Osmose® Products Catalog

Remedial Treatment, Inspection Pole Restoration, Pole Protection and Additional Products.

Everything you need to help protect, preserve, repair, restore and identify your T&D assets.



Terms of Sale

Net 30 Days

All Prices in U.S. Dollars and do not include freight
Quoted prices are for shipment within the U.S.
F.O.B. Origin (shipping points depend upon product ordered)
Service Charge of 1.5% per month will be charged on past-due accounts.

Return Procedure:

Return of products is subject to the prior approval and return goods policy of Osmose Utilities Services, Inc. Buyer must contact Osmose prior to shipping material for Return Material Authorization approval. All returns must be shipped prepaid, in resalable condition, and are subject to inspection for damage or misuse prior to issuance of a credit or refund. All products are subject to a 10% restocking charge.

Damaged Shipments:

Buyer should thoroughly inspect all items for shipping damage before accepting delivery. If damage has occurred, Buyer should note the extent of the damage on the freight bill and contact Osmose immediately.

Warranty Limitation:

Osmose Utilities Services, Inc. makes no warranties express or implied, of merchantability, fitness for a particular purpose, or otherwise.

Limitation of Liability:

Under no circumstances shall Osmose be liable for special, indirect, incidental, or consequential damages resulting from the use or handling of any product sold by Osmose Utilities Services, Inc. and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which such damages are claimed. Any claim by buyer against Osmose Utilities Services, Inc. in contract or warranty or tort or otherwise must be commenced within one year of the date of accrual of such action.

To comply with EPA notice (51 Federal Register 1333-1348 dated January 10, 1986 as may be updated), Osmose Utilities Services, Inc. is required to have on file a registered Pesticide Applicators License, applicable in the state where the material will be shipped, in order to provide restricted-use pesticides to our customers.

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Preservative Paste

Brush-on paste is the best choice to protect against external decay in wood poles. Easy brush-on application goes on fast and adheres to wood to reduce waste.

MP400-EXT™

MP400-EXT is a new generation, patent pending remedial preservative paste based on proprietary Osmose technology. This unique preservative system is the first and only commercial paste formulation that utilizes a combination of four industry proven biocides to deliver broad-spectrum control of wood destroying decay fungi and insects when applied to in-service wooden structures.

Independent testing has shown MP400-EXT treated wood to exhibit exceptional biocidal properties against wood decay fungi and insects with minimal chemical loadings. MP400-EXT exhibits low toxicity characteristics favorable to the applicator and the environment and is currently the only remedial paste on the market that has been classified as Toxicity Category III with the EPA signal word of "CAUTION" on the label.

Benefits:

- Four active ingredients for broad-spectrum control
- Patent-pending tebuconazole and bifenthrin combination for insect and fungi control
- Micronized oxine copper technology for protection against soft rot
- Waterborne formulation eliminates petroleum and reduces VOC's
- · Lowest toxicity profile of all registered pastes





Technical Data	
Active Ingredients	Copper 8-quinolinolate Tebuconazole Bifenthrin Sodium Tetraborate Decahydrate
Packaging	4 Gallon box
Shipping Description	Non-Hazardous—MP400-EXT
Weight	43 lbs per box – 10.7 lbs. per gallon
Handling and Storage precautions	Wash thoroughly after handling. Reseal containers immediately after use. Store away from food and beverages.
In the event of accidental release	Utilize protective clothing. Spill should be taken up mechanically and placed in appropriate containers. Wash down spill area with water. Collect wash water for approved disposal.
Waste Disposal	Follow container label instructions for disposal of wastes generated during use in compliance with the FIFRA product label. Do not reuse container.
Basic Personal Protection "CAUTION"	RESPIRATORY PROTECTION: Normally not needed. PROTECTIVE GLOVES: Rubber or Nitrile Gloves EYE PROTECTION: Wear face shield or goggles.
For more detailed Personal Protective Measures please refer to the label & MSDS Information.	OTHER PROTECTIVE CLOTHING OR EQUIPMENT: As necessary to avoid skin contact.
Appearance	Brownish-Green
Odor	Faint Organic odor
Freezing Point	Not Determined
Melting Point	N/A
Flash Point/Auto Ignition Temperature	N/A



Ordering Information:

MP400-EXT™

Item Description	Item ID	UOM	Shipping Weight
4 gallon box (2—2 gallon pouches)	65-110-010-040	Gallon	43 lbs. per 4 gallon box

OsmoShield™

Item Description	Item ID	UOM	Shipping Weight
OsmoShield—22" x 100' roll (6 per box)	75-080-030-022	Roll	40 lbs. per box of 6
OsmoShield—24" x 100' roll (6 per box)	75-080-010-024	Roll	55 lbs. per box of 6



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. The combination of effectiveness and ease-of-application has helped to make MITC-FUME the most widely used fumigant in the United States.

Benefits of MITC-FUME:

Pre-measured in 30-gram tubes, ensures proper dosage application. Easy to Q.C.

Slow release. Long term protection.

Solid melt formulation: Reduces risk of fumigant loss through voids and checks.

Safer application: No transfer or measuring of chemical.

Increased efficacy: Due to a combination of all the above factors.

Recommended application rates are as follows:

3 tubes for poles < 36"

4 tubes for poles 36" - 49"

5 tubes for poles 50" - 59"

6 tubes for poles 60" - 69"

7 tubes for poles 70" - 79"

8 tubes for poles 80" - 89"

9 tubes for poles 90"+

Pesticide Applicators License is required for state product is shipping into.





Technical Data			
Active Ingredients	Methylisothiocyanate—97.00% Inert Ingredients—3.00% Total—100.00%		
Packaging	Packaged 270 tubes per carton (18 canisters of 15 tubes each).		
Shipping Description	Preservatives, Wood, NOI, Liquid in inner containers in boxes. NMF 161490 Methylisothiocyanate, 6.1, UN2477, PGI. This Package Conforms to Conditions and Limitations Specified in 49 CFR 173.4 and DOT-SP 11900.		
	Must ship via LTL carrier.		
Weight	32 lbs. per case		
Handling and Storage precautions:	Store only in closed original container to prevent leakage. Store in cool, well ventilated, locked areas away from food and foodstuff, out of reach of children and irresponsible persons. Avoid exposure to heat and/or direct sunlight.		
Steps to be taken in the event of accidental release	Remove all sources of ignition and contain spill as soon as possible. Recover as much product as possible for reuse. Absorbents compatible with petroleum may be used to soak up spill. Do not allow spill material or residue to reach water. Major spills need to be reported to the National Response Center.		
Waste Disposal	Wood treated with MITC-FUME IS NOT a hazardous waste. If unused MITC-FUME is disposed of it may be considered a hazardous waste (as per RCRA) because of its ignitability. Disposal of such material should be conducted by an EPA permitted facility. Questions regarding disposal can be directed to EPA's RCRA Hotline at (800) 424-9346. Always dispose in accordance with all Federal, State and Local Laws.		



Fumigants

MITC-FUME®

Technical Data (con't):

Basic Personal Protection For more detailed Personal Protective Measures please refer to the label & MSDS Information.	RESPIRATORY PROTECTION: Under normal outdoor use, there is no need for respiratory protection. PROTECTIVE GLOVES: Rubber or neoprene (limited protection, replace frequently). EYE PROTECTION: Goggles, safety glasses, or face shield. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Acid-resistant non-porous overalls or aprons. WORK/HYGIENIC PRACTICES: Remove contaminated clothing immediately and launder before reuse. Heavily contaminated clothing should be disposed of. Wash thoroughly after handling, before eating or smoking.			
Appearance	Colorless to slightly yellow solidified melt.			
Odor	Pungent irritating odor as of horseradish.			
Freezing Point	N/A			
Melting Point	96°F			
Flash Point/Auto Ignition Temperature	95F°/698°			

Ordering Information:

Customer must provide Osmose Utilities Services, Inc. with a Pesticide Applicators License for the state where the product will be shipped.

Item Description	Item ID:	UOM	Shipping Weight:
MITC-FUME (carton of 270 tubes)	65-050-100-000	Carton	35 lbs. per carton

Additional Products

Item Description	Item ID:	UOM	Shipping Weight:
MITC-FUME Opening Tool	90-060-220-010	Each	3 lbs. each
MITC-FUME Tags	90-090-120-011	500/Bag	1 lb. per bag
MITC-FUME Recovery Kit	90-060-210-010	Each	3 lbs. each
Shell Thickness Indicator - Fumigant	90-060-310-010	Each	1 lb. each



Fumigants

DuraFume®

A crystallized solid dazomet-based (98% dazomet) product that decomposes to produce approximately 45% MITC. It is applied from a metered one-gallon container.

Field Trials indicate that Durafume can provide effective fumigant protection. The amount of MITC delivered by dazomet-based fumigants is less than MITC-FUME, but greater than from water based, metam sodium fumigants.





Technical Data	
Active Ingredients	Tetrahydro-3, 5-Dimethyl-2H-1, 3, 5-Thiadiazine-2-Thione—98.00% Inert Ingredients—2.00% Total—100.00%
Packaging	(4) – 7 lb. Bottles per Case
Shipping Description	Non-Hazardous—DuraFume
Weight	28 lbs. per case
Handling and Storage precautions:	Store in cool, dry area.



