct treatment or to residues on crop or weeds.

Section 13 - Disposal Considerations**Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. See product label for disposal instructions.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	NA1993	Bulk packaging only: Combustible liquid, n.o.s. (Glyceryl triacetate, Petroleum distillates)	Comb. Liq.	III	Not Applicable
IMO/IMDG	UN1993	Flammable liquids, n.o.s. (Glyceryl triacetate, Petroleum distillates)	3	III	Marine Pollutant
IATA/ICAO	UN1993	Flammable liquids, n.o.s. (Glyceryl triacetate, Petroleum distillates)	3	III	Not Applicable

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Other information

IMO/IMDG • No data available

IATA/ICAO • No data available

Section 15 - Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**

SARA Hazard Classifications • SARA Title III Section 313, Acute, Chronic, Fire

FIFRA – Pesticide Labeling

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.

CAUTION

Precautionary Statements • KEEP OUT OF THE REACH OF CHILDREN.

Hazards to Humans and Domestic Animals

Harmful if swallowed, inhaled, or absorbed through the skin. Causes moderate eye irritation. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash before reuse.

First Aid •

If swallowed:• Immediately call a poison control center or doctor.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give any liquid to the person.• Do not give anything by mouth to an unconscious person.If on skin or clothing:• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.If in eyes:• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.If inhaled:• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.Contains petroleum distillate - vomiting may cause aspiration pneumonia.

Environmental Hazards •

This product is highly toxic to bees exposed to direct treatment or residues on crop or weeds. Do not apply this product or allow it to drift to crops or weeds on which bees are actively foraging. Additional information may be obtained from your Cooperative Extension Service.This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. Do not apply when weather conditions favor drift from treated areas.For Treatment of Preconstruction Lumber and Logs: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Physical or Chemical Hazards • Combustible.
Do not use or store near heat or open flame

Inventory		
Component	CAS	TSCA
Acetin, tri-	102-76-1	Yes
Glycols, polyethylenepolypropylene,	9038-95-3	Yes

monobutyl ether (nonionic)		
Naphthalene	91-20-3	Yes
Permethrin	52645-53-1	No
Solvent naphtha	64742-94-5	Yes

United States

Environment

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Acetin, tri-	102-76-1	Not Listed
• Naphthalene	91-20-3	100 lb final RQ; 45.4 kg final RQ
• Solvent naphtha	64742-94-5	Not Listed
• Glycols, polyethylenepolypropylene, monobutyl ether (nonionic)	9038-95-3	Not Listed
• Permethrin	52645-53-1	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Acetin, tri-	102-76-1	Not Listed
• Naphthalene	91-20-3	0.1 % de minimis concentration
• Solvent naphtha	64742-94-5	Not Listed
• Glycols, polyethylenepolypropylene, monobutyl ether (nonionic)	9038-95-3	Not Listed
• Permethrin	52645-53-1	1.0 % de minimis concentration

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

• Acetin, tri-	102-76-1	Not Listed
• Naphthalene	91-20-3	waste number U165
• Solvent naphtha	64742-94-5	Not Listed
• Glycols, polyethylenepolypropylene, monobutyl ether (nonionic)	9038-95-3	Not Listed
• Permethrin	52645-53-1	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring

• Acetin, tri-	102-76-1	Not Listed
• Naphthalene	91-20-3	
• Solvent naphtha	64742-94-5	Not Listed
• Glycols, polyethylenepolypropylene, monobutyl ether (nonionic)	9038-95-3	Not Listed
• Permethrin	52645-53-1	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics

• Acetin, tri-	102-76-1	Not Listed
• Naphthalene	91-20-3	waste number U165
• Solvent naphtha	64742-94-5	Not Listed
• Glycols, polyethylenepolypropylene, monobutyl ether (nonionic)	9038-95-3	Not Listed
• Permethrin	52645-53-1	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Waste Minimization Priority Chemicals

• Acetin, tri-	102-76-1	Not Listed
• Naphthalene	91-20-3	
• Solvent naphtha	64742-94-5	Not Listed
• Glycols, polyethylenepolypropylene, monobutyl ether (nonionic)	9038-95-3	Not Listed
• Permethrin	52645-53-1	Not Listed

Section 16 - Other Information

- Revision Date** • 26/February/2016
- Last Revision Date** • 26/February/2016
- Preparation Date** • 26/February/2016
- Disclaimer/Statement of Liability** •
The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.