NONIONIC OIL CONCENTRATE/BUFFERING ADJUVANT

ACTIVE INGREDIENTS:
Mid-Range Mineral Oil, Polyol Fatty Acid Esters,
Polyethoxylated Esters thereof, Ethoxylated Alkyl Aryl
Phosphate Esters .................................................. 97.00%
Components ineffective as adjuvant ............................... 3.00%
TOTAL ................................................................. 100.00%

All ingredients are accepted for use under CFR 40, 180.

KEEP OUT OF REACH OF CHILDREN
CAUTION
See Inside Panel for Additional Precautionary Statements

CASN 0206/0609

CAL. Reg. No. 5905-50074-AA

Patent Nos. 5,393,571, 5,178,795, 5,741,502, and 5,580,567

Manufactured For
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300 • COLLIERVILLE, TENNESSEE 38017

OPM #110284 PEEL BACK BOOK HERE AND RESEAL AFTER OPENING

NET CONTENTS:
PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

BEFORE USING THIS PRODUCT, READ ALL PRECAUTIONS, DIRECTIONS FOR USE, CONDITIONS OF SALE – LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES.

Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist. Follow all precautionary statements on the accompanying pesticide(s) label(s).

FIRST AID

IF SWALLOWED: • Call a poison control center or doctor immediately for treatment advice. • Have a person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious or convulsing person.

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.

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 further treatment advice.

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 treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Store in original container only. Keep container tightly closed. Do not allow water to be introduced into the contents of this container. Do not store near heat or open flame. Do not store with oxidizing agents.

PESTICIDE DISPOSAL: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water sources by runoff from cleaning of equipment, disposal of equipment wastewater or spray waste.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, STAY OUT OF SMOKE.

GENERAL INFORMATION

PENETRATOR® PLUS is a nonionic blend of special surfactants, buffering agents, and a highly refined mineral spray oil and is designed for use with a broad range of pesticides. Subject to the precautionary statements set forth in the Directions for Use, PENETRATOR® PLUS may be used with pesticides and/or fertilizer products. The addition of PENETRATOR® PLUS to a spray tank improves pesticide application by modifying the wetting and deposition characteristics of the spray solution. This can result in a more even and uniform spray deposit and by adjusting the pH of alkaline waters minimizing hydrolysis of pesticides which tend to decompose in alkaline solutions. Optimum application and effect can be affected by but is not limited to the pesticide or product, the carrier crop, pest, spray equipment, spray volume, and pressure, droplet size and environmental factors. Consequently, it is recommended that careful observations of the spray deposit be made and adjuvant concentrations be adjusted accordingly.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. Do not spray pesticides if conditions of thermal inversion exist or if wind direction and speed may cause spray drift onto adjacent areas. With both aerial and ground applications the use of a drift control or spray deposition additive (in accordance with pesticide label directions) may reduce the potential for drift to occur. Drift minimization is the responsibility of the applicator. Consult your local and State agricultural authorities for information regarding avoiding or minimizing spray drift.

DIRECTIONS FOR USE

FOR USE WITH PRODUCTS REGISTERED FOR USE IN: AGRICULTURAL, AQUATIC, FORESTRY, INDUSTRIAL, MUNICIPAL, NON-CROPLAND, ORNAMENTAL, RIGHTS-OF-WAY, TURF AND OTHER USES.

For use with any pesticide that recommends the use of an oil concentrate or crop oil concentrate spray adjuvant. The addition of an adjuvant to some pesticides or pesticide tank mix combinations may cause phytotoxicity to the foliage and/or fruit of susceptible crops. Prior to the application of PENETRATOR® PLUS in spray tank mixes or with a pesticide and/or fertilizer where an oil or oil adjuvant is not specifically recommended but not prohibited by the product label, the user or application advisor must have experience with the combination under similar environmental and crop cultural conditions and/or have conducted a phytotoxicity trial under similar environmental and crop cultural conditions.

PENETRATOR® PLUS may be applied by Ground, CDA and Aerial spray equipment. In most cases, use enough PENETRATOR® PLUS to allow for uniform wetting and deposition of the spray onto leaf surfaces without undue runoff or to adjust spray pH to the optimum range.

WHEN USED FOR WETTING, SPREADING, AND PENETRATION:

Ground: Use 4 – 8 pints per 100 gallons of spray solution or follow the pesticide label recommendations if higher or lower volumes are required. Do not use less than 0.50% v/v concentration.

Aerial, Low Volume, CDA: Use 6 – 8 fluid ozs. in 1–5 gallons water per acre or follow the pesticide label recommendations if higher or lower volumes are required.

WHEN USED AS A BUFFERING AGENT:

When PENETRATOR® PLUS is used as a buffering agent a minimum of 1% v/v concentration is recommended. Generally, optimum pesticide performance is achieved when spray solution is in the 4 – 7 pH range or slightly acidic. The chart below illustrates the pH reduction performance of PENETRATOR® PLUS.

<table>
<thead>
<tr>
<th>pH Reduction Activity</th>
<th>pH 10 Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Volume</td>
<td>Final pH</td>
</tr>
<tr>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>0.25</td>
</tr>
<tr>
<td>4</td>
<td>0.50</td>
</tr>
<tr>
<td>6</td>
<td>0.75</td>
</tr>
<tr>
<td>8</td>
<td>1.00</td>
</tr>
<tr>
<td>12</td>
<td>1.50</td>
</tr>
<tr>
<td>14</td>
<td>1.75</td>
</tr>
<tr>
<td>16</td>
<td>2.00</td>
</tr>
</tbody>
</table>

The use of a pH measuring device is recommended. Final spray solution pH should be in the 4–7 range.
NOTE: The above use recommendations are considered to be accurate for most uses. Some pesticides, however, may require higher or lower rates for optimum effect. Follow the pesticide label directions when this occurs.

CAUTION: Do not mix with oxidizing agents unless oxidizing agents are in solution. PENETRATOR® PLUS will not economically lower the pH of a solution containing an alkaline buffer.

MIXING

Prior to any pesticide application all spray mixing and application equipment must be cleaned. Carefully observe all cleaning directions on the pesticide label.

Fill spray tank one-half full with water and begin agitation. Add pesticides and/or fertilizers as directed by labeling or in the following sequence.

1. Dry flowables or water dispersible granules
2. Wettable powders
3. Flowables
4. Solutions
5. Emulsifiable concentrates

and continue filling. Add PENETRATOR® PLUS last and continue agitation.

Do not add adjuvant at a level that would exceed 5% of the finished spray volume.

CONDITIONS OF SALE – LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale – Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the “Company”) or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company’s election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profit or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

© Copyright Helena Holding Company, 2009.

PENETRATOR® is a registered trademark of Helena Holding Company.