

WHY YOUR UTILITY SHOULD BE USING COPPER NAPHTHENATE TREATED WOOD UTILITY POLES

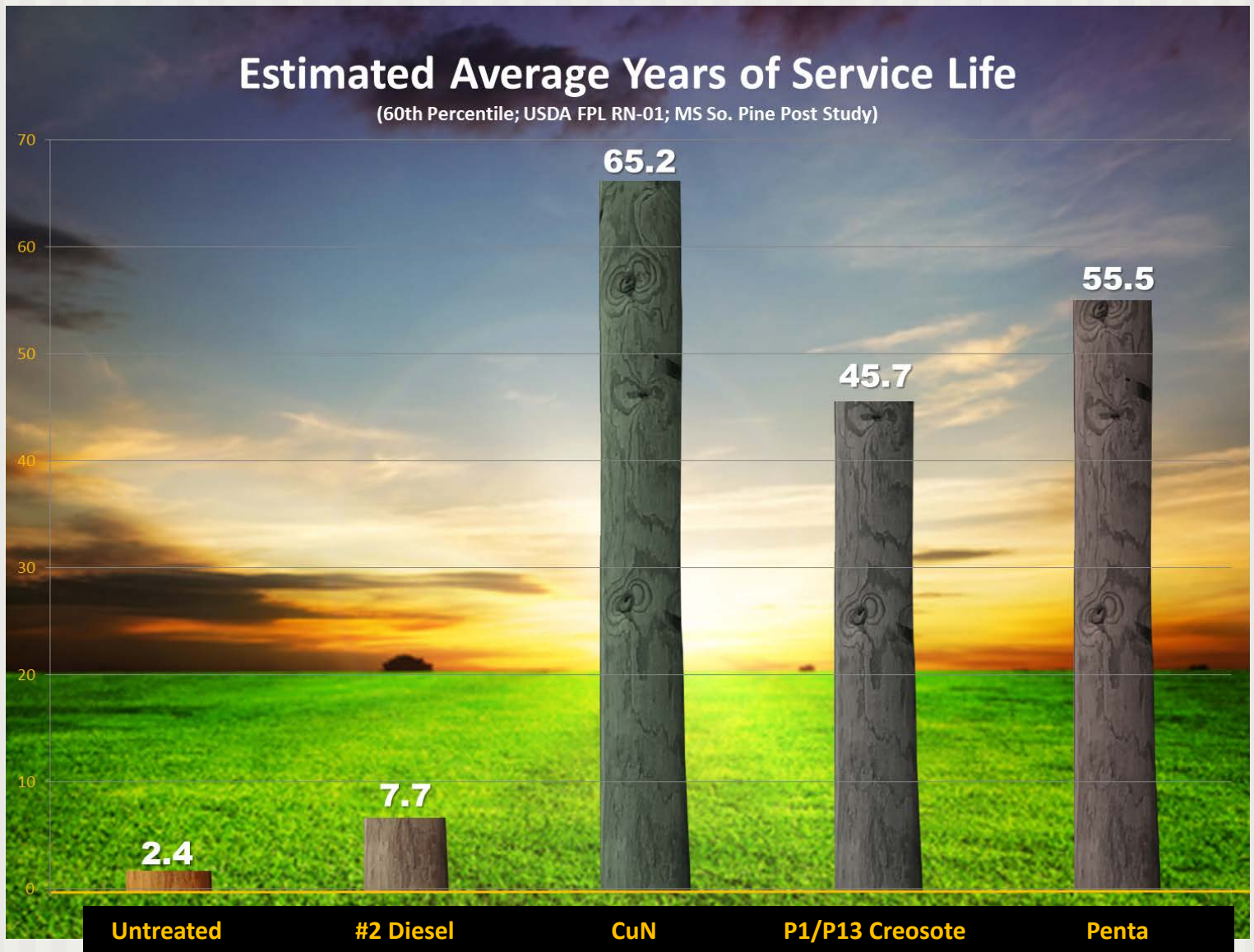


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Q[®]NAP
COPPER NAPHTHENATE

QNAP UTILITY POLES LAST LONGER

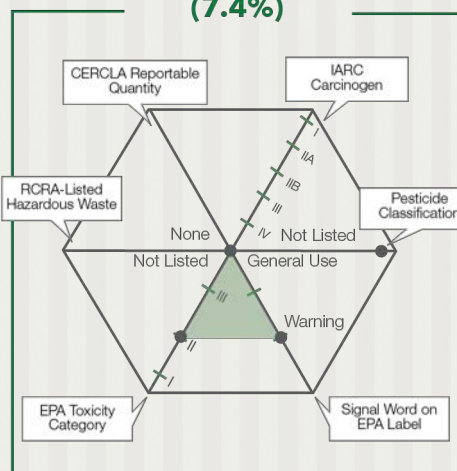


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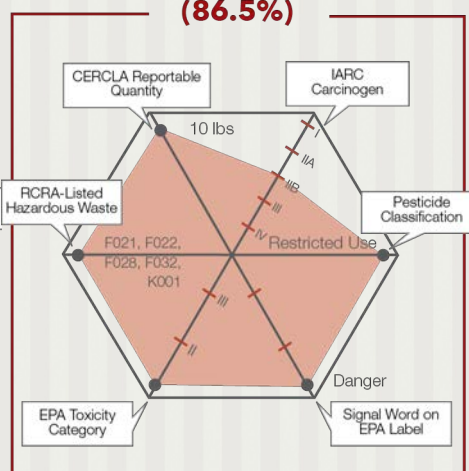
ENVIRONMENTAL COMPARISON

CATEGORY	PENTA	QNAP	COMMENTS
HAPs - ACTIVE INGREDIENT (EPA)	YES	NO	Pentachlorophenol is an EPA-listed hazardous air pollutant.
HAPs - TREATED WOOD, PPM	7527	111	Total SVOCs (PAHs & pentachlorophenol) and HAP metals (TWC 2015)
LIFE EXPECTANCY (USDA FPL)	56 YEARS	65 YEARS	Concentrates were diluted in petroleum oil. Freeman et al. 2005. Proc. AWWA. 101:136-143.
CLASSIFICATION	RESTRICTED USE	GENERAL USE	Restricted use requires that product is used only by state-licensed licensed applicators or persons under their direct supervision.
TOXICITY CATEGORY	1	3	Toxicity category is a rating of toxicity with 1 being more toxic than 2
SIGNAL WORD	DANGER	WARNING	
