

## Safety Data Sheet



### Section 1: Identification

#### Product identifier

##### Product Name

- **Starbar Cattle Armor 1% Synergized Pour On**

##### Synonyms

- 100209002; 100209003; 100209004; EPA Reg. No.: 89459-70

##### Product Description

- Clear amber liquid.

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

##### Recommended use

- Insecticide.

##### Restrictions on use

- Keep out of reach of children. Avoid release to the environment. Avoid contact with skin, eyes, or clothing. 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

- 1-800-347-8272

### Section 2: Hazard Identification

#### United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

#### Classification of the substance or mixture

##### OSHA HCS 2012

- Specific Target Organ Toxicity Single Exposure 1  
Skin Sensitization 1  
Aspiration 1  
Skin Irritation 2  
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

#### Label elements

##### OSHA HCS 2012

**DANGER**



- Hazard statements**
- Causes damage to organs - nervous system.
  - May cause an allergic skin reaction
  - May be fatal if swallowed and enters airways
  - Causes skin irritation
  - May cause drowsiness or dizziness

### Precautionary statements

- Prevention**
- Wash thoroughly after handling.
  - Wear protective gloves.
  - Do not breathe dust, fume, gas, mist, vapors and/or spray.
  - Contaminated work clothing should not be allowed out of the workplace.
  - Use only outdoors or in a well-ventilated area.
  - Do not eat, drink or smoke when using this product.
- Response**
- IF ON SKIN: Wash with plenty of soap and water.
  - If skin irritation or rash occurs: Get medical advice/attention.
  - Take off contaminated clothing and wash before reuse.
  - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
  - Do NOT induce vomiting.
  - IF exposed: Call POISON CENTER or doctor/physician.
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.
- Storage/Disposal**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
  - Store in a well-ventilated place. Keep container tightly closed.
  - Store locked up.

### Other hazards

#### OSHA HCS 2012

- This product is extremely toxic to aquatic organisms, including fish and invertebrates. This product is highly toxic to bees exposed to direct treatment on blooming crops 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 according to United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

### Mixtures

Composition		
Chemical Name	Identifiers	%
Permethrin	CAS:52645-53-1	1%
Piperonyl butoxide	CAS:51-03-6	1%
Petroleum distillates, hydrotreated (mild) heavy paraffinic	CAS:64742-54-7	97.96%
Petroleum distillates, hydrotreated (mild) light paraffinic	CAS:64742-55-8	above
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 CENTER or doctor/physician if you feel unwell.

### Skin

- IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. 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. Do NOT induce vomiting.

## Most important symptoms and effects, both acute and delayed

- Causes damage to organs - nervous system. May cause an allergic skin reaction in individuals with a sensitivity to piperonyl butoxide. Aspiration hazard. Causes skin irritation. May cause dizziness and/or drowsiness if inhaled. 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** • SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**Unsuitable Extinguishing Media** • Avoid heavy hose streams.

**Firefighting Procedures** • Do not use direct stream of water. A direct stream of water may spread fire. Do not allow fire fighting water to escape into waterways or sewers.

### Special hazards arising from the substance or mixture

**Unusual Fire and Explosion Hazards** • No data available.

**Hazardous Combustion Products** • Decomposes upon heating to produce toxic vapors/gases which may include oxides of carbon.

### 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** • Avoid breathing fumes. Wear appropriate personal protective equipment, avoid direct contact. Keep all sources of ignition away.

**Emergency Procedures** • Stop leak if you can do it without risk. Avoid release into the environment. Avoid

unnecessary personnel and equipment traffic in the spill area. Do not allow runoff into water, storm drains or drainage ditches. Wear appropriate personal protective equipment (PPE).

## Environmental precautions

- Avoid run off to waterways and sewers.

## Methods and material for containment and cleaning up

### Containment/Clean-up Measures

- Cover liquid spill with sand, earth or other non-combustible absorbent material. Wear appropriate personal protective equipment, avoid direct contact. Prevent entry into waterways, sewers, basements or confined areas.

## Section 7 - Handling and Storage

### Precautions for safe handling

#### Handling

- Handle and open container with care. Avoid release to the environment. Use only in well ventilated areas. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe vapors.

### Conditions for safe storage, including any incompatibilities

#### Storage

- Keep out of reach of children. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep from freezing. Store away from oxidizers strong acids and strong bases.

#### Incompatible Materials or Ignition Sources

- Strong acids, strong bases, and oxidizing agents.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

### Exposure controls

#### Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

#### Personal Protective Equipment

##### Pictograms

- 

##### Respiratory

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

##### Eye/Face

- Wear chemical splash safety goggles.

##### 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

- Avoid release to the environment.

### 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	Clear amber liquid.
Color	Amber	Odor	Slight solvent.
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	0.848 g/ml (7.07 lb/gal)	Water Solubility	Insoluble
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	260°F (127°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

- Avoid storage with or near toxic substances. Direct sunlight. Excessive heat >110°F.

### Incompatible materials

- Heat, strong acids, strong bases and oxidizing agents.

