Liquid Internal Treatment
The Hollow Heart CB preservative system is available as a concentrate or ready-to-use (RTU) formulation. Both technologies are liquid, waterborne preservative systems developed to provide long-lasting protection against the actions of decay and wood destroying insects. Testing has demonstrated that the Hollow Heart CB formulations are effective accelerants for dazomet-based wood pole fumigants such as Osmose’s OsmoFume® and DuraFume® II technologies.

The Hollow Heart CB preservative system incorporates both copper and boron, two effective and proven biocides for remedial wood pole protection. The liquid formulations provide flexibility of application including direct pour, pressure injection, brush, roller, or spray.

Hollow Heart CB - Concentrate offers shipping and packing efficiencies but requires dilution and mixing capabilities by the end-user. The concentrated product contains an anti-freeze additive that protects the product from slushing and hard-freeze. The concentrate is simply diluted with water according to the product label prior to application. When using in extreme cold conditions, an additive, such as Osmose’s MELT®, can be incorporated to further prevent slushing and hard-freeze of the diluted product.

Hollow Heart CB - RTU is the most convenient because no dilution is required prior to application and can be used directly from the original bottle. As with the concentrated formula, the RTU contains an additive that effectively prevents slushing and hard-freeze of the product in cold conditions.

When to use Hollow Heart CB – Concentrate?
✓ Where larger volumes of product can be safely diluted, mixed, and transported from pole to pole
✓ Pole inspection and treatment as well as restoration projects where product is applied using pressure application to fill internal voids

When to use Hollow Heart CB – RTU?
✓ Field treatment of in-service wood utility poles, pole tops, bore or bolt holes, cuts, and mechanical abrasions
✓ For use as an accelerator for dazomet-based wood pole fumigants, including OsmoFume® and DuraFume® II technologies
Hollow Heart CB vs. Traditional Copper Naphthenate

When compared to other liquid internal treatments, Hollow Heart CB offers the following advantage:

- **Superior efficacy**
  - Hollow Heart CB features cobiocides of copper and boron compared to a single biocide
  - Boron offers deeper penetration than copper alone which is primarily topical
- **Lower cost** (compared to other internal treatments)
- **Reduced exposure risk for improved worker safety**
  - Carries a signal word of “Warning” versus “Danger” for copper naphthenate products
  - Easy to clean up and virtually odor free
  - Improved applicator hygiene
- **Better environmental profile**
  - Water-based rather than solvent-based
  - Low volatile organic compound (VOC) emission
  - UL Environmental Claim Validation for VOC content

**Hollow Heart CB vs. Copper Naphthenate**

<table>
<thead>
<tr>
<th></th>
<th>Hollow Heart CB (dilute conc. or RTU)</th>
<th>Copper Naphthenate &amp; Solvent Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulation</td>
<td>Waterborne</td>
<td>Oilborne</td>
</tr>
<tr>
<td>VOC Content (grams/liter)</td>
<td>&lt; 100</td>
<td>&gt; 750</td>
</tr>
<tr>
<td>UL Environment Validation</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Meets SCAQMD Standards</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Diesel Fuel/Solvent Free</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Number of Active Ingredients</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Easy Clean Up</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Flammability (NFPA Code)</td>
<td>0 - not flammable</td>
<td>2 - flammable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>212 F</td>
<td>104 F</td>
</tr>
<tr>
<td>Store Above 90 F</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Copper as Cu</td>
<td>2.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Boron as DOT</td>
<td>5.0%</td>
<td>NONE</td>
</tr>
</tbody>
</table>

**ORDERING INFORMATION**

**Hollow Heart CB - Concentrate**

is available in two sizes:

- 1-gallon jugs (4 per case)
- 5-gallon pails

**Hollow Heart CB - RTU**

is available in two sizes:

- 1-gallon jugs (4 per case)
- 16-ounce squeeze bottles (12 per case)

For more information on Hollow Heart CB or to place an order:

CALL 770.632.6700 Opt. 3    EMAIL products@osmose.com

© 2020 Osmose Utilities Services, Inc.