RCRA LISTED HAZARDOUS WASTE	F021, F027, F028, F032 K001	NOT LISTED	QNAP is not listed as a hazardous waste
OSHA SELECT CARCINOGEN	PROBABLE CARCINOGEN	NOT LISTED	QNAP is not listed as a carcinogen or probably carcinogen
CERCLA RQ, LBS	10	NONE	No reportable quantity requirement under CERCLA if QNAP is spilled.
MEDIAN LETHAL DOSAGE FOR	1.8	136	QNAP median lethal dosage is ~75 times that of pentachlorophenol
A 150 LB PERSON, GRAMS			(higher MLD = less toxic)
GAFF PENETRATION; FORCE REQUIRED FOR 0.475" PEN., LBS (UNTREATED POLE = 422 LBS)	454	232	Penta requires almost twice as much force as QNAP using 9206 gaff. Untreated southern pine requires half again as much force as QNAP. Ref: Shupe et al. 2011. Proc. AWWA. 107: 150-152.
CONDUCTIVITY (Siemens/meter) (Untreated pole = 1.68×10^{-8}) (Lower value = less conductive)	2.13×10^{-6}	1.01×10^{-8}	Penta is >200 times more conductive QNAP is essentially identical to untreated wood. Ref: Ragon et al. 2010. Proc. AWWA. 106: 153-167.
SOLUTION CORROSIVITY (Mild Steel, mils/year, in #2 fuel oil)	2.1	< 0.5	Exposed 2 weeks at 230-260°F; 1% Cu and 7% penta.

