

# Fumigant Treatment for Utility Pole Protection



A complete line of  
wood pole fumigants:

- MITC-FUME®
- DuraFume™
- WoodFume®

**Osmose®**

## Your Single Source for Wood Pole Fumigants

For more than 70 years, Osmose has set the industry standard for effective remedial treatment products. We have provided wood pole fumigants since 1976 and currently offer a complete line to meet the needs of your wood pole asset management program.

### MITC-FUME®

A methylisothiocyanate-(mitc) based product that offers easy application and a higher level of protection against internal decay. MITC-FUME is 97% mitc in a solid-melt form pre-packaged in individual dose tubes.

### DuraFume™

DuraFume is a crystallized solid dazomet-based product that decomposes to produce smaller quantities of mitc than MITC-FUME. It is applied from a metered one-gallon container.

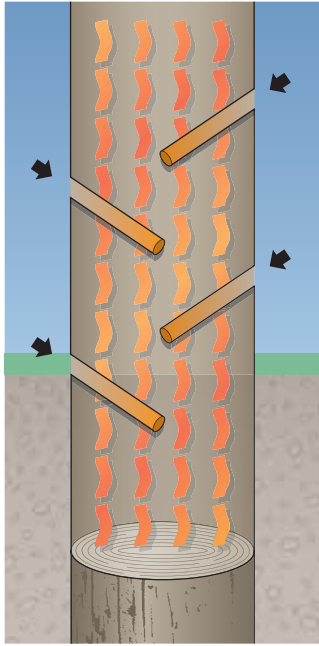
### WoodFume®

A liquid metham sodium based product that decomposes to produce smaller quantities of mitc than MITC-FUME. It is applied from a calibrated one-gallon container.



**Osmose**®

## What you should know about fumigants



Typical fumigant movement

### What is the purpose of fumigants in a wood pole maintenance program?

Fumigants are applied to utility poles to protect them against strength loss caused by internal decay and/or insect attack. Fumigant application can control an existing condition or prevent a future one.

### Are all poles susceptible to internal decay?

Yes, but not to the same degree. Western species (fir and cedar) are prone to internal decay because they are largely heartwood, which is difficult to penetrate and treat. Fumigant research and development at Oregon State University in the 1960's, was initially targeted for western species remedial treatment.

### How do fumigants work?

Fumigants are generally applied at or near the groundline area in liquid, granular or solid melt forms. After application, the fumigants begin to volatilize and move several feet from point of application under vapor pressure. Fumigants control existing decay fungi and prevent the re-colonization of decay fungi by sterilizing the wood, including difficult to treat heartwood.

### Do solid-rod treatments work the same as fumigants?

No. Rods are another type of remedial treatment system with a different set of performance characteristics. Rods are made with water diffusible active ingredients that require a high moisture content to perform. First, the active ingredients need to dissolve, then they will eventually diffuse several inches from the point of application. Fumigants will quickly move several feet. This is extremely important when attempting to control an active decay infestation.

### Are there different fumigants available?

Yes. All fumigants currently registered for use on wood poles in the United States contain one of four active ingredients. MITC-FUME (97% mitc), DuraFume (dazomet) and WoodFume (metham sodium) all rely on mitc as the preservative agent. Dazomet and metham sodium must decompose in order to produce mitc, while the 97% mitc does not. The fourth, Timberfume (99% chloropicrin), is a very effective fumigant but handling, application and transportation issues usually make it impractical for use except on rural transmission lines. DuraFume, UltraFume\* and SuperFume\* are all comparable (dazomet) products.

### How can effectiveness of fumigants be evaluated and compared?

Effectiveness is measured by how far the preservative agent travels from the point of application at levels sufficient to protect the pole from fungal attack over time.

### Is there any third-party data directly comparing the performance of the three mitc-based fumigants?

There are no independent studies of all three fumigants. There are studies including 97% mitc and metham sodium, as well as studies including dazomet and metham sodium, but no studies including all three. That is why Osmose initiated its own field trial in June 2000. The chart in this brochure depicts the performance of these fumigants in the Osmose trial.



Osmose Research Division

## A full line of fumigants to meet every need

### MITC-FUME



- Pre-packaged in individual dose tubes.
- 97% mitc.
- Does not have to decompose to produce mitc.
- Delivers the highest concentration of active ingredient to the pole.
- Provides quick control.
- Provides a higher level of protection.

### DuraFume



- Crystallized solid is applied from a metered one-gallon container.
- 98% Dazomet.
- Decomposes to provide smaller quantities of mitc than MITC-FUME.
- Provides a greater level of protection than WoodFume.
- Same active ingredient as UltraFume\* and SuperFume.\*
- Use of an accelerant is not recommended.

