SAFETY DATA SHEET
In accordance with OSHA’s Hazard Communication Standard 29 CFR §1910.1200

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier:
Absorbine® UltraShield® EX Insecticide & Repellent

1.2. Relevant identified uses of the substance or mixture and uses advised against
Residual insecticide use

1.3. Details of the supplier of the safety data sheet
Manufactuer/Supplier:
W. F. Young, Inc.
302 Benton Drive
East Longmeadow, MA 01028
Telephone number for information: 413 526 9999

E-mail: SDS@wfyoung.com

1.4. Emergency telephone number
413 526 9999

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the mixture
N; R50-53
R67

2.2. Label elements

N; Dangerous to the environment
2.3. Other hazards

None identified

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous ingredients information

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Nr.</th>
<th>EINECS / ELINCS</th>
<th>Amount (%)</th>
<th>DSD Hazard Symbol</th>
<th>DSD R-Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic alcohol</td>
<td>-</td>
<td>-</td>
<td>5 - 15</td>
<td>F, Xi</td>
<td>R11, 36, 67</td>
</tr>
<tr>
<td>Permethrin</td>
<td>52645-53-1</td>
<td>258-067-9</td>
<td>0.5</td>
<td>Xn, N</td>
<td>R20/22, 43, 50/53</td>
</tr>
<tr>
<td>Piperonyl butoxide</td>
<td>51-03-6</td>
<td>200-076-7</td>
<td>0.5-1.0</td>
<td>T, N</td>
<td>R24, 50/53</td>
</tr>
</tbody>
</table>

Other Components:

Remaining components of this aqueous mixture are proprietary, non-hazardous and/or are present at concentrations below reportable limits.

Additional Information:

Amounts specified are typical and do not represent a specification. For the wording of the listed risk phrases refer to Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Remove affected person to fresh air; wash mouth and nasal passages with water repeatedly; if breathing difficulties persist seek medical attention.

Skin

Wash contacted area with soap and water; DO NOT attempt to neutralize with chemical agents; if irritation persists, seek medical attention.

Eye

Remove contact lenses. Immediately flush eyes for 15 minutes in clear running water while holding eyelids open; seek medical attention immediately.
Ingestion

If swallowed, call a physician of Poison Control Center immediately. Drink 1 or 2 glasses of water or milk. Do not induce vomiting unless directed to do so by medical personnel. Do not give anything by mouth to an unconscious or convulsing person.

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

**INHALATION**: Inhalation of mists or vapors may cause irritation to upper respiratory tract and mucous membranes. Prolonged inhalation of this product may cause ulcers to the upper respiratory tract.

**SKIN**: Contact with skin may cause irritation, dermatitis. May cause sensitization by skin contact.

**EYES**: Contact with eyes may cause pain and irritation. Repeated contact with eyes may cause severe irritation.

**INGESTION**: This substance is slightly toxic to internal organs if swallowed. Signs and symptoms may include, but may not be limited to, headache, dizziness, weakness, nausea, vomiting and diarrhea.

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

None identified

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Carbon dioxide, water fog, dry chemical, chemical foam.

5.2. Special hazards arising from the substance or mixture

Closed containers can explode due to buildup of pressure when exposed to extreme heat.

5.3. Advice for fire-fighters

Self-contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate and ventilate area

6.2. Environmental precautions

Do not discharge into lakes, ponds, streams or public waters.
6.3. Methods and material for containment and cleaning up

Confine and absorb into absorbent; place material into approved containers for disposal.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep this and other chemicals out of reach of children. Avoid inhaling concentrated fumes or vapors.

7.2. Conditions for safe storage, including any incompatibilities

It should be stored in tightly closed containers in a cool, well ventilated area.

7.3. Specific end use(s)

None identified

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

National Limit values:

<table>
<thead>
<tr>
<th>Substance</th>
<th>NIOSH (US)</th>
<th>ACGIH (US)</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA ppm</td>
<td>TWA mg/m³</td>
<td>STEL ppm</td>
</tr>
<tr>
<td>Aliphatic alcohol</td>
<td>400</td>
<td>999</td>
<td>500</td>
</tr>
<tr>
<td>Permethrin</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Piperonylbutoxide</td>
<td>-</td>
<td>5</td>
<td>-</td>
</tr>
</tbody>
</table>

**national occupational exposure limit values**: see above

**relevant DNELs and PNECs**: not available
8.2. Exposure controls

Appropriate engineering controls:

Use general dilution or local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

(a) Eye/face protection:

None determined

(b) Skin protection:

Coveralls, apron, or other equipment should be worn to minimize skin contact. Neoprene or rubber gloves with cuffs.