QNAP OIL-BORNE PRESERVATIVE (7.4%)

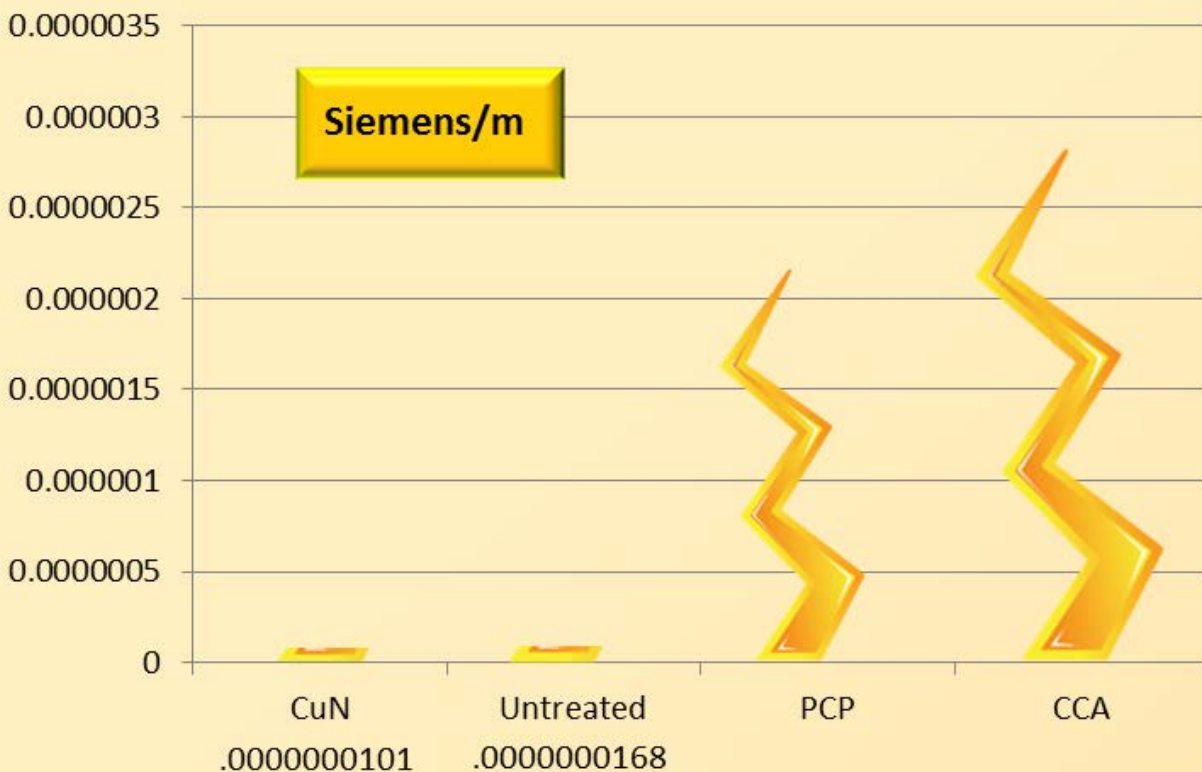


OTHER OIL-BORNE PRESERVATIVES (86.5%)