Fumigants

DuraFume®

Technical Data (con't)	
In the event of accidental release	Before responding to a spill or leak of this product, review each section of the MSDS. Follow the recommendations given in the Handling Precautions sections. Check the Fire and Explosion Data section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritation fumes are present, consider evacuation of affected areas. Initially minimize area affected by the spill or leak. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.). Based on the product's toxicological and chemical properties, and on the size and location of the spill or leak, assess the impact on contaminated environments (e.g. water systems, ground, air equipment, etc.). There are no methods available to completely eliminate any toxicity this product may have on aquatic environments. Minimize adverse effects on these environments. Determine if federal, state, and/or local release notification is required. Recover as much of the pure product as possible into appropriate containers. Later, determine if this recovered product can be used for its intended purpose. Address clean-up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil, or commercially available absorbents may be used to recover any material that can not readily be recovered as pure product. Flushing residual material to an industrial sewer, if present at the site of a spill or leak incident may be acceptable if authorized approval is obtained. If product and/or spill/leak residuals are flushed to an industrial sewer insure that they do not come into contact with incompatible materials. In the event of a spill, Buckman Laboratories is available for technical assistance at 901-767-2722.
Waste Disposal	Dispose of in accordance with Federal, State, and Local laws. This product is not specifically listed in 40 CFT 261 as a Resource Conservation and Recovery Act (RCRA) hazardous waste. However, spill or leak residuals may meet the criteria for a characteristic hazardous waste under this Act. Check the characteristics of the material to be disposed of and/or the physical and reactivity data given in this MSDS for the neat product. Empty containers, as defined by appropriate sections of RCRA, are not RCRA hazardous wastes. However, insure proper management of any residuals remaining in container.
Basic Personal Protection For more detailed Personal Protective Measures please refer to the label & MSDS Information.	RESPIRATORY PROTECTION: No ACGIH TLV or OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice. If dusting can occur, a NIOSH approved respirator is recommended. PROTECTIVE GLOVES: Rubber gloves. EYE PROTECTION: Wear goggles or face shield. Eye wash fountains in the work place are recommended. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Protective clothing as
Appearance	necessary to avoid skin contact. White crystalline solid.
Odor	Slight odor
Freezing Point	N/A
Melting Point	N/A
Flash Point/Auto Ignition	N/A
Temperature	



Ordering Information:

DuraFume®

Item Description	Item ID	UOM	Shipping Weight
DuraFume—(4) - 7lb. bottles per box	65-070-100-000	Lb	28 lbs. per box

Additional Products

Item Description	Item ID	UOM	Shipping Weight
DuraFume Tags (500/bag)	90-090-200-010	Each	1 lb. per bag of 500



Fumigants

WoodFume®

An easy to apply liquid fumigant that decomposes to MITC at a theoretical maximum rate of 32.7% after being placed into wood. Its active ingredient is sodium methyl dithiocarbamate—a general use pesticide of proven effectiveness.

Recommended uses for all fumigants:

- Where full excavation is impractical such as poles set in pavement.
- In combination with proven external groundline preservatives.
- Where incipient decay is proven or suspected including use for all older Douglas-fir, western red cedar and southern pine poles.
- For poles in areas characterized by decay at a depth greater than 18" below groundline.
- · To treat inspection or bolt holes.

Recommended application rates are as follows:

- 1 pint to poles with a groundline circumference under 40".
- 2 pints to poles with a groundline circumference over 40".

Refer to product label for information on drilling patterns for application.





Technical Data	
Active Ingredients	Sodium methyldithiocarbamate (Anhydrous)—32.70% Inert Ingredients—67.30% Total—100.00%
Packaging	12 pints per box (4) – 1 gallon bottles per box 55 gallon drum
Shipping Description	Environmentally hazardous substance, liquid, n.o.s., 9, UN3082, PGIII (Metam Sodium)
Weight	17 lbs. per box (pints) 44 lbs. per box (gallons) 575 lbs. per drum
Handling and Storage precautions:	Store in cool, dry area away from direct sunlight, flammable materials, and open flames. Do not store below 0°F.



Fumigants

WoodFume[®]

Technical Data (con't)	
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In the event of accidental release	Before responding to a spill or leak of this product, review each section of the MSDS. Follow the recommendations given in the Handling Precautions sections. Check the Fire and Explosion Data section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritation fumes are present, consider evacuation of affected areas. Initially minimize area affected by the spill or leak. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.). Based on the product's toxicological and chemical properties, and on the size and location of the spill or leak, assess the impact on contaminated environments (e.g. water systems, ground, air equipment, etc.). There are no methods available to completely eliminate any toxicity this product may have on aquatic environments. Minimize adverse effects on these environments. Determine if federal, state, and/or local release notification is required. Recover as much of the pure product as possible into appropriate containers. Later, determine if this recovered product can be used for its intended purpose. Address clean-up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil, or commercially available absorbents may be used to recover any material that can not readily be recovered as pure product. Flushing residual material to an industrial sewer, if present at the site of a spill or leak incident may be acceptable if authorized approval is obtained. If product and/or spill/leak residuals are flushed to an industrial sewer insure that they do not come into contact with incompatible materials.
Waste Disposal	This product is toxic to fish. Do not contaminate water. Dispose of in accordance with Federal, State, and Local laws. This product is not specifically listed in 40 CFT 261 as a Resource Conservation and Recovery Act (RCRA) hazardous waste. However, spill or leak residuals may meet the criteria for a characteristic hazardous waste under this Act. Empty containers, as defined by appropriate sections of RCRA, are not RCRA hazardous wastes. However, insure proper management of any residuals remaining in container.
Basic Personal Protection For more detailed Personal Protective Measures please refer to the label & MSDS Information.	RESPIRATORY PROTECTION: No ACGIH TLV or OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice. If needed, use MSHA/NIOSH approved respirator for pesticides. PROTECTIVE GLOVES: Rubber. EYE PROTECTION: Chemical goggles. Eye wash fountains in the work place are strongly recommended. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Impervious clothes and shoes recommended. Additional protection, such as full body suit and boots, may be required depending on conditions.
Appearance	Clear yellow to yellow-green liquid
Odor	Strong amine sulfur odor
Freezing Point	32°F
Melting Point	N/A
Flash Point/Auto Ignition Temperature	212°F/ N/A



Ordering Information:

WoodFume[®]

Item Description	Item ID	UOM	Shipping Weight
WoodFume—12 pints per box	65-050-500-000	Pint	17 lbs. per box
WoodFume—(4) 1-gallon containers/box	65-050-200-040	Gallon	44 lbs. per box
WoodFume—55 gallon drum	65-050-400-055	Gallon	575 lbs. per drum

Additional Products

Item Description	Item ID	UOM	Shipping Weight
WoodFume Tags (500/bag)	90-090-140-011	Each	1 lb. per bag of 500



Solid-Rods and Internal Treatments FLURODS™

Designed to help protect against internal decay in wood poles, pilings and other structural wood members. As a stand-alone treatment, it is ideally used for pole tops, inspection holes, spar arms, pre-drilled framing holes and where hardware is attached to poles.

Solid FLURODS contain sodium fluoride, a highly effective, internationally-recognized, diffusible wood preservative. FLURODS are clean, easy to handle and install.

Refer to our FLUROD Technical Bulletin for application rates alone and in combination with external treatments.



Technical Data	
Active Ingredients	Sodium Fluoride—92.60% Inert Ingredients—7.40% Total—100.00%
Packaging	1/2" x 3" – 50 per box – 10 boxes per case 5/16" x 1 1/2" – 350 per container – 8 containers per case
Shipping Description	Sodium fluoride, solid, 6.1, UN1690, PGIII, Limited Quantity
Weight	3 lbs. per box/container – 32 lbs. per case
Handling and Storage precautions:	Store in cool, dry area away from direct sunlight, flammable materials, and open flames. Do not store below 0°F.
In the event of accidental release	Pick up rods and place back into container. If a rod breaks, sweep up. Use broken rod if possible. If rod is crushed, sweep up dust and dispose of in sanitary landfill.
Waste Disposal	This product is toxic to fish. Do not contaminate water. Dispose of in accordance with Federal, State, and Local laws. This product is not specifically listed in 40 CFT 261 as a Resource Conservation and Recovery Act (RCRA) hazardous waste. However, spill or leak residuals may meet the criteria for a characteristic hazardous waste under this Act. Empty containers, as defined by appropriate sections of RCRA, are not RCRA hazardous wastes. However, insure proper management of any residuals remaining in container.
Basic Personal Protection For more detailed Personal Protective Measures please refer to the label & MSDS Information.	RESPIRATORY PROTECTION: No ACGIH TLV or OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice. If needed, use MSHA/NIOSH approved respirator for pesticides. PROTECTIVE GLOVES: Rubber EYE PROTECTION: Chemical goggles. Eye wash fountains in the work place are strongly recommended. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Impervious clothes and shoes recommended. Additional protection, such as full body suit and boots, may be required depending on conditions.
Appearance	Solid white rod
Odor	No odor
Freezing Point	32°F
Melting Point	1819°F
Flash Point/Auto Ignition Temperature	N/A



Ordering Information:

FLURODSTM

Item Description	Item ID	UOM	Shipping Weight
1/2" x 3" - 50 per box	65-040-100-030	Each	3 lbs. per box
5/16" x 1-1/2" - 350 per box	65-040-200-010	Each	3 lbs. per box

Additional Products

Item Description	Item ID	UOM	Shipping Weight
FLUROD Tags (500/bag)	90-090-090-010	Each	1 lb. per bag of 500



Solid-Rods and Internal Treatments Bor8[®] **Rods:**

Designed to help protect against internal decay in wood poles. Intended to be installed in pre-drilled holes concentrated in the locations where decay control is required. For utility poles, the areas most prone to decay are the groundline zone—typically defined as 6" above grade to 18" below—and the pole top. It can also be used as an internal treatment to help protect open bolt holes, spar arms, and X-braces.

Bor8 Rods are solid, easy-to-handle glass-like rods containing 96.65% water diffusible borate wood preservative.

Refer to our Bor8 Rods Product Information Sheet for application rates.

Technical Data	
Active Ingredients	Anhydrous Disodium Octaborate—96.65% Inert Ingredients—3.35% Total—100.00%
Packaging	1/2" x 4" – 750 per pail 3/4" x 3" – 500 per pail 1/3" x 1" - 2,000 per pail
Shipping Description	Bor8 Rods—Not Regulated by DOT
Weight	1/2" x 4" – 44 lbs. 3/4" x 3" – 51 lbs. 1/3" x 1" – 15 lbs.
Handling and Storage precautions:	Keep out of reach of children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal. Wash thoroughly after handling this product.
In the event of accidental release	No special release measures are required for this product.
Waste Disposal	Dispose of in accordance with Federal, State, and Local laws. Waste resulting from the use of this product may be disposed on site or at an approved waste disposal facility.
	Container Disposal—Non-refillable container. Do not reuse or refill container. If empty: place in trash or offer for recycling if available. If partly filled: call your local solid waste agency for disposal instructions.
Basic Personal Protection	No special clothing / personal protection measures are required when handling this product.
	Engineering Controls : Facilities storing or using this material should be equipped with an eyewash facility and a safety shower.
Appearance	Clear, hard glass-like rods
Odor	No odor
Flash Point/Auto Ignition Temperature	N/A



Ordering Information:

Bor8® Rods

Item Description	Item ID	UOM	Shipping Weight
1/2" x 4" - 750 per pail	65-040-100-040	Each	44 lbs. per pail
3/4" x 3" - 500 per pail	65-040-100-050	Each	51 lbs. per pail
1/3" x 1" - 2,000 per pail	65-040-100-060	Each	15 lbs. per pail

Additional Products

Item Description	Item ID	UOM	Shipping Weight
Bor8 Rods Tags (500/bag)	90-090-270-010	Each	1 lb. per bag of 500
5/8" Plastic Plug	75-070-150-005	Each	

Bor8 Rods is a registered trademark of Wood Care Systems.



