Section 1: Identification

Product identifier

Product Name  | Adams Plus Yard Spray
Synonyms       | 3006022; EPA Reg. No.: 28293-271-270
Product Description | Off-white liquid.

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

Recommended use  | Insect control for lawns.
Restrictions on use | Avoid contact with eyes, skin or clothing. Keep out of reach of children and pets.

Details of the supplier of the safety data sheet

Manufacturer  | Farnam Companies, Inc.
Address        | 1501 E. Woodfiled Road, Suite 200W
              | Schaumburg, IL 60173
              | United States

Emergency telephone number

Manufacturer  | 1-800-234-2269
Manufacturer (Transportation)  | 1-800-424-9300 - CHEMTREC
Manufacturer (Transportation)  | 1-703-527-3887 - CHEMTREC - Outside the US collect calls accepted

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 - H370

Label elements

OSHA HCS 2012

DANGER

Hazard statements  | Causes damage to organs - nervous system. - H370
Precautionary statements

Prevention  | Do not eat, drink or smoke when using this product. - P270
Section 3 - Composition/Information on Ingredients

Substances

| Material does not meet the criteria of a substance. |

Mixtures

<table>
<thead>
<tr>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
</tr>
<tr>
<td>Permethrin</td>
</tr>
<tr>
<td>Other ingredients</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

| IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CONTROL center or doctor. |

Skin

| IF ON SKIN: Wash with plenty of soap and water. |

Eye

| IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur. |

Ingestion

| IF SWALLOWED: Call a POISON CONTROL center or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. |

Most important symptoms and effects, both acute and delayed

| Causes damage to organs - nervous system. Refer to Section 11 - Toxicological Information. |

Indication of any immediate medical attention and special treatment needed

Notes to Physician

| Treat symptomatically and supportively. |

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media

| Use water fog, foam, carbon dioxide, or dry chemical. |

Unsuitable Extinguishing

| None known. |
Media
Do not use direct water stream.

Firefighting Procedures
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
None known.

Hazardous Combustion Products
Carbon and nitrogen oxides.

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 contact with skin, eyes, and clothing. Avoid breathing fumes.

Emergency Procedures
No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended.

Environmental precautions
Do NOT water the treated area to the point of runoff. Do not allow runoff into water, storm drains or drainage ditches.

Methods and material for containment and cleaning up

Containment/Clean-up Measures
Stop leak if you can do it without risk.
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
LARGE SPILLS: Dike far ahead of spill for later disposal.

Section 7 - Handling and Storage

Precautions for safe handling
Handling
Use good safety and industrial hygiene practices. Avoid contact with skin or eyes. Use only with adequate ventilation. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities
Storage
Keep this product in its tightly closed original container, when not in use. Store in a cool, dry (preferably locked) area that is inaccessible to children and pets. Store locked up.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure controls
Engineering Measures/Controls
No data available

Personal Protective Equipment

Pictograms

Respiratory
If prolonged exposure is anticipated wear appropriate respiratory protection.

Eye/Face
Wear chemical splash safety goggles.

Hands
Wear appropriate gloves.
Skin/Body

If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

Environmental Exposure Controls

Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>Off-white liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Off-white</td>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

General Properties

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>No data available</th>
<th>Melting Point</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td>pH</td>
<td>Typical pH 7.3</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>1.008 Water=1</td>
<td>Water Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Like water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volatile

<table>
<thead>
<tr>
<th>Vapor Pressure</th>
<th>No data available</th>
<th>Vapor Density</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>VOC (Wt.)</td>
<td>&lt; 3 %</td>
</tr>
<tr>
<td>VOC (Vol.)</td>
<td></td>
<td></td>
<td>&lt; 3 %</td>
</tr>
</tbody>
</table>

Flammability

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>140 C (284 F)</th>
<th>UEL</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEL</td>
<td>No data available</td>
<td>Autoignition</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Flammable.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Environmental

| Octanol/Water Partition coefficient | No data available | |

Section 10: Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under normal temperatures and pressures.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to avoid

Excessive heat.

Incompatible materials

Store away from oxidizers and strong acids.