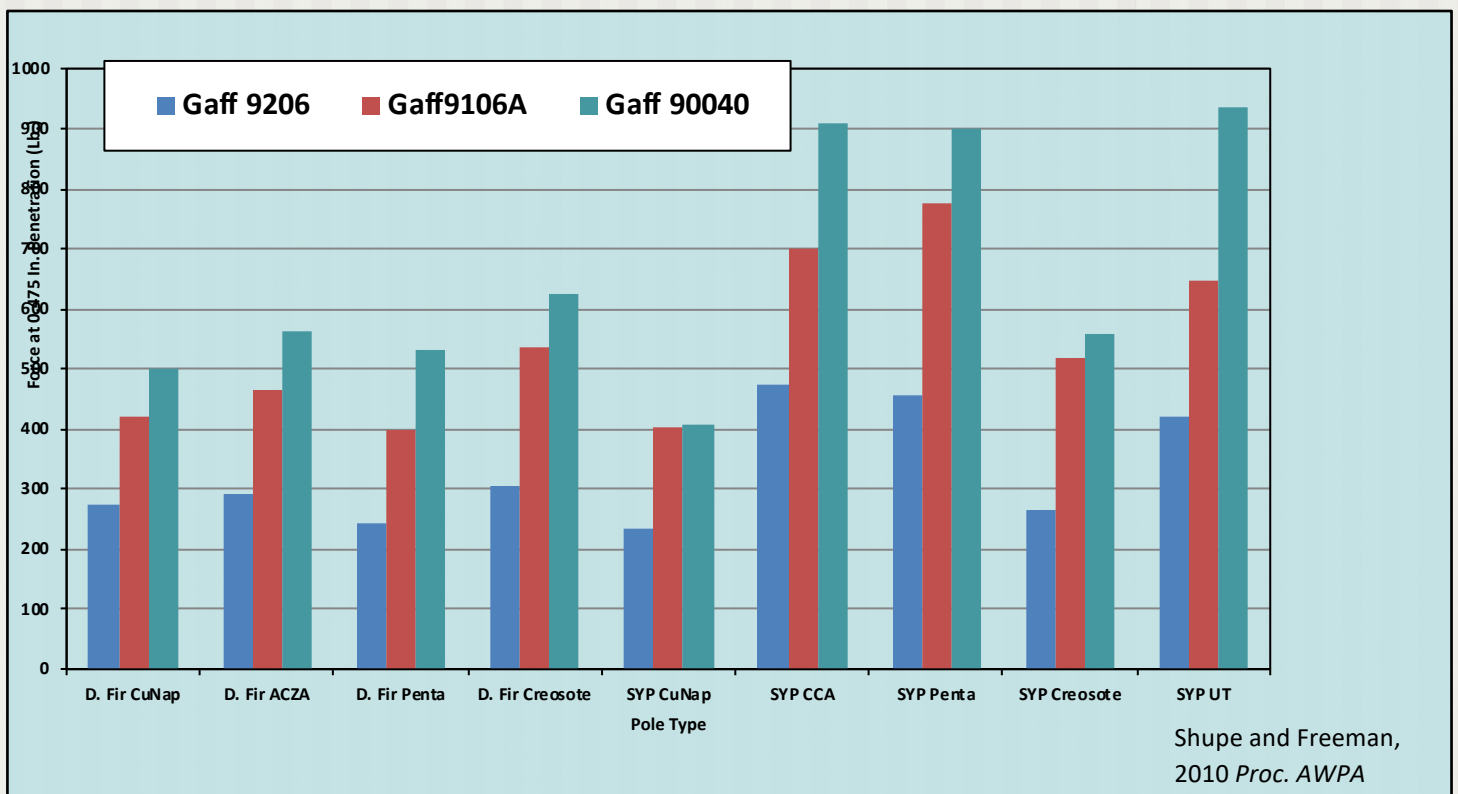
QNAP COPPER NAPHTHENATE IS LESS CONDUCTIVE THAN PENTACHLOROPHENOL OR CHROMATED COPPER ARSENATE

Treated Wood Resistivity Copper Naphthenate is Non-Conductive



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TREATED WOOD POLE CLIMBABILITY (GAFF PENETRATION STATS)



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Meets AWPA M-4 End Cut and Field Cut Requirements for Above & Below Ground use with All Wood Preservatives

QNAP2 is a copper naphthenate 2% oil-borne preservative that can be used in the field as a brush-on application for end-cuts, dap cuts, drill holes and other applications where treated wood needs protection.

QNAP2 can be used for:

- Utility Poles
- Cross Arms
- Drill Holes
- End-Cuts
- Posts
- Lumber

FOR MORE INFORMATION, CONTACT:

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Southern Regional Sales Manager

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COPPER NAPHTHENATE UTILITY POLES ARE AVAILABLE FROM THESE TREATMENT PLANTS

QNAP® Copper Naphthenate

Amerities West

100 Tie Plant Road
PO Box 1608
The Dalles, OR 97058

John McGinley

jmcginley@amerities.com
(405) 359-3235

Conrad Forest Products/ Cox Wood Preserving

Arbuckle Plant
7085 Eddy Rd
Arbuckle, CA 95912-9789

John Tomlin

PH: (541) 756-2595

Mitch Seitzinger

PