 SECTION 1: IDENTIFICATION

Product Name: Framework® 3.3 EC Herbicide
EPA Registration #: 1381-216
Product ID/Unity #: 10126226, 10126227, 10126609, 10126673, 10126773, 10126794, 10127684
Common Name: Pendimethalin
Chemical Description: Aniline derivative
Recommended Uses: Agricultural Herbicide. See product label for complete list of uses and use sites.
Restrictions for Use: See product label for information regarding restrictions on the use of this product.
Manufactured For: WINFIELD SOLUTIONS, LLC
P. O. Box 64589
St. Paul, MN 55164-0589
MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs)
Non-Emergency Business Inquiries: 1-855-494-6343
Mon – Fri 8am – 5pm (Central Standard Time)

FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:
CHEMTREC 1-800-424-9300 (24 hours)

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Dark amber liquid with moderate aromatic odor. May cause moderate but temporary eye irritation and slight skin irritation.

POTENTIAL HEALTH EFFECTS:
Eyes: May cause moderate but temporary eye irritation.
Skin: May cause slight skin irritation.
Inhalation: Low inhalation toxicity. Inhalation of mist may cause slight irritation of the upper respiratory tract.
Ingestion: Slightly toxic with single ingestion.
Preexisting Conditions: Preexisting respiratory and dermal conditions may be aggravated by exposure.
Chronic Health Effects: None known

Carcinogenicity
NTP: Suspected (Naphthalene)  IARC: Group 2B (Naphthalene)  OSHA: Not listed

OSHA HCS 2012 CLASSIFICATION: Not determined
SIGNAL WORD: CAUTION

HAZARD STATEMENTS:
Not determined

Percent of product with unknown toxicity: 0%

PRECAUTIONARY STATEMENTS:
Prevention: See Section 8 for personal protective equipment.
Response: See Section 4 for first aid.
Storage: See Section 7 for storage information.
Disposal: See Section 13 for disposal information.
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>% (wt)</th>
<th>CAS Reg. #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pendimethalin</td>
<td>37.4%</td>
<td>40487-42-1</td>
</tr>
<tr>
<td>2-Methylnaphthalene</td>
<td>&lt;12.0%</td>
<td>91-57-6</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>&lt;7.0%</td>
<td>91-20-3</td>
</tr>
<tr>
<td>1-Methylnaphthalene</td>
<td>&lt;6.0%</td>
<td>90-12-0</td>
</tr>
</tbody>
</table>

*Ingredients not specifically listed are non-hazardous and/or are considered to be confidential business information under 29 CFR 1910.1200(i).

See Section 8 for exposure limits.

SECTION 4: FIRST AID MEASURES

**Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.

**Ingestion:** Seek medical attention or call a poison control center for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Eyes:** Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.

**Skin:** Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if irritation persists.

SECTION 5: FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Water fog, water spray, foam, dry chemical, carbon dioxide (CO2)

**Unsuitable Extinguishing Media:** Water jet

**Special Fire Fighting Procedures:** Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.

**Hazardous Combustion Products:** Toxic gases may be formed in a fire situation; carbon monoxide, carbon dioxide, nitrogen oxide, and hydrocarbons.

**Unusual Fire and Explosion Hazards:** None known

SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

**Environmental Precautions:** Keep spilled product from entering sewers or waterways.

**Methods for Containment:** Contain spilled product by diking area with sand or earth.

**Methods for Clean-up:** Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop, or sweep up material and place in a container for disposal. Do not place spilled material back in original container.

**Other Information:** Spills of this product may require reporting under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as the product contains Naphthalene with a reportable quantity (RQ) of 100 lbs. See Section 15 for additional information.
SECTION 7: HANDLING AND STORAGE

Handling: RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the pesticide product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Storage: Store in secured, cool, dry areas designated specifically for pesticides, away from children, feed and food products and sources of heat. Keep containers closed when not in use. See pesticide product label for additional storage information.

Minimum Storage Temperature: 32°F

Other Precautions: Consult Federal, state and local laws and regulations pertaining to storage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component: OSHA PEL ACGIH TLV NIOSH REL

Naphthalene (CAS #91-20-3) 50 mg/m3; 10 ppm (TWA) 10 ppm (TWA) 15 ppm skin (STEL); (skin)
1-methylnaphthalene (CAS #90-12-0) 0.5ppm (TWA) (skin)
2-methylnaphthalene (CAS #91-57-6) 0.5ppm (TWA) (skin)

NOTE TO END USERS: PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING LISTED IN THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PESTICIDE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING.

Respiratory Protection: Where airborne exposure to concentrations greater than the above listed exposure limits is likely, use a NIOSH approved respirator with cartridges/canisters approved for pesticides and organic vapors.

Engineering Controls: Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

Protective Gloves: Wear chemical resistant gloves to prevent skin exposure.

Eye Protection: Wear chemical goggles or safety glasses and full-face shield. Contact lenses are not eye protective devices. An emergency eyewash or water supply should be readily accessible to the work area.

Other Protective Clothing or Equipment: Wear long sleeve shirt, long pants and chemical resistant shoes plus socks to prevent skin exposure.