Hazardous decomposition products

Carbon and nitrogen oxides.
### Section 11 - Toxicological Information

#### Information on toxicological effects

<table>
<thead>
<tr>
<th>Components</th>
<th>Acute Toxicity: Ingestion/Oral-Rat LD50 • 6000 mg/kg; Inhalation-Rat LC50 • 2.3 mg/L; Skin-Rabbit LD50 • &gt;2000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin (2.5%)</td>
<td>52645-53-1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GHS Properties</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>STOT-RE</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>STOT-SE</td>
<td>OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 1</td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
<td>OSHA HCS 2012 • Classification criteria not met</td>
</tr>
</tbody>
</table>

#### Route(s) of entry/exposure
- Inhalation, Skin, Eye, 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 mild irritation.
- **Chronic (Delayed)**: No data available.

**Eye**
- **Acute (Immediate)**: May cause irritation.
- **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.
- **Chronic (Delayed)**: No data available.

**Mutagenic Effects**
- Active Ingredient Only: Permethrin did not produce any mutagenic effects when tested in the Ames assay.

**Carcinogenic Effects**
- Active Ingredient: A statistically significant increase in the incidence of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/kg/day of permethrin technical over 85 weeks. Permethrin is not classified as carcinogen by NTP, IARC and OSHA.
Reproductive Effects

Active Ingredient Only Developmental Toxicity: Permethrin was not teratogenic when tested in rats.

Section 12 - Ecological Information

Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin (2.5%)</td>
<td>52645-53-1</td>
<td><strong>Crustacea:</strong> NOEC Crustacea <em>Daphnia magna</em> 0.000039 mg/L [Chronic]; NOEC Crustacea <em>Mysis shrimp</em> 0.000011 mg/L [Chronic]; LC50 Crustacea <em>Hexagenia bilineata</em> 0.0001 mg/L [Acute]; 96 Hour(s) LC50 Crustacea <em>Mysis shrimp</em> 0.000019 mg/L [Acute]; <strong>Fish:</strong> 96 Hour(s) LC50 Fish <em>Blue gill</em> 0.00079 mg/L [Acute]; 96 Hour(s) LC50 Fish <em>Atlantic silverside</em> 0.0022 mg/L [Acute]; NOEC Fish <em>Fathead minnow</em> 0.0003 mg/L [Chronic]; NOEC Fish <em>Sheepshead minnow</em> 0.00083 mg/L [Chronic]</td>
</tr>
</tbody>
</table>

Persistence and degradability

Active ingredient: Permethrin has a moderate rate of degradation in soil and half-life is related to soil type, microbial population, concentration in the soil and the aerobic condition of the soil.

Bioaccumulative potential

Active ingredient: 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).

Mobility in Soil

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

Results of PBT and vPvB assessment

No PBT and vPvB assessment has been conducted.

Other adverse effects

No studies have been found.

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.

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. If empty: Nonrefillable container. Do not reuse or refill this container. 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.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class(es)</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>Consumer commodity</td>
<td>N/A</td>
<td>N/A</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>DOT</td>
<td>UN3082</td>
<td>Environmentally Hazardous Substance, Liquid, n.o.s. (Permethrin)</td>
<td>9</td>
<td>III</td>
</tr>
<tr>
<td>--------------</td>
<td>--------</td>
<td>---------------------------------------------------------------</td>
<td>---</td>
<td>-----</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>UN3082</td>
<td>Environmentally Hazardous Substance, Liquid, n.o.s. (Permethrin)</td>
<td>9</td>
<td>III</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>UN3082</td>
<td>Environmentally Hazardous Substance, Liquid, n.o.s. (Permethrin)</td>
<td>9</td>
<td>III</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>IMO/IMDG</th>
<th>Limited quantity 5L, excepted quantity 30mL</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA/ICAO</td>
<td>Limited quantity 5L, excepted quantity 30mL</td>
</tr>
</tbody>
</table>

Key to abbreviations
N/A = Not applicable.

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications
SARA Title III Section 313, Chronic

FIFRA – Pesticide Labeling

This material 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

Hazards to Humans and Domestic Animals
HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION: Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

First Aid
FIRST AID: 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.

Environmental Hazards
This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. 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. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. 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.

United States

Environment

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
- Permethrin 1.0 % de minimis concentration

Preparation Date: 17/December/2014
Revision Date: 17/December/2014

OSHA HCS 2012
Format: GHS Language: English (US)
### Section 16 - Other Information

<table>
<thead>
<tr>
<th>Last Revision Date</th>
<th>17/December/2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation Date</td>
<td>17/December/2014</td>
</tr>
<tr>
<td>Disclaimer/Statement of Liability</td>
<td>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. <strong>NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.</strong></td>
</tr>
</tbody>
</table>