(c) Respiratory protection:

None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds standard workplace limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

(d) Thermal hazards:

None determined

Environmental exposure controls

None specified at present under Community environmental protection legislation. As a general precaution, do not discharge into the drains/surface waters/groundwater.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

(a) Appearance: slightly yellow liquid
(b) Odor: characteristic insecticide odour
(c) Odor threshold: not established
(d) pH: 7.5
(e) Melting point / freezing point: not applicable
(f) Initial boiling point and boiling range: 100°C
(g) Flash point: 93.3°C
(h) Evaporation rate (water = 1): <1
(i) Flammability (solid, gas): not applicable
(j) Upper/lower flammability or explosive limits: none established
(k) Vapour pressure: not determined
(l) Vapour density (air = 1): >1
(m) Relative density: 0.996
(n) Solubility(ies): complete in water
(o) Partition coefficient: n-octanol/water: not established
(p) Auto-ignition temperature: not determined
(q) Decomposition temperature: not determined
(r) Viscosity: not determined
(s) Explosive properties: not applicable
(t) Oxidising properties: not applicable

9.2. Other information

None
SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Not likely to react under normal storage and use conditions.

10.2. Chemical stability
Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions
None identified

10.4. Conditions to avoid
See 10.5

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
Carbon dioxide and carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

(a) acute toxicity:
Oral LD50: > 5g/kg bw
Dermal LD50: > 2g/kg bw
Inhalation LC50: 5.59 mg/L

(b) skin corrosion/irritation: slight skin irritant

(c) serious eye damage/irritation: non-irritating

(d) respiratory or skin sensitization: not a contact sensitizer

(e) germ cell mutagenicity: not available for the mixture

(f) carcinogenicity: not available for the mixture

(g) reproductive toxicity: not available for the mixture

(h) STOT-single exposure: not available for the mixture

(i) STOT-repeated exposure: not available for the mixture

(j) aspiration hazard: not available for the mixture
SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

This product is toxic to fish, aquatic invertebrates, and aquatic life stages of amphibians.

Permethrin LC50 = 8.9 µg/L (guppy)
Permethrin EC50 = 0.32 µg/L (Daphnia)
Permethrin EC50 > 100 mg/L (algae)
Permethrin LD50 > 3000 mg/kg (birds)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Do not contaminate water, food, or feed by storage or disposal. This product, when spilled or disposed of, is a hazardous waste. According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used.

Pesticide Disposal: Product that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

Container Disposal: Do not reuse empty container. Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved state and local procedures.
SECTION 14: TRANSPORT INFORMATION

14.1. Ground: Non-hazardous for Transport

14.2. Ocean or Air:

UN number: 3082
UN proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S.
Transport hazard class(es): Class 9: miscellaneous dangerous substances and articles
Packing group III
Environmental hazards Environmentally hazardous substance
Special precautions for user None identified

SECTION 15: REGULATORY INFORMATION

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

TSCA (USA - Toxic Substance Control Act)
All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume or Polymer Exemption has been granted in accordance with 40 CFR 723.50.

SARA TITLE III (USA - Superfund Amendments and Reauthorization Act)
311/312 Hazard Categories
Immediate health
313 Reportable Ingredients:
(a) Indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CERCLA (USA - Comprehensive Response Compensation and Liability Act)
None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
There are no reportable chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations)
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
WHMIS Classification: D2B

IDL (Canadian Ingredient Disclosure List)
Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.
DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)
Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)
Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

WGK Water Quality Index: 3 VbK Index: A III

15.2. Chemical Safety Assessment

Not available for the mixture

SECTION 16: OTHER INFORMATION

Risk and Safety phrases:
R11 Highly flammable
R20/22 Harmful by inhalation and if swallowed.
R24 Toxic in contact with skin.
R36 Irritating to eyes.
R43 May cause sensitization by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67 Vapours may cause drowsiness and dizziness.
S2 Keep out of the reach of children
S13 Keep away from food, drink and animal feeding stuffs.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Hazard Statements:
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed
H311 Toxic in contact with skin
H319 Causes serious eye irritation
H332 Harmful if inhaled
H336 May cause drowsiness and dizziness
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

LAST UPDATE: 9 January 2013

Changes:

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