Work/Hygienic Practices: Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Specific Gravity (H₂O=1): 1.06 (typical)

Vapor Pressure (mm Hg): Not determined
Density (lbs/gallon): 8.86 (typical)

Vapor Density (Air=1): Not determined
Melting Point/Freezing Point: Not determined

Solubility in Water (wt %): Emulsifiable, insoluble
Boiling Point/Range: Not determined

Viscosity: Not determined
pH (1% dispersion): 6.0 – 7.0

Appearance and odor: Dark amber liquid with moderate aromatic odor
Flash Point: >219°F (based on solvent)

SECTION 10: STABILITY AND REACTIVITY

Reactivity: None known
Chemical Stability: Product is stable at ambient temperature and pressure, under normal storage and handling conditions.

Possibility of Hazardous Reactions: Will not occur


Incompatible Materials: Nitric acid, sulfuric acid, oxidizing agents, strong alkalies.

Hazardous Decomposition Products: Toxic gases may be formed in a fire situation or under prolonged thermal loading; carbon monoxide, carbon dioxide, nitrogen oxide, and hydrocarbons.
### SECTION 11: TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY**
- **Eye Effects:** Causes mild eye irritation (rabbit)
- **Skin Effects:** Causes mild skin irritation; LD50 >2000 mg/kg (rats); Not a skin sensitizer
- **Acute Inhalation Effects:** LC50 >5.35 mg/L (rats)
- **Acute Oral Effects:** LD50 = 3,956 mg/kg (rats)
- **Specific Target Organ Toxicity:** None known

**CHRONIC TOXICITY**
- **Chronic Effects:** None known
- **Carcinogenicity:** Naphthalene is considered to be a suspected human carcinogen.
- **Mutagenicity:** None known
- **Teratogenicity:** None known
- **Reproductive Toxicity:** None known

**POTENTIAL HEALTH EFFECTS:**
- **Eyes:** May cause moderate but temporary eye irritation.
- **Skin:** May cause slight skin irritation.
- **Inhalation:** Low inhalation toxicity. Inhalation of mist may cause slight irritation of the upper respiratory tract.
- **Ingestion:** Slightly toxic with single ingestion.

### SECTION 12: ECOLOGICAL INFORMATION

**ENVIRONMENTAL SUMMARY:**
This product is toxic to fish. 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 when cleaning equipment or disposing of equipment washwaters.

**ECOTOXICITY DATA:**
- **Fish Acute and Prolonged Toxicity:** Pendimethalin: *Oncorhynchus mykiss* 96 hr LC50 = 0.138 mg/L
- **Aquatic Invertebrate Acute Toxicity:** Pendimethalin: *Daphnia magna* 48 hr EC50 = 0.4 mg/L
- **Aquatic Plant Toxicity:** Pendimethalin: Green algae 72 hr EC50 = 0.0337 mg/L
- **Bird Acute and Prolonged Toxicity:** Pendimethalin Mallard duck LD50 = 1,421 mg/kg
- **Honeybee Toxicity:** Pendimethalin: 49.8 ug/bee

**ENVIRONMENTAL EFFECTS:**
- **Soil Absorption/Mobility:** Not determined
- **Persistence and degradability:** Not determined
- **Bioaccumulative Potential:** Not determined
- **Other adverse effects:** Not determined

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste:** Dispose of in accordance with applicable Federal, state and local laws and regulations.

**Container:** Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations. See pesticide product label for full instructions on disposal.

**RCRA Characteristics:** It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

### SECTION 14: TRANSPORT INFORMATION

**DOT:**
- (Ground) This product is not regulated by the U.S. DOT as a hazardous material for ground shipment in quantities of less than 161 gallons.
- For quantities of 161 gallons or greater: UN3082, Environmentally hazardous substance, liquid, n.o.s. (naphthalene), 9, PG III, RQ

**IMDG:**
- Not determined

**IATA:**
- (Air) Not determined

**TDG:**
- (Canada) Not determined
SECTION 15: REGULATORY INFORMATION

**TSCA Inventory:** This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

**SARA Title III Information:**
- **Section 302 - Extremely hazardous substances:** None listed
- **Section 311/312 – Hazard Categories:** Immediate (Acute), Delayed (Chronic)
- **Section 313 –** The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:
  - Naphthalene (CAS #91-20-3) <7.0%);
  - Pendimethalin (CAS #40487-42-1) 37.4%

**CERCLA -** This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):
- Naphthalene (CAS #91-20-3) has an RQ of 100 lbs reached with approximately 161 gallons of product.

**EPA Registration Information:** 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:

**CAUTION**
- Causes moderate eye irritation.
- Harmful if swallowed or absorbed through the skin.
- Avoid contact with skin, eyes or clothing.

**California Proposition 65: WARNING:** This product contains a chemical known to the state of California to cause cancer and/or reproductive harm.

**U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>State(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Methylnaphthalene</td>
<td>90-12-0</td>
<td>PA</td>
</tr>
<tr>
<td>2-Methylnaphthalene</td>
<td>91-57-6</td>
<td>IL, NJ</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>IL, MN, NJ, PA, RI</td>
</tr>
</tbody>
</table>

**Canadian Domestic Substances List:** Not determined

**WHMIS Classification:** This product is not approved for use in Canada. WHMIS classification is not determined.

SECTION 16: OTHER

**Disclaimer:** The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions’ knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

**Revision Date:** December 16, 2013  
**Supersedes document dated:** October 2, 2009  
**Sections Revised:** All