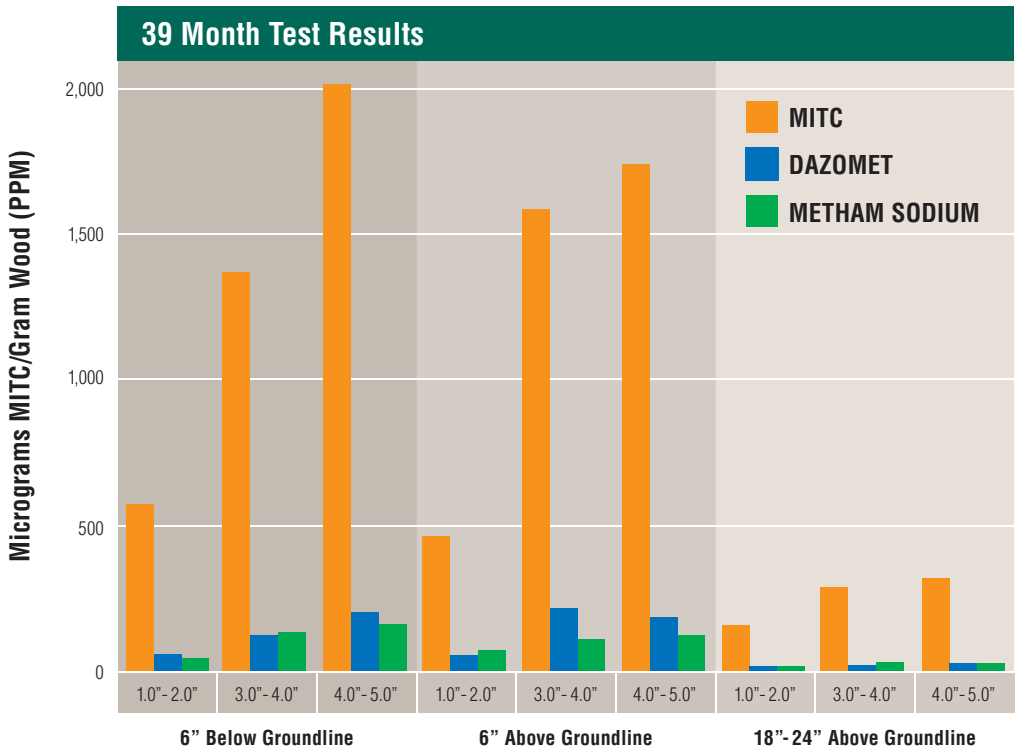
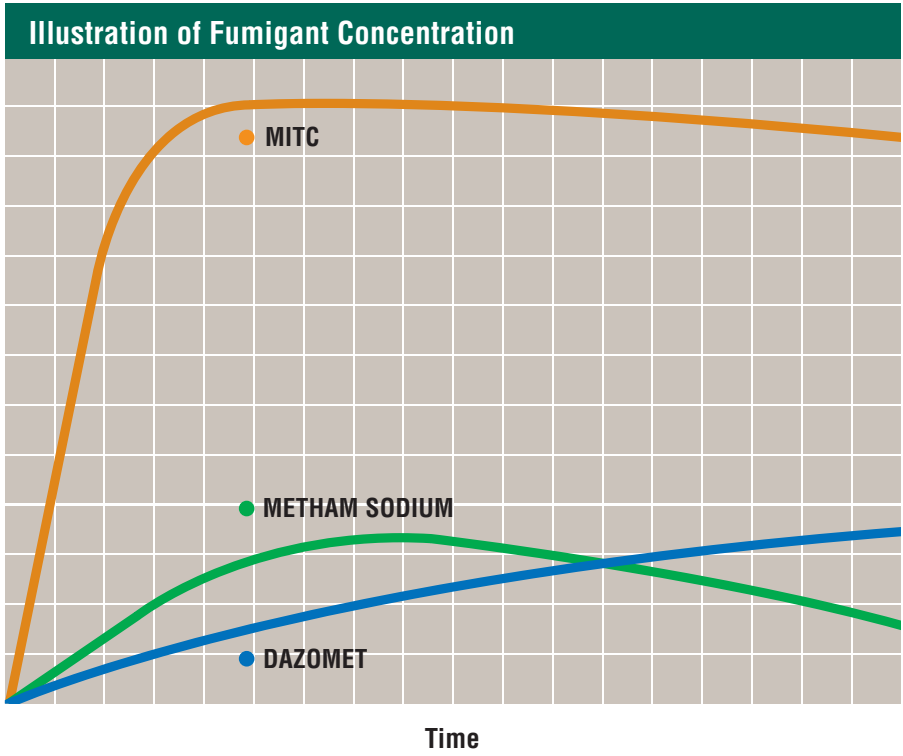
### WoodFume



- Liquid, applied from a calibrated one-gallon container.
- 32.7% Metham Sodium.
- Decomposes to provide lower levels of mitc than MITC-FUME or DuraFume.
- Provides quick protection.
- The lowest cost wood pole fumigant.

\*UltraFume and SuperFume are trademarks of their respective owners.

# Fumigant performance



**Protect**

**Assets**

**Save**

**Money**

### **Osmose and the Environment**

Osmose believes that its best contribution to the protection and improvement of our environment can be made through the preservation of natural resources utilized for utility infrastructure, including wood, steel and concrete. The demand for new poles, towers and cabinets requires logging, mining and manufacturing processes that may create significant environmental risk. Osmose will develop, manufacture, distribute and apply preservatives and coatings that present minimal risk to the environment while most effectively increasing the life cycle of utility infrastructure. The safety of our workers, utility employees and the public will always be our first consideration. As industry professionals, we all should acknowledge that preservatives, even those that are less effective, may present some measure of risk when improperly handled.

### **Convenient Locations**

With headquarters in Buffalo, New York and local offices throughout the United States, Osmose Utilities Services is organized to respond to the increasing demand for utility maintenance services.



# **Osmose®**

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### **Services**

- Pole Inspection & Remedial Treatment
- GIS Services
- Pole Restoration
- Corrosion Investigation and Repairs for Steel Towers and Poles
- Grounding System & Stray Voltage Inspection
- Integrated Vegetation Management
- Padmount Transformer Inspection
- Joint Use/Streetlight Surveys
- Network Connectivity
- Code Violations, Reliability and Safety Inspections
- On-site Office Support
- Data Integration Services

### **Software**

- FastGate® Mobile
- FastGate Manager® Applications
- FastGate Viewer®
- O-Calc™ for Pole Load Analysis Software

### **Products**

- Pole Toppers and Cover Caps
- Pole Wrap
- Guy Markers
- Remedial Treatments
- Woodpecker Damage Repair Products
- Pole Splints
- C-Truss™ and C2 Truss™ Pole Reinforcement
- Markers, Tags and Signs

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