Solid-Rods and Internal Treatments

CU-89 RTU II™

Similar to Cop-R-Nap, CU-89- RTU is a <u>ready-to-use</u> copper based internal treatment/fungicide used to control fungal decay organisms and wood destroying insects. Applied by internal injection under pressure to poles, pole tops, bore holes, posts and pilings, Cop-R-Nap provides control to existing wood destroying organisms while creating a reservoir of protection to help deter future attacks.



Technical Data	
Active Ingredients	Copper Naphthenate—17.00% (2% copper as metal) Inert Ingredients—83.00% Total—100.00%
Packaging	16 fl. oz. Bottle 5 Gallon Pai
Shipping Description	Wood preservatives, liquid, 3, UN1306, III* *According to 49CFR 173.150, this material may be reclassified as a combustible liquid and it can be shipped as a non-hazardous material if the container is under 120 gallons.
Weight	17 lbs. per box of 16 fl. oz. bottles 39 lbs. per Pail
Handling and Storage precautions:	Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, frill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition: They may explode and cause injury or death. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. OTHER PRECAUTIONS: Use product with caution around heat, sparks, pilot lights, static electricity, and open flame. Read label.
In the event of accidental release	Eliminate all sources of ignition (flares, flames, including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, or floor absorbent and shoveled into containers. Prevent run-off to sewers, streams or other bodies of water.



Solid-Rods and Internal Treatments

CU-89 RTU II™

Technical Data	
Waste Disposal	WASTE DISPOSAL METHODS: If waste product has a flash point below 140°F, it must be treated as a RCRA hazardous waste "ignitable". Such waste must be disposed at an approved hazardous waste TSD facility. Potential disposal methods include incineration and land disposal, if permitted by the facility in question. Dispose in accordance with Federal, State, and local laws.
For more detailed Personal Protective Measures please refer to the label & MSDS Information. Appearance	RESPIRATORY PROTECTION: Normally not needed. If TLV of any component is exceeded, a NIOSH/MSHA self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure modes is advised. Contact industrial hygienist. PROTECTIVE GLOVES: Petroleum resistant such as Neoprene. EYE PROTECTION: Chemical goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other types of safety glasses. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact. Green liquid
Odor	Petroleum odor
Freezing Point	Unavailable
	162°F / N/A
Flash Point/Auto Ignition Temperature	102 F / N/A

Ordering Information:

CU-89 RTU II™ – Ready to Use Solution (Copper Naphthenate – 2% copper as metal)

Item Description	Item ID	UOM	Shipping Weight
Pole Topper Fluid—box of (12) 16 oz. bottles	65-030-050-016	Bottle	17 lbs. per box
5 gallon pail	65-030-050-005	Gallon	39 lbs. per pail



Solid-Rods and Internal Treatments

Hollow Heart® CF

Hollow Heart CF concentrate contains recognized diffusible, water-borne preservatives used successfully in wood preserving for decades. This combination of sodium fluoride and copper naphthenate provides deep, long lasting protection against decay. Hollow Heart CF is designed for remedial treatment of in-service poles, piling and posts.

Please see the product label for appropriate mixing and application instructions.



Technical Data		
Active Ingredients	Sodium Fluoride—8.39% Copper Naphthenate—41.27% (Equivalent to 4.5% copper as metal) Inert Ingredients—50.34% Total—100.00%	

Ordering Information:

Item Description	Item ID	UOM	Shipping Weight
5 gallon pail	65-060-060-000	Gallon	50 lbs. per pail



Pole Bandages

Pole bandages are designed to help protect in-service poles from external decay with a manufactured pre-metered dose of preservative contained in a durable wrap.

Pole Wrap™

Pole Wrap[™] has been designed to help protect poles against decay at the critical groundline area. The combination of sodium fluoride—a proven, effective preservative used in wood preservation for more than 40 years —combined with a fiberglass matting, makes for a dry, clean and easy-to-use bandage.

Designed specifically to protect the groundline portion of wooden poles, Pole Wrap contains a recognized water soluble preservative. This preservative penetrates deeply into the wood. Pole Wrap offers protection against decay for a comparable period to your normal groundline treatment cycle, consistent with industry practice.

Pole Wrap has many recommended uses:

- · Relocated or reused poles
- New poles, especially those to be set in pavement
- Poles set in locations vulnerable to decay
- High value installations
- Standing poles that have the groundline disturbed for underground cable installations or grade change
- Poles stored for six months or more

Packaging:

Pole Wrap is available as individual or rolled bandages. *Minimum order size* is one box.

Individual (20" wide):

Length	#/box Shipping Weight	
36" bandage	10	37 lbs.
48" bandage	10	48 lbs.
60" bandage	8	62 lbs.

Rolled (20" wide by 25' long—25 lbs. shipping weight) - Estimated usage:

Pole Circumference	Poles per Roll
30"	10
36"	8
48"	6

Packaging:



Installation:



Completed Application:





Pole Bandages

Pole Wrap™

Technical Data	
Active Ingredients	Sodium Fluoride—70.60% Inert Ingredients—29.40% Total—100.00%
Shipping Description	Sodium fluoride, solid, mixture, 6.1, UN1690, PGIII
Handling and Storage precautions:	Store in dry area. Do not store near open flames. Use good personal hygiene. Applicators must not eat, drink, or use tobacco products during those parts of the application process that may expose them to the wood treatment formulation.
In the event of accidental release	N/A - Due to physical nature of product.
Waste Disposal	Bury in approved landfill. Dispose in accordance with all Federal, State and local laws.
For more detailed Personal Protective Measures please refer to the label & MSDS Information.	RESPIRATORY PROTECTION: Normally not necessary due to physical nature of product. PROTECTIVE GLOVES: Rubber EYE PROTECTION: Wear protective eyewear (goggles, face shield or safety glasses). OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A WORK/HYGIENIC PRACTICES: Follow good work practices. Wash hands before eating, smoking or using tobacco products. Remove contaminated clothing and wash clothing before reuse.
Appearance	Dark Gray Bandage
Odor	Odorless
Freezing Point	N/A
Melting Point	1818°F
Flash Point/Auto Ignition Temperature	N/A

Ordering Information:

Item Description	Item ID	UOM	Shipping Weight
20" x 25' Roll	65-100-100-025	Roll	25 lbs. per roll
20" x 36" Bandage—10 each per box	65-100-120-036	Each	37 lbs. per box of 10
20" x 48" Bandage—10 each per box	65-100-140-048	Each	48 lbs. per box of 10
20" x 60" Bandage—8 each per box	65-100-160-060	Each	62 lbs. per box of 8



Trusses, Banding, Installation Equipment

Pole Restoration is a third or less of the cost of pole replacement. A successful program can save a utility millions of dollars in unnecessary replacement costs. Osmose restoration products add many years of service life to older, weakened poles.

Osmo-C2-Truss®

Lighter weight, higher strength, lower cost—The optimized truss design provides the highest strength-to-weight ratio in the industry at a lower cost than other systems.

Patent pending design—Finite Element Analyses were used to optimize the cross-sectional shape and maximize the efficiency of the design.

Reduced rotation—The patent pending design concept enables the C2-Truss to minimize the twisting caused by transverse wind loads that reduce the performance of other truss shapes.

Engineered for safety and reliability—The Osmo-C2-Truss system is installed to exceed the strength requirements of the National Electric Safety Code (NESC).

Higher yield strength steel - 100,000 psi - combined with an optimized design allows the truss to develop its full strength potential. The high strength-to-weight ratio helps lower overall weight and cost.

Low profile—The unique design of the Osmo-C2-Truss results in a lower profile on the pole.

Longer lengths for high decay—The standard truss extends 5 feet above ground. Single piece trusses are available for applications up to 8 feet above ground. A two-piece design is available for taller applications.



Galvanized for corrosion protection—Every Osmo-C2-Truss system is hot-dip galvanized to ASTM A-123 specifications, ensuring long term corrosion protection.



Trusses, Banding, Installation Equipment

Osmo-C-Truss®

The Osmo-C-Truss system is constructed from A-572 Grade 60 and A-715 Grade 80 steel and exceeds the strength requirements of the National Electric Safety Code (NESC). Every Osmo-C-Truss is galvanized to the heaviest Coating Thickness Grade specified by ASTM A-123 for long-term corrosion protection.

The Osmo-C-Truss has been extensively tested throughout its' 40 year history. Tests have been conducted by Osmose, independent laboratories and pole owners nationwide.

Full-scale foundation testing allows Osmose to offer trusses with a shorter driving depth, saving pole owners money. The design of the Osmo-C-Truss system and the installation tools allow it to maintain positive contact with the pole butt below ground, insuring transfer of loads during bending.





Ordering Information:

Osmo C2 Truss®					
Lighter - St	Lighter - Stronger - Lower Cost				
	Bending				
Part Number	Size	Strength (ft-lb)	Weight		
Call for specific	C2-3610	36,544	82 lbs.		
part numbers	C2-4910	49,628	94 lbs.		
	C2-5610	56,442	103 lbs.		
	C2-7110	71,759	116 lbs.		

Osmo-C-Truss®				
		Bending		
Part Number	Size	Strength (ft-lb)	Weight	
Call for specific	6 x 10'	21,875	108 lbs.	
part numbers	7 x 10'	25,525	112 lbs.	
	8 x 10'	36,500	126 lbs.	
	9 x 10'	55,135	178 lbs.	
	980 x 10'	73,515	178 lbs.	
	1080 x 11'	90,825	209 lbs.	
	1180 x 11'	111,670	228 lbs.	
	1280 x 11'	128,875	245 lbs.	
	1380 x 11'	152,005	291 lbs.	
	1480 x 11'	169,560	315 lbs.	
	1580 x 12'	191,125	324 lbs.	
	1680 x 12'	210,460	337 lbs.	

All C-Trusses are also available in lengths from 10' to 25'. Bolted design C-Trusses are also available.

C-Truss Materials

Part Number	ltem	Size	Shipping Weight	Unit	
T dit Hullibei	Item	OIZC	Weight	Offic	
75-020-001-010	Banding	2" x 290'	103 lbs.	Roll	
75-020-001-020	Seals	Single 250/Box	50 lbs.	Box	
75-020-001-021	Seals	Double 250/Box	50 lbs.	Box	
75-020-001-030	CoverCap	Small	1.5 lbs.	Each	
75-020-001-031	CoverCap	Large	3.5 lbs.	Each	
75-020-001-033	C2 CoverCap	Small	1.5 lbs.	Each	

C-Truss Installation Equipment—call for detailed equipment listing and pricing



Trusses, Banding, Installation Equipment

Banding and Seals

Osmose banding is stronger than other banding systems in the industry with over 138,000 psi tensile strength. The banding is hot-dip galvanized to 2.0 ounces per square foot—two to three times heavier than others—for long term corrosion protection unmatched by any other system. Banding comes in a 290 ft. coil.

Seals come in both the Single Band Galvanized Seal (push-type) or the Double Band Galvanized Seal (closed-type). Both are 2" W x 3" L and are packaged 250 seals per box.







Additional Products: Pole Restoration

Trusses, Banding, Installation Equipment

Installation Systems

Osmose offers both a pneumatic and manual installation system.

Pneumatic:

Air Hammer Kit—includes modified air hammer with muffler, hammer cradle & chain assembly and sheath driver & shank.

Pull-Down Winch and Steel Dolly—2000 lb. capacity winch with heavy duty steel cable.

Tension Roller—Connects air hammer and pull-down winch for steady driving force and faster installation.

Pike Pole & Winch Assembly—18' Fiberglass pike pole with 800 lb. capacity winch assembly and automatic locking mechanism for greater safety and easier use. Optional 16' sectional pike pole assembly is available. Note: Pike poles are recommended for lifting driving hammers only.

Air Tensioner (2") - High strength industrial tensioner with 2000 lb tensioning capacity at 100 psi air pressure.



Band Shear (2") - High capacity shear for easy and fast cutting of bands.

Band Dispenser (2") - Accommodates 100 lb. coils of banding.

Optional Systems:

Drop Weight/Manual:

Drop Weight Assembly-Includes ten 25 lb. wafer weights and driving shank with shackle.

Nylon Sling-2" x 8' two-ply nylon.

Pulley (8") - Sling and Pulley assembly used for hoisting drop weight assembly.

Electric Capstan Hoist—3000 lb. capacity hoist with bracket and chain assembly for easy attachment to the pole.

Hoist Rope-3/4" x 65' polyester rope.

High Capacity Manual Tensioner (2") - Tensioner modified with extended arm and hook assembly for greater tensioning capacity.

Manual Crimper (2").

Band Punch—Used for installation with manual tensioning systems.

Hydraulic Installation:

Hydraulic Hammer Kit—Includes modified hydraulic hammer with hammer cradle and chain assembly and sheath driver and shank.





Woodpecker Damage Repair Products

Osmose pole treatment and restoration products have helped pole owners restore and maintain wood poles for more than 60 years. Osmose is committed to providing the most cost-effective and reliable asset management solutions for transmission and distribution system owners.

OsmoWeld[®] MPF™

This multi-purpose filler is designed primarily to repair wood poles damaged by woodpeckers. It can also be used to repair decayed or split tops and other damage that results in decay.

Woodpecker damage repair is fast, easy and clean with MPF compared to other systems. The KwikMixx™ cartridge system provides even mixing of the two-part epoxy formula. Cartridges come in two sizes, 600 ml and 1500 ml, for small or large repairs. The 600 ml cartridges fill approximately 36 cubic inches of void and the 1500 ml fill approximately 90 cubic inches.

For maximum results, all debris and foreign materials should be removed from the damaged area and tape should be placed over the entry hole. After drilling a filling hole at a 45° angle, OsmoWeld MPF filler is injected into the cavity. The product will flow easily and evenly, completely filling the hollow, which is vital in preventing the return behavior of woodpeckers. OsmoWeld MPF filler is designed to bond to wood without shrinking or cracking.



Installation Guide:

- Step 1 Inspect woodpecker damage area and remove any standing water and or loose debris.
- Step 2 To ward off future decay, it is recommended that the surface of the damaged area be treated with Pole Topper Fluid™ (CU-89 RTU II) in one pint squirt bottles. The surface of the cavity should receive a light even coat.
- **Step 3** To insure complete filling of the damaged cavity, it is recommended to drill a pilot hole from above the damaged area into the crown of the cavity. This should be done with a 7/8" drill bit. If the hole is not completely filled and a hollow remains the woodpecker may return to the damage area and cause further destruction. Filling the hole through the crown will prevent this.
- **Step 4** Prior to filling, make several wraps of light duty adhesive tape around the pole to completely cover the woodpecker entry hole. This tape can be removed after the repair has initially cured (approx. 30 45 minutes at 70 degrees F, complete cure occurs after approx. 24 hours).
- Step 5 Remove black end caps from KwikMixx™ cartridge and attach mixing nozzle (use retaining nuts if needed). End caps can be replaced if a cartridge is not completely dispensed. Place cartridge into installation dispensing tool.
- Step 6 Insert mixing nozzle into pilot hole and begin to fill void. Continue to fill void until MPF™ begins to fill up pilot hole.
- **Step 7** Plug pilot hole with 15/16" treated wood dowel and wipe off excess. Instead of using a treated dowel, pilot hole can also be sealed with a wrap of the light duty adhesive tape.
- **Step 8** Prior to curing, excess MPF™ can be cleaned with industrial wipes or with denatured alcohol. Excess MPF™ should be wiped or removed from all surfaces (i.e. tools, clothes, equipment) before curing.

For safety and disposal, please refer to the Material Safety Data Sheet (MSDS). If you have questions or comments about this product, call (800) 877-POLE and ask for the Manager - Product Sales, Osmose Utilities Services, Inc.



Woodpecker Damage Repair Products

OsmoWeld® MPFTM

Technical Data	
Active Ingredients	Hardener: Amine/Filler Blend—100.00% Resin: Epoxy Resin Blend—<1.00% Total—100.00%
Packaging:	1500 ml – (6) cartridges per carton 600 ml – (6) cartridges per carton
Shipping Description:	"Consumer commodity", ORM-D
Weight:	38 lbs. per 1500 ml carton 15 lbs. per 600 ml carton
Handling and Storage precautions:	Store in a warm (50°F - 90°F), dry, ventilated, place. Avoid breathing vapors. Handle in well-ventilated workspace. Avoid contact with skin, eyes or clothing. Wear protective clothing, boots, gloves and eye protection.
In the event of accidental release:	For small spills, i.e. broken tubes, react components and dispose of in a sanitary landfill. For large spills, i.e. drums in a manufacturing facility, reduce vapor spreading with a water spray. Stop the leak, if possible. Construct a dike to prevent spreading. Spread absorbent material over area. Transfer to containers by suction. Dispose of material in accordance with local, state, and federal regulations. Wash the area with soap and water. Prevent washing from entering sewers or waterways.
Waste Disposal:	This material does not contain any VOC's (volatile organic compounds). Empty tubes may be disposed of in chemical trash. Reacted material may be disposed of in sanitary landfill. Dispose of material in accordance with applicable local, state, and federal laws and regulations. The state and local regulations and laws may differ from federal regulations, and laws may change or be reinterpreted. This information only applies to the material as manufactured. Process, use or contamination may make the information inappropriate, inaccurate, or incomplete. Responsibility for proper waste disposal is with the owner of the waste.
Basic Personal Protection: For more detailed Personal Protective Measures please refer to the label & MSDS Information.	RESPIRATORY PROTECTION: Not necessary under most operating conditions. NIOSH approved organic vapor respirator should be used in confined areas, or when conditions cause high vapor concentrations. If the percent of oxygen is below the normal then use self-contained breathing apparatus. PROTECTIVE GLOVES: Neoprene rubber gloves. Cuffed butyl rubber gloves, Nitrile rubber gloves. EYE PROTECTION: Chemical splash goggles or safety glasses with side shields should be worn as appropriate. Contact lenses should not be worn while using this product. Eye wash stations should be readily available. FOOTWEAR: As necessary to avoid dermal contact.
Appearance:	The hardener is a tan viscous liquid with an amine odor. The epoxy resin is a white viscous liquid.
Odor:	The hardener has an amine odor. The epoxy resin has a slight sweet odor.
Freezing Point:	Not Determined
Melting Point:	N/A
Flash Point/Auto Ignition Temperature:	Resin: >200°F/ Not Determined Hardener: > 200°F/ Not Determined
Compression Strength (PSI):	5240 lbs.



Ordering Information:

OsmoWeld® MPFTM

Item Description	Item ID	UOM	Shipping Weight
1500ml—6 cartridges per carton (includes: 3 mixing nozzle kits per carton)	70-070-200-015	Cartridge	38 lbs. per carton
600 ml—6 cartridges per carton (includes: 3 mixing nozzle kits per carton)	70-070-200-600	Cartridge	15 lbs. per carton



Woodpecker Damage Repair Products

PowerPush™ 7000—Power Dispenser for MPF

Functional Description:

Each Power Dispenser Kit contains (1) PowerPush 7000, (1) AC or DC Charger, (2) Re-chargeable Batteries, (1) Carry-Strap and Instruction Manual



Technical Data	
Size:	Model 7030T - 600 ml gun Model 7075 - 1500 ml gun
Capacity:	Model 7030T – 22 oz (300:300 ml) Model 7075 – 56 oz (750:750 ml)
Weight:	Model 7030T – 8.2 lbs. (3.88 kg.) Model 7075 – 8.9 lbs. (4.03kg)
Thrust:	Factory set – up to 1,800 lbs. (8kN)
Speed:	Variable up to 6 inches/per minute (2.5mm/s)
Dosing Limit	Variable - 10-30 seconds
Charger	One hour NiCd AC Charger Uses 120 Volt AC Power Recharges 14.4 volt battery packs Plugs into standard American 120 VAC wall socket One hour NiCd DC Charger Uses 12 Volt DC Automotive Power Recharges 14.4 Volt battery packs Both chargers recharge battery packs in one hour once proper tem-
	perature is reached Use battery chargers in accordance with separate instructions sup- plied with the charger
Battery Pack	14.4 volt 1.7 amp-hour Nickel-Cadmium Battery Pack Higher voltage (14.4 volts DC) increases the speed of the tool. Higher 1.7 amp-hour capacity for longer capacity for longer run time than the 12 volt battery pack



Ordering Information:

OsmoWeld Power Dispenser

Item Description	Item ID	UOM	Shipping Weight
OsmoWeld Power Dispenser w/DC Charger 1500 ml	70-070-400-1500	Each	16 lbs. each
OsmoWeld Power Dispenser w/AC Charger 1500 ml	70-070-410-1500	Each	16 lbs. each
OsmoWeld Power Dispenser w/DC Charger 600 ml	70-070-400-600	Each	14 lbs. each
OsmoWeld Power Dispenser w/AC Charger 600 ml	70-070-410-600	Each	14 lbs. each
DC Charger Only	70-070-400-001	Each	1 lb. each
AC Charger Only	70-070-410-001	Each	1 lb. each



Woodpecker Damage Repair Products

Accessories for OsmoWeld® MPFTM

Osmose offers a full line of accessories to help in the repair of damaged wood poles:

Nozzle— Newly designed integrated one-piece dispensing nozzle. Two sizes available, 600 ml and 1500 ml. Attaches to Kwik-Mixx cartridges to mix and dispense product.

Entry Way Tape—3" x 300' - used to cover damaged area on pole so product remains in pole until it is set-up.

Woodpecker Repair Tags—3" Round—orange background with white writing "This pole has been repaired for woodpecker damage" to mark poles that have been repaired.

Wooden Spacer Dowels—5/8" x 4" - packaged 144 pieces per bag—used with larger voids to help fill the cavity so you use less product.

Steel Fluted Reinforcing Pins-3/8" x 16"

Ordering Information:

OsmoWeld Accessories

Item Description	Item ID	UOM	Shipping Weight
Nozzle 1500 ml	70-140-780-150	Each	<1 lb. each
Nozzle 600 ml	70-140-120-600	Each	<1 lb. each
Entry Way Tape—3" x 300' Roll Heat Resistant	70-140-030-020	Each	1 lb. each
Woodpecker Repair Tags—3" Round	70-140-090-120	Each	<1 lb. each
Wooden Spacer Dowels 5/8" x 4" 144 per carton	75-070-110-110	Each	6 lbs. per carton
Steel Fluted Reinforcing Pin 3/8" x 16"	75-110-010-000	Each	<1 lb. each



Woodpecker Damage Repair Products

Osmose pole treatment and restoration products have helped pole owners restore and maintain wood poles for more than 60 years. Osmose is committed to providing the most cost-effective and reliable asset management solutions for transmission and distribution system owners.

OsmoWeld[®] LV™

OsmoWeld LV is designed primarily to repair wood poles damaged by woodpeckers. It can also be used to repair decayed or split tops and other damage that results in decay.

The KwikMixx™ cartridge system provides even mixing of the two-part epoxy formula. Cartridges are 600 ml in size which fills approximately 36 cubic inches of void.

For maximum results, all debris and foreign materials should be removed from the damaged area and tape should be placed over the entry hole. After drilling a filling hole at a 45° angle, OsmoWeld LV filler is injected into the cavity. The product will flow easily and evenly, completely filling the hollow, which is vital in preventing the return behavior of woodpeckers.



Installation Guide:

- **Step 1** Inspect woodpecker damage area and remove any standing water and or loose debris.
- Step 2 To ward off future decay, it is recommended that the surface of the damaged area be treated with Pole Topper Fluid™ (CU-89 RTU II) in one pint squirt bottles. The surface of the cavity should receive a light even coat.
- **Step 3** To insure complete filling of the damaged cavity, it is recommended to drill a pilot hole from above the damaged area into the crown of the cavity. This should be done with a 7/8" drill bit. If the hole is not completely filled and a hollow remains the woodpecker may return to the damage area and cause further destruction. Filling the hole through the crown will prevent this.
- **Step 4** Prior to filling, make several wraps of light duty adhesive tape around the pole to completely cover the woodpecker entry hole. This tape can be removed after the repair has initially cured (approx. 30 45 minutes at 70 degrees F, complete cure occurs after approx. 24 hours).
- Step 5 Remove black end caps from KwikMixx™ cartridge and attach mixing nozzle (use retaining nuts if needed). End caps can be replaced if a cartridge is not completely dispensed. Place cartridge into installation dispensing tool.
- Step 6 Insert mixing nozzle into pilot hole and begin to fill void. Continue to fill void until LV™ begins to fill up pilot hole.
- **Step 7** Plug pilot hole with 15/16" treated wood dowel and wipe off excess. Instead of using a treated dowel, pilot hole can also be sealed with a wrap of the light duty adhesive tape.
- Step 8 Prior to curing, excess LV[™] can be cleaned with industrial wipes or with denatured alcohol. Excess LV[™] should be wiped or removed from all surfaces (i.e. tools, clothes, equipment) before curing.

For safety and disposal, please refer to the Material Safety Data Sheet (MSDS). If you have questions or comments about this product, call (800) 877-POLE and ask for the Manager - Product Sales, Osmose Utilities Services, Inc.



Ordering Information:

OsmoWeld® LVTM and Accessories

Item Description	Item ID	UOM	Shipping Weight
OsmoWeld LV 600 ml—6 cartridges per carton	70-070-200-600	Each	15 lbs./carton
Mixing Nozzle Kit—600 ml	70-140-120-600	Each	0.5 lbs. each
Dual-Chambered Caulking Gun (manual)	70-140-020-000	Each	6 lbs. each
Entry Way Tape—3" x 300' roll	70-140-030-020	Roll	1 lb. each
Wooden Spacer Dowels 5/8" x 4" - 144 pieces/carton	75-070-110-110	Carton	6 lbs./carton
Steel Fluted Reinforcing Pins—3/8" x 16"	75-110-010-000	Each	7 oz. each

OsmoWeld[®]

OsmoWeld is designed to fill woodpecker damage to wood utility poles. This two-part epoxy product is packaged in a single 300 ml tube and fits into a standard caulking gun.

Item Description	Item ID	UOM	Shipping Weight
OsmoWeld 300 ml—12 tubes per carton	70-070-100-050	Each	12 lbs./carton
Extra OsmoWeld Mixer (one included in carton)	50-100-090-000	Each	1 lb. each

Pole Restoration Products

Composite Wraps

Osmose pole treatment and restoration products have helped pole owners restore and maintain wood poles for more than 60 years. Osmose is committed to providing the most cost-effective and reliable asset management solutions for transmission and distribution system owners.

Aquawrap™

Osmose Aquawrap provides the predictable strength of fiberglass repair systems without the mess of mixing and applying resins. Large or clustered woodpecker holes, gunshot and other damage can now be repaired by utility personnel with a water-activated fiberglass repair system. Installation and repair take minutes, and can be as simple as wrap and spray with water.

Aquawrap can also be utilized to repair damaged or decayed cross arms and braces. Once applied, Aquawrap takes approximately one hour for the initial cure and is fully cured within 24 to 48 hours.

In three easy steps the product is applied: (1) Restore pole shape. (2) Apply Underwrap. (3) Outer Coverwrap added to complete restoration.

Aquawrap Underwrap—8" x 50' per roll. Shipping weight is 10 lbs. Aquawrap Outer Coverwrap—10" x 25' per roll. Shipping weight is 4 lbs.

Refer to the Aquawrap Application Manual for more detailed installation instructions and to calculate the material required for your repair.







Item Description	Item ID	UOM	Shipping Weight
Aquawrap Underwrap—8" x 50'	70-070-500-004	Roll	10 lbs. per roll
Aquawrap Outer Coverwrap—10" x 25'	70-070-500-005	Roll	4 lbs. per roll



Mechanical Deterrents

Animal Guard II

Animals are among the leading causes of outages. Animal Guard II can prevent ground-based animals from climbing and reaching energized equipment. For pesky climbers, it is recommended that an overlap of Animal Guard is used. Place the first section at the bottom of the pole, the next over the top. This will not create a lip or grabbing point for insistent climbers. Each roll is $14" \times 16$.

Benefits:

- Weather resistant Its special formulation resists sun, wind and weather for dependable long term protection.
- Durable- holds up against sharp claws
- Lightweight easily handled by line personnel during application
- Easy to install can be easily cut and attached



Item Description	Item ID	UOM	Shipping Weight
14" x 16' Roll	70-140-010-010	Roll	5 lbs. per roll



Pole Impact and Abrasion Protector

Designed to help protect poles from damage caused by minor vehicle impact. Both products below can help reduce pole replacement costs, and may even help minimize customer complaints and damage claims.

Pole Protector™

The Pole Protector is simple to install and can be utilized effectively in parking lots, on corners and in other high-traffic areas. It is also useful for poles located in school playgrounds, parks and backyards. A tough outer shell combines with an impact-absorbent inner shell to provide an excellent safeguard.

Sizes are based on the area/height of the pole to be covered and the pole's circumference. Available in 2', 4' and 6' heights. Available circumferences are 38", 44", 50", 56", 62" and 68".





POLE PRO	OTECTOR ¹	™ KIT	
Part Number	Height	Pole Circumference	Unit
70-090-110-038	2'	38"	Each
70-090-120-044	2'	44"	Each
70-090-130-050	2'	50"	Each
70-090-140-056	2'	56"	Each
70-090-150-062	2'	62"	Each
70-090-160-068	2'	68"	Each
70-090-170-038	4'	38"	Each
70-090-180-044	4'	44"	Each
70-090-190-050	4'	50"	Each
70-090-200-056	4'	56"	Each
70-090-210-062	4'	62"	Each
70-090-220-068	4'	68"	Each
70-090-230-038	6'	38"	Each
70-090-240-044	6'	44"	Each
70-090-250-050	6'	50"	Each
70-090-260-056	6'	56"	Each
70-090-270-062	6'	62"	Each
70-090-280-068	6'	68"	Each



Pole Top Products

These products are designed to help protect the top of poles and cross arms from damage and decay.

ArmGuard™

ArmGuard is a specially modified PVC compound designed to protect the underside of utility pole cross arms from woodpecker attack.

Recommended Uses:

- On all new construction
- · Replacement cross arms on installations suffering woodpecker damage
- As part of an above ground maintenance program

Manufactured from a custom blended polyvinyl chloride. UV light stabilizers have been added to ensure long life outdoors. This same formula has been in use for telephone cable maintenance items in Southern Texas since 1973. The bottom side of ArmGuard is curved to facilitate air flow and moisture drainage. There are four ridges along the base which add strength and allow more complete air circulation.



Installation:

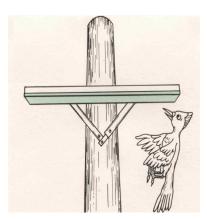
Installation is fast and easy. Place the appropriate size ArmGuard on the bottom of the cross arm. The side legs of ArmGuard are angled to help hold it in place. Nail into place using predrilled nail holes. ArmGuard is installed during new construction or on poles already in service.

Dimensions:

Wall thickness-.060" Width: 3-3/4" or 4-5/8" Length: 8 ft or 10 ft

Weight: 3-3/4" - .22 lbs. per foot 4-5/8" - .26 lbs. per foot

Packaging: 3-3/4" - Carton of 20 4-5/8" - Carton of 12



Item Description	Item ID	UOM	Shipping Weight
3-3/4" x 8' - Carton of 20 pieces	70-010-001-308	Each	36 lbs. per carton
3-3/4" x 10' - Carton of 20 pieces	70-010-001-310	Each	44 lbs. per carton
4-5/8" x 8' - Carton of 12 pieces	70-010-001-408	Each	32 lbs. per carton
4-5/8" x 10' - Carton of 12 pieces	70-010-001-410	Each	39 lbs. per carton



Pole Top Products

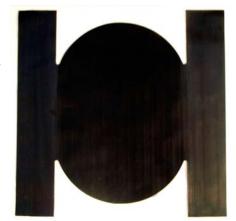
These products are designed to help protect the tops of poles from decay, caused by weathering and moisture.

Pole Topper™ NEW

The Osmose Pole Topper creates a "roof" that is durable, inexpensive and that shields pole tops from weathering and deterioration. Osmose designed the new Pole Topper to protect that small but critical area - pole tops - from decay and the effects of weathering caused by rain, freeze/thaw cycles, and UV rays. Pole Toppers create a durable, longlasting barrier against moisture and sunlight that helps to maintain structural stability and preservative retention. They adhere to virtually any shape pole and can be installed in minutes without hardware or tools.



- All standing poles in service
- · New poles before placement
- · Reset poles
- · Newly cut pole top surfaces

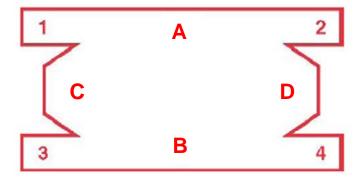


The new and improved Pole Topper is manufactured from a cross-linked, reinforced, water and UV resistant material with performance characteristics similar to commercial grade roofing. Pole Toppers are strong, light, and easy to install. Pole Toppers maintain their elasticity and adhesion in both high and low temperatures.

- · Available in three sizes to fit both distribution and transmission poles
- · Highly resistant to UV degradation and weathering
- Installation requires no metal fasteners
- · Adheres strongly to wood and to itself
- · Forms easily around existing hardware on in-service poles
- · Clean and dry to the touch
- Conveniently packaged ten to a box; can be easily stored on line trucks

Installation:

- Pull back on center tab folds to expose center black adhesive surface. (Leave tabs covered until step 3).
- Center Pole Topper over utility pole, mastic side down, and press firmly to adhere to pole.
- Continue removing paper to completely expose tabs.
- Press down flaps A and B. (See diagram below)
- Wrap tabs 1, 2, 3, and 4 around sides of pole. Make sure tabs overlap by at least 1 inch. (See diagram below)
- Press down flaps C and D. (See diagram below)
- Press down firmly around Pole Topper to make sure it has adhered to the utility pole.









Pole Top Products

Pole Topper™

Technical Data	
Solids Content	98.5% minimum
Packaging:	10 per carton
Shipping Description:	Not regulated by Department of Transportation.
Weight:	12" - 5 lbs. per carton 16" - 7 lbs. per carton 19" - 12 lbs. per carton
Handling and Storage precautions:	Avoid high heat and open flames. Recommended storage temperature is between 0°C and 37.8°C (32°F - 100°F). Shelf life is 2 years.
OTHER PRECAUTIONS:	Store in cool dry area. Protect containers from physical damage. Keep from freezing. Keep dry.
Waste Disposal:	Dispose of in trash. Always dispose in accordance with Federal, State and Local laws.
Basic Personal Protection: For more detailed Personal Protective Measures please refer to the label & MSDS Information.	PROTECTIVE GLOVES: Cotton work gloves recommended. EYE PROTECTION: Wear safety glasses.
Appearance & Odor:	Black sticky mastic laminated to a black EPDM membrane. Slight odor.
Odor:	No Objectionable Odor
Freezing Point:	N/A
Melting Point:	N/A
Flash Point/Auto Ignition Temperature:	246.1°C (475.0°F)

Ordering Information:

Item Description	Item ID	UOM	Shipping Weight
12" - Carton of 10 each (fits Class 6 poles and smaller)	70-110-020-012	Fach	5 lbs. per carton
			·
, , , , ,	70-110-020-016	Each	7 lbs. per carton
19" - Carton of 10 each (fits Class 2, 1, H1, H2 and H3 poles)	70-110-010-019	Each	12 lbs. per carton



Pole Top Products

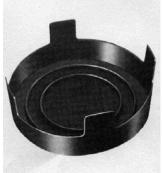
CoverCap™

CoverCap pole covers offer protection from moisture and decay for in-service wooden utility pole tops.

Recommended Uses:

- · All poles in service
- · New poles before placement
- · Reset poles
- · Newly cut pole top surfaces





CoverCap pole covers are designed to protect pole tops from decay and the effects of normal weathering. It is especially applicable to installation on new poles prior to setting. It can also be installed on poles in service.

CoverCap pole covers are rugged so that they can be installed in pole owners' service yards without requiring any special handling prior to installation. They are inexpensive, durable, clean and easy to use. Manufactured from low density polyethylene, CoverCap pole covers do not constitute a source of radio interference.

For additional protection against decay apply Pole Topper Fluid to the pole top prior to installation of the CoverCap pole covers. This is recommended for poles already in service to help arrest decay. Pole Topper Fluid is available in one pint squeeze bottles for easy application and is a general use preservative containing copper naphthenate marketed under the trade name Osmose CU-89 RTU II, Pole Topper Fluid.

<u>Design:</u> CoverCap pole covers are circular in form, including a 1 inch overlap. In addition they have four 1 inch long tabs. Aluminum or galvanized nails are used to secure CoverCap pole covers to the pole top. Two circular ridges are provided on the inside of the cap to supply additional strength and allow proper ventilation. CoverCap pole covers are packaged 10 per carton for easy identification and neat storage.

CoverCap pole covers are available in various sizes for the pole classes listed below:

Diameter	Pole Class
6 ½"	5,6
7 ½"	4,5
8 1/2"	3,4
9 ½"	2,3
10 ½"	1,2

Installation:

Application is accomplished by driving four 2" nails (not included) through the tabs. When applied on the ground, the time involved is less than a minute for one person.



Ordering Information:

CoverCap™

Item Description	Item ID	UOM	Shipping Weight
6 1/2" - Fits pole class 5,6 / carton of 10 each	70-130-010-065	Each	2 lbs. per carton
7 1/2" - Fits pole class 4,5 / carton of 10 each	70-130-020-075	Each	2 lbs. per carton
8 1/2" - Fits pole class 3,4 / carton of 10 each	70-130-030-085	Each	3 lbs. per carton
9 1/2" - Fits pole class 2,3 / carton of 10 each	70-130-040-095	Each	4 lbs. per carton
10 1/2" - Fits pole class 1,2 / carton of 10 each	70-130-050-105	Each	4 lbs. per carton



Cable Protection

Designed to help protect aerial telephone, CATV and fiber optic cables from squirrel damage, moisture and tree abrasion.

SquirrelGuard[™]

SquirrelGuard is designed to protect lead and plastic overhead telephone cables from moisture intrusion. When installed properly, it will eliminate 90-95% of the moisture from cables, thereby reducing trouble calls. SquirrelGuard reduces maintenance costs, improves reliability of service and can extend the useful life of cable.

SquirrelGuard works by acting as a shingled roof shielding cables from moisture. SquirrelGuard will help shield cables from damage caused by squirrel bites, woodpeckers, fatigue cracks, and tree limb abrasion.



SquirrelGuard is self extinguishing and can help to protect cables from falling secondary power lines.

Appearance:

SquirrelGuard blends well with existing cable plant construction whether placed on the roadside, rear lot or right-of-way toll lines.

Life Expectancy:

SquirrelGuard has proven its durability in field applications lasting ten or more years.

Composition

SquirrelGuard is constructed of high density black polyvinyl chloride (PVC). It is formulated for outdoor use with special additives to prevent degradation from ultraviolet light.

Available in two different configurations and nine unique sizes. V-Shape SquirrelGuard is used for protection on lashed or ring-supported cable. Round SquirrelGuard is used on lashed or self-supporting cable. The following chart relates the sizes to corresponding applications:

	Will Fit Cable Diameter (In.) Including	
Size (in.)	Strand	Application
1.5" V-Shape	0.5 to 1.25	Lashed or Ring-Supported Cable
2.5" V-Shape	1.25 to 2.25	Lashed or Ring-Supported Cable
3.25" V-Shape	2.25 to 3.0	Lashed or Ring-Supported Cable
4.5" V-Shape	3.0 to 4.0	Lashed or Ring-Supported Cable
5.12" V-Shape	4.0 and larger	Lashed or Ring-Supported Cable
1" Round	0.5 to .75	Self Supporting or Lashed Cable
1.5" Round	.75 to 1.25	Self Supporting or Lashed Cable
2.5" Round	1.25 to 2.25	Self Supporting or Lashed Cable
3.5" Round	2.25 to 3.25	Self Supporting or Lashed Cable

All V-Shape sizes come in 10 foot sections with 10 cable tie slots approximately one foot apart. Round SquirrelGuard comes in 10 foot sections with cable tie openings at each end. Sections can be easily cut to size with standard aviation type snips.



Ordering Information:

SquirrelGuard

Item Description	Item ID	UOM	Shipping Weight
1.5" V-Shape / 200 ft. per bundle	70-120-010-010	Ft.	24 lbs. / bundle
2.5" V-Shape / 200 ft. per bundle	70-120-010-020	Ft.	35 lbs. / bundle
3.25" V-Shape / 200 ft. per bundle	70-120-010-030	Ft.	48 lbs. / bundle
4.5" V-Shape / 100 ft. per bundle	70-120-010-040	Ft.	32 lbs. / bundle
5.125" V-Shape / 100 ft. per bundle	70-120-010-050	Ft.	48 lbs. / bundle
1" Round / 200 ft. per bundle	70-120-020-050	Ft.	19 lbs. / bundle
1.5" Round / 200 ft. per bundle	70-120-020-010	Ft.	24 lbs. / bundle
2.5" Round / 100 ft. per bundle	70-120-020-020	Ft.	33 lbs. / bundle
3.5" Round / 50 ft. per bundle	70-120-020-030	Ft.	44 lbs. / bundle



Cable Protection

Cable Guard

Cable Guard is made from the same durable material as SquirrelGuard and is manufactured in 8" lengths for use in T-zones and other hard-to-fit applications.



Item Description	Item ID	UOM	Shipping Weight
1" R x 8" / 15 pieces per package	70-020-010-108	Pkg	1 lb. / pkg
1.5" R x 8" / 10 pieces per package	70-020-010-158	Pkg	1 lb. / pkg
2.5" R x 8" / 10 pieces per package	70-020-010-258	Pkg	1 lb. / pkg



Cable Protection

Flex Guard

Flex Guard is a flexible corrugated polyethylene tube designed for covering service cable drops. Special additives to the compound help this product resist UV degradation. Flex Guard is available in three widths, 3/4", 1", and 2", delivered in 10 foot lengths, and is split lengthwise to facilitate easy installation.

Flex Guard can be installed by one person using either a bucket, truck or ladder. After gaining access to cable drops at either the T-Zone or the Terminal, the installer places the guard over the drops so that complete coverage is achieved leading out of the terminals and across the pole face. The guard is then secured with cable ties and mounting bases.

The first procedure to follow before applying the Flex Guard is to organize drops exiting terminal (strand or pole mounted) so that a single (or in some cases multiple) path is created. It is preferable to maintain one path so that only one section of Flex Guard is required. Existing drive rings are removed and replaced with mounting bases. There will be applications where multiple lengths (and possibly widths) will be required. Once drops are organized, measure the length that will be required to cover and cut length of Flex Guard to fit. Drops are then placed into the Flex Guard (via slit opening) and the guard is wrapped around to attain full coverage and custom fit. The Flex Guard is then secured by installing cable ties around guard, through mounting bases and secured. Additional ties are to be applied every ten to twelve inches to maintain closure (mounting base not required at these locations).



FLEX GUARD SIZES AND APPLICATION

Approx. Wt. <u>Lbs./Ft</u>	<u>Drops/Guard</u>	<u>Application</u>
.05	1 to 3 drops	Single or
.09	2 to 4 drops	Multiple Drop
.17	3 or more drops	Installations

Item Description	Item ID	UOM	Shipping Weight
3/4" - pre-cut in 10 ft. sections	70-040-010-034	Ft.	0.5 lb per section
1" - pre-cut in 10 ft. sections	70-040-010-010	Ft.	0.75 lbs per section
2" - pre-cut in 10 ft. sections	70-040-010-020	Ft.	1.25 lbs. per section



Groundwire and Guywire Protection

Groundwire Molding- Polyethylene

Osmose Groundwire Molding is manufactured from durable, non-conductive polyethylene material. This molding is designed for years of protection and retards UV degradation. The flexibility of the material makes it easy to install on irregular groundwire.

Groundwire Molding is manufactured in 8' sections and packaged in cartons of 50 pieces. It is available in the following sizes:

1/2" x .100 3/4" x .100

Installation:

- · Check groundwire to make sure it's connected.
- Place Groundwire Molding over the groundwire.
- · Secure it with the appropriate staple.



Item Description	Item ID	UOM	Shipping Weight
1/2" x .100" x 8' PE—Bundle of 50 each	70-050-001-108	Each	24 lbs./bundle
3/4" x .100" x 8' PE—Bundle of 50 each	70-050-003-108	Each	32 lbs./bundle
Staples (for 1/2" molding) - 3/4" x 1-1/2" (100/crtn)	90-050-230-020	Carton	12 lbs./carton
Staples (for 3/4" molding) - 1-1/16" x 2" (100/crtn)	90-050-230-030	Carton	45 lbs./carton



Fire Coating

Fire-Guard™

Osmose wood pole Fire-Guard coating has excellent flame resistance. The latex based formula contains 73% solids and helps protect wood poles from damage when exposed to fires.

The coating is sprayed onto the pole much like a paint using a high pressure airless sprayer. A minimum coating of 1/16 inch (dry) is required. Where the potential exists for extensive duration of flame contact, a 1/8 inch coating is recommended.

Fire-Guard can withstand many years of outdoor weathering.

Suggested Uses:

To help protect poles from fire damage in:

- · Marshy areas.
- · Pasture lands.
- · Crop lands.
- · Controlled burns.
- Brush fire hazard areas on both transmission and distribution lines.

<u>Benefits:</u>

- Helps provide fire protection for all species and treatments of wood utility poles.
- $\bullet\,$ The coating should withstand 2 to 3 burn incidents depending on intensity and duration.
- Helps reduce annual cost for brush control and pole repairs.
- · Safe to apply.
- · Clean up with soap & water.

Fire-Guard is relatively non-toxic. It does not contain solvents, plasticizers, asbestos nor any type of hazardous inorganic fiber. Material Safety Data Sheets and labels are available upon request.

Brush-on formula is available for applications where spray-on is impractical.







Fire Coating

Fire-Guard™

Technical Data	
Packaging:	5-gallon pail
Shipping Description:	Not Regulated
Weight:	60 lbs.
Handling and Storage precautions:	Avoid high heat and open flames. Recommended storage temperature is between 0°C and 37.8°C (32°F - 100°F). Shelf life is 1 year. OTHER PRECAUTIONS: Store in cool dry area. Protect containers from physical damage. Keep from freezing. Keep dry.
In the event of accidental release:	Solid material. Pick up and dispose of in trash.
Waste Disposal:	Dispose of in trash. Always dispose in accordance with Federal, State and local laws.
For more detailed Personal Protective Measures please refer	RESPIRATORY PROTECTION: Respiratory protection is required during spray application. A dust/mist respirator such as a 3M Type P-95 or 3M Type 3-95 with organic vapor protection (or equivalent) is adequate. Specific working conditions, which must be assessed periodically, may require an increased level of respiratory protection. A respirator equipped with organic vapor cartridges may be required indoors and in other poorly ventilated areas. Respirators may not be required during non-spray applications and other specific situations. In all cases, maintain exposures below governmental limits specified in Section 2. (See Work/Hygenic Practices for additional information.) A NIOSH approved respirator for Formaldehyde vapor is required whenever exposures exceed regulatory limits. For additional information, refer to US OSHA Regulations 29 CFR 1910.§ 134. PROTECTIVE GLOVES: Impervious (PVC, latex or nitrile) gloves should be worn anytime direct contact is possible. EYE PROTECTION: Wear goggles to prevent exposure to high vapor or mist concentrations. Wear goggles or safety glasses with side shields and a full-face shield to prevent contact due to splashing. OTHER PRECAUTIONS: Work clothing with long sleeves/long pants and work boots must be worn. Clothing must be laundered before reuse. Disposable tyvek suits may be used during spraying
to the label & MSDS Information.	applications.
Appearance:	White Mastic
Odor:	Mild Latex Odor
Freezing Point:	32°F (0°C)
Melting Point:	N/A
Flash Point/Auto Ignition Temperature:	> 212°F (100°C)/ Not Determined



Ordering Information:

Fire-Guard™

Item Description	Item ID	UOM	Shipping Weight
Spray-on—5 Gallon Pail	70-030-020-020	Gallon	60 lbs./pail
Brush-on—5 Gallon Pail	70-030-010-010	Gallon	60 lbs./pail



Barrier Protection: Osmose Field Liner

The environmental benefits of the Osmose Field Liner are clear. Preventing preservatives from leaching is an immediate benefit to the environment. By increasing the useful service life of utility poles, there are long term and sustainable requirements for fewer replacements. This reduction in new pole demand leads to lower energy consumption requirements and to reduced waste and pollution.

The economic benefits of the Osmose Field Liner derive from extending the serviceable life of new wooden utility poles. The Field Liner is an effective 'Barrier Protection' that will substantially increase the lifespan of any utility pole by protecting it from fungal and insect attack far more effectively than a preservative treatment alone can achieve.



The Osmose Field Liner is quick and easy to install at the point of pole setting. Taking up very little space on the Line Truck, the Linemen simply pull the Field Liner sleeve over the butt end of a new utility pole immediately prior to setting. The entire process takes just a few minutes to provide lifelong protection for the Utility Pole.

Call for volume order discounted pricing.

Item Description	Item ID	UOM	Shipping Weight
8' x 24" Distribution Field Liner	99-344-008-048	Each	3 lbs. each
12' x 36" Transmission Field Liner	99-344-012-074	Each	4.5 lbs. each



Additional Products

Inspection/Treating Supplies Ordering Information:

INSPECTIO	N / TREATING SUPPL	IES		
			Shipping	
Part Number	Description	Size	Weight	Unit
				<u> </u>
90-060-260-010	Pasture Wrap™	9" x 125'	2 lbs.	Roll
	Treated Wood Plugs			
75-070-080-080	7/16" x 2"	Multiples of 100	1 lb.	Each
75-070-090-090	7/16" x 3"	Multiples of 100	1 lb.	Each
75-070-060-060	11/16" x 2"	Multiples of 100	1 lb.	Each
75-070-070-070	13/16" x 2"	Multiples of 100	1 lb.	Each
75-070-050-050	15/16" x 3"	Multiples of 100	2 lbs.	Each
75-070-040-040	7/8" x 2 ½"	Multiples of 100	2 lbs.	Each
	PlastiPlug™			
75-070-080-085	7/16" x 2"	Multiples of 500	0.5 lb.	Each
75-070-150-002	15/16" x 2"	Multiples of 500	1 lb.	Each
75-070-150-038	PlastiPlug Removal Tool			Each
	Tags			
90-090-050-010	Reject Tags (plain)	Bag	3/4 lbs.	500
90-090-030-010	Internal Treat Tags	Bag	3/4 lbs.	500
90-090-110-011	Inspected Tags – Single Date	Wire of 100 tags	3/4 lbs.	500
90-070-010-010	Nails, Aluminum - 1 1/2"	Carton	2 lbs.	525



Additional Products

Inspection/Treating Supplies Ordering Information:

INSPECTION / TREATING SUPPLIES

<u>Drills & Accessories</u>							
Part #	<u>Description</u>	<u>UOM</u>	Part #	<u>Description</u>	<u>UOM</u>		
90-010-030-050	3/8" x 18" Drill Bit	EA	90-110-020-020	Drill – BT45 Small	EA		
90-010-030-100	7/8" x 18" Drill Bit	EA	90-110-030-010	Drill - Tanaka	EA		
90-010-030-110	7/8" x 23" Drill Bit	EA	90-100-145-010	Handle Assem. BT120	EA		
90-060-020-010	Auger Bit Files	EA	90-100-185-015	Recoil Assem. BT45	EA		
90-010-020-020	Plastic Tubes	EA	90-100-185-010	Recoil Assem. BT120	EA		

<u>Tools</u>						
Part #	<u>Description</u>	<u>UOM</u>	Part #	Description	<u>UOM</u>	
90-060-010-010	Applicator Brush	EA	90-060-350-010	Stapler – Gun Style	EA	
90-050-010-010	Applicator Handle	EA	90-050-230-010	Staples	BOX	
90-060-120-010	File – Curl – Coarse	EA	90-060-360-010	Tape Measure – 8' G/ L	EA	
90-060-130-010	File – Mill – Fine	EA	90-060-370-010	Tarps – 3'x5'	EA	
90-060-160-010	Hammer Claw-Mill Faced	EA	90-060-050-010	Tool Carrier Canvas	EA	
90-060-200-010	Lopping Shears	EA	90-060-390-010	Utility Knife	EA	
90-060-290-010	Shell Indicator – 13"	EA	90-060-400-010	Wire Brush	EA	
90-060-310-010	Shell Indicator – WF – 18"	EA	Interna	I Treat System Items:		
90-060-330-010	Shovel-Cut Down Digging	EA	90-050-145-041	Hose Kit – 4 ft. & Valve	EA	
90-050-210-020	Shovel Handles – Long	EA	90-050-160-010	Injection Nozzle	EA	
90-050-190-010	Shovel Handles – Steel	EA	90-050-100-010	IT Tank	EA	
			90-050-180-010	IT Tank Pump Assy	EA	



Additional Products

Inspection/Treating Supplies (continued) Ordering Information:

INSPECTION / TREATING SUPPLIES

Protective Equipment / Safety Items							
Part #	<u>Description</u>	<u>UOM</u>	Part #	Description	<u>UOM</u>		
90-130-050-010	Apron Tool w/belt	EA	90-130-290-010	Leather Gloves	PR		
90-060-060-010	Check Scraper	EA	90-130-320-010	Plastic Gloves Green - M	PR		
90-050-040-010	Check Scraper Blade	EA	90-130-320-020	Plastic Gloves Green – L	PR		
90-060-070-010	Chipper	EA	90-130-350-010	Red Safety Flags	EA		
90-050-050-010	Chipper Guard	EA	90-130-340-010	Safety Cones 18"	EA		
90-060-080-010	Clip Board	EA	90-130-340-020	Safety Cones 28"	EA		
90-060-410-010	Crayons – Yellow	EA	Various	Safety Vests	EA		
90-060-100-010	Digging Bar	EA	90-130-490-020	Treating Apron – Short	EA		
90-130-420-010	Goggles	EA	90-130-500-010	Treating Sleeves	PR		
90-130-430-010	Goggles Retainer	EA	90-130-510-010	Tyvek Sleeves	PR		
90-130-270-010	Knee Pads	EA	90-130-520-010	Tyvek Suit	PR		
			90-130-160-010	1 st Aid Kit Complete	EA		



Signs & Marking Products

Guy Markers

Osmose brand Guy Markers offer long-lasting, highly visible protection for your guy wires. Osmose Guy Markers differentiate themselves from competitive products by the addition of special additives to help retard UV light degradation. Material quality and generous wall thickness help Osmose Guy Markers resist both cracking and shattering.



Ordering Information:

GUY MARKERS						
Part Number	Size	Wall Thickness	Shipping Weight/ Pallet			
70-060-005-188	I.D. 1 1/8" x 8'	.080"	400 lbs.			
70-060-005-388	I.D. 1 3/8" x 8'	.080"	500 lbs.			
70-060-005-258	I.D. 2 1/2" x 8'	.080"	375 lbs.			

1 1/8" and 1 3/8" ship 250 per pallet

2 1/2" ship 125 per pallet



Signs & Marking Products

Markers, Signs and Tags

Pole Markers/Numbers:

Mark your poles economically, while performing routine maintenance. Accurate pole marking means fast response in an emergency and accurate tracking.

Pole Tags:

Durable pole dating tags withstand salt, sunlight and rain. Markers can identify the date of the pole and pole inspection. "Do Not Climb" tags help in accident prevention.

Transformer Markers:

Upgrade your transformer labels. Comply with ANSI and NESC regulations. Labels provide emergency information. New Shock-in-the-Box and shrubbery symbols add impact to the warning.

Substation Signs:

Be compliant! We work diligently to understand the ANSI 535 requirements for substation markings. There are certain key words, colors, punctuation and symbols that need to be followed for compliance. We have materials that offer 30 years of durability to reduce life cycle costs. In addition, we offer services to mount signs.

"The primary purpose of the ANSI Standard is to provide an effective means of communicating information concerning environmental hazards to the observer, so that injury resulting from the hazard(s) can be avoided."

Transmission Markers:

We offer a variety of signs for transmission marking, including: Aerial Crossing, Aerial Hazard, Aerial Turning, Right of Way, Patrol Signs and Mile Markers. All are ANSI 535 compliant.

Custom Markers, Signs, Tags and Labels:

Call us for any questions or inquiries into customization of your marking needs.















Call for pricing and custom options.



Bee Bopper™ Wasp and Hornet Spray

Bee Bopper is very effective against dangerous insects such as: bees, wasps, yellow jackets and hornets that threaten the safety of personnel in utility, industrial, or telecom applications. Spray into the air or into nests. Dielectric breakdown voltage is rated 40,100 volts by ASTM test method D-877.

The forceful spray pattern delivers a blast that knocks down and kills insects from a safe distance of up to 20 feet.



Ordering Information:

Item Description	Item ID	UOM	Shipping Weight
Bee Bopper—12 cans per carton	90-130-065-010	Each	12 lbs. / carton

Halt!™ Dog Repellent

Halt! Formula helps repel dogs without any long term effects. Halt! Uses Capsaicin, a naturally occurring extract of peppers, which, when sprayed in a dog's face, causes only temporary, but extreme discomfort for the dog.

Since 1966 the U.S. Postal Service has been using Halt!TM Dog Repellent. Halt! typically stops dogs in their tracks, helping to give workers time to move out of danger. Halt!'s pressurized spray is accurate up to 10 feet.

Dog Repeller for Personal Protector From Dog Attack CAUTION-RAY Names age of the Personal Protector From Dog Attack CAUTION-RAY Names age of the Personal Protector State of the Personal Prot

Item Description	Item ID	UOM	Shipping Weight
Halt!—1.5 aerosol cans / 12 cans			
per carton	75-090-020-010	Carton	3 lbs. / carton





BugBand™ Towellette: 40 Count Tub

The BugBand towelette is a very handy, easy-to-use method of applying Geraniol insect repellent. The 8-by-8 -inch pretreated towelettes have the power to protect with just one application.

The 40-count dispenser is a great item for anyone working from a service truck outdoors – simply toss a 40-count dispenser in the truck, and you've got everything you need to repel insects at the job site.

Item Description	Item ID	UOM	Shipping Weight
Bugband Towellettes: 40 count			
tub / 6 tubs per carton	99-900-088-540	Carton	4.5 lbs. / carton

BugBand™ Wristband: Yellow

A good choice for recreational and lighter-duty applications. The vapors from the plastic BugBand wristband form a protective shield around the immediate area, keeping insects a safe distance away. The plastic band is designed with a patented break-away strap that snaps if it becomes entangled.

Item Description	Item ID	UOM	Shipping Weight
Bugband Yellow Wristband / 12			
bands per carton	99-900-088-201	Carton	2 lbs. / carton





BugBand™ 4 oz. Camouflage Pump Spray

Perfect for when you need more heavy-duty protection, BugBand spray lotion does not contain any propellants, the Geraniol vapors form a protective barrier to deter blood-sucking insects from biting. It is ideal for uses around the ankles, wrist or neck, where insects tend to invade clothing. Use once for hours of insect protection.

Item Description	Item ID	UOM	Shipping Weight
Bugband 4 oz. Pump Spray Bottle /			
12 bottles per carton	99-900-088-334	Carton	4.5 lbs. / carton



Personal Care Products

Personal Skin Protection Kits

- A refillable first aid kit that has all the basic needs for skin care while working outdoors.
- The outdoor kit is packaged in a Heavy Duty zipper nylon case that keeps the contents clean and secure.
- Small enough to fit in the glove box of the work vehicle, back pack or use the convenient belt loop clip for easy access.





Personal Skin Protection Kits Include:

•	SunX 30 SPF Sunscreen Foil Pack Towelettes	3/ea
•	SunX 30 SPF Sunscreen Lip Balm Tube	1/ea
•	IvyX Pre-Contact Barrier Foil Pack Towelettes	2/ea
•	IvyX Cleanser Foil Pack Towelettes	2/ea
•	BugX Insect Repellent Foil Pack Towelettes	2/ea
•	BurnX First Aid Burn Gel Foil Pack Pouches	2/ea
•	StingX Packettes with Pain Relief Pad	1/ea
•	Corium Hand Sanitizer Foil Pack Pouches	2/ea
•	Corium Dual Action Anti-Itch in Foil Pack	1/ea

This item can be private labeled by silk-screening or heat press on the front cover.

Contact us for details.

Item Description	Item ID	UOM	Shipping Weight
Personal Skin Protection Kits / 12			
kits per carton	99-900-550-100	Carton	3 lbs. / carton



Personal Care Products

FogTech® Anti-Fog Wipes

Fogtech® is targeted specifically to prevent fogging on today's high tech plastics and glass. It quickly provides crystal clear vision through safety goggles, glasses, prescription glasses or face shields. Advanced ingredients enable FogTech® to safely coat these lenses with a transparent, long-lasting layer that instantly soaks up fog before it can obscure vision. WORKS UP TO 5 DAYS



Ordering Information:

Item Description	Item ID	UOM	Shipping Weight
FogTech Anti-Fog Wipes / Bag of			
100	99-900-269-100	Bag	1.5 lbs. / bag

RainCoat® Water Repelling Wipes



Easy to apply and long lasting, Raincoat® has a special wax blend that is suspended in a volatile oil. These waxes are hydrophobic, that is, they 'hate' water. They repel water by beading up the drops. Because those beads of water have less contact with your plastic optics, the larger ones run off with gravity or the wind. The remaining water will appear as smaller and more rounded droplets rather than a smear that distorts your vision. By repelling the water, the trapped dirt and salts stay off your lenses or shields. So you will not need to clean them as often. Also, it has been reported that ice and snow find it difficult to stick to plastic surfaces coated with Raincoat® Advanced Water Repellent Coating.

Item Description	Item ID	UOM	Shipping Weight
RainCoat Water Repelling Wipes /			
Bag of 100	99-900-724-100	Bag	1.5 lbs. / bag

Osmose_®

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