### Hazardous decomposition products

- Carbon monoxide and carbon dioxide.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
Permethrin (1%)	52645-53-1	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 500 mg/kg; Inhalation-Rat LC50 • 2.65 mg/L 4 Hour(s); Skin-Rabbit LD50 • >2000 mg/kg; <b>Irritation:</b> Eye-Rabbit • Mild irritation; Skin-Rabbit • Essentially non-irritating
Piperonyl butoxide (1%)	51-03-6	<b>Acute Toxicity:</b> Ingestion/Oral-Rat • 4300 mg/kg; Inhalation-Rat • >5 mg/L 4 Hour(s); Skin-Rat LD50 • >2000 mg/kg; <b>Irritation:</b> Eye-Rabbit • Essentially non-irritating; Skin-Rabbit • Essentially non-irritating

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met
Skin corrosion/Irritation	OSHA HCS 2012 • Skin Irritation 2
Serious eye damage/Irritation	OSHA HCS 2012 • Classification criteria not met
Skin sensitization	OSHA HCS 2012 • Skin Sensitizer 1
Respiratory sensitization	OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard	OSHA HCS 2012 • Aspiration 1
Carcinogenicity	OSHA HCS 2012 • Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012 • Classification criteria not met
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

**Route(s) of entry/exposure** • Inhalation, skin, eye, and ingestion.

## 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.

#### Chronic (Delayed)

- No data available

### Skin

#### Acute (Immediate)

- May cause an allergic reaction in individuals with a sensitivity to piperonyl butoxide.

#### Chronic (Delayed)

- No data available

### Eye

#### Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

#### Chronic (Delayed)

- No data available

### Ingestion

#### Acute (Immediate)

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

#### Chronic (Delayed)

- No data available

### Mutagenic Effects

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

### Carcinogenic Effects

- Permethrin is not classified as carcinogen by NTP, IARC and OSHA. Piperonyl butoxide is not classified as carcinogen by NTP, IARC and OSHA.

**Reproductive Effects**

- Permethrin does not cause birth defects or adverse effects on reproduction. Piperonyl butoxide did not produce any birth defects or adverse effects on reproductive parameters in tests with rats and rabbits.

**Section 12 - Ecological Information****Toxicity**

Components		
Permethrin (1%)	52645-53-1	<b>Aquatic Toxicity-Fish:</b> 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] <b>Aquatic Toxicity-Crustacea:</b> 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]
Piperonyl butoxide (1%)	51-03-6	<b>Aquatic Toxicity-Fish:</b> LC50 <i>Rainbow Trout</i> 1.9 mg/L [Acute] LC50 <i>Sheepshead minnow</i> 3.94 mg/L [Acute] NOEC <i>Fathead minnow</i> 0.04 mg/L [Chronic] <b>Aquatic Toxicity-Crustacea:</b> LC50 <i>Gammarus fasciatus (amphipod)</i> 0.51 mg/L [Acute] LC50 <i>Mysid shrimp</i> 0.49 mg/L [Acute] NOEC <i>Daphnia magna</i> 0.03 mg/L [Chronic]

**Persistence and degradability**

- No data available

**Bioaccumulative potential**

- Permethrin has a Log Pow of 6.1, but because of the ease with which biological systems degrade the molecule, the potential for bioconcentration and accumulation in the environment is low (BCF = 500). Permethrin: Bioconcentration factor (BCF) 300; Does not bioaccumulate.

**Mobility in Soil**

- Permethrin has a high affinity for organic matter (Koc = 86,000), there is little potential for movement in soil or entry into groundwater. Permethrin: Immobile in soil.

**Other adverse effects****Potential Environmental Effects**

- This pesticide is extremely toxic to aquatic organisms including fish and invertebrates. Care should be taken to avoid contamination of the aquatic environment. This product is highly toxic to bees.

**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. Do not allow entry into storm drains, drainage ditches, gutters or surface waters.

**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	UN3082	Bulk packaging only: Environmentally hazardous substance, liquid, n.o.s (Permethrin and Piperonyl butoxide)	9	III	Marine Pollutant
IMO/IMDG	UN3082	Packaging 5 L or greater: Environmentally hazardous substance, liquid, n.o.s (Permethrin and Piperonyl butoxide)	9	III	Marine Pollutant
IATA/ICAO	UN3082	Packaging 5 L or greater: Environmentally hazardous substance, liquid, n.o.s (Permethrin and Piperonyl butoxide)	9	III	Acute Aquatic Toxicity

**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

**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**

**Hazard Statements** • KEEP OUT OF REACH OF CHILDREN

**Precautionary Statements** •

**Hazards to Humans and Domestic Animals** •

Contains Petroleum distillate. Harmful if inhaled. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse.

**First Aid** •



IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. 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 SWALLOWED: Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor, Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.  
 Note to Physician: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

**Environmental Hazards •**

This product is extremely toxic to aquatic organisms, including fish and invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and run-off may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash-waters or rinsate. This product may contaminate water through run-off. This product has a potential for run-off for several months or more after application. Poorly draining soils and soils with shallow water tables are prone to produce run-off that contains this product. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. See Directions for Use for additional precautions and requirements. This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

Inventory		
Component	CAS	TSCA
Petroleum distillates, hydrotreated (mild) heavy paraffinic	64742-54-7	Yes
Petroleum distillates, hydrotreated (mild) light paraffinic	64742-55-8	Yes
Permethrin	52645-53-1	No
Piperonyl butoxide	51-03-6	Yes

**United States**

**Environment**

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

• Petroleum distillates, hydrotreated (mild) heavy paraffinic	64742-54-7	Not Listed
• Permethrin	52645-53-1	1.0 % de minimis concentration
• Piperonyl butoxide	51-03-6	1.0 % de minimis concentration
• Petroleum distillates, hydrotreated (mild) light paraffinic	64742-55-8	Not Listed

**Section 16 - Other Information**

- Revision Date** • 07/March/2016
- Last Revision Date** • 07/March/2016
- Preparation Date** • 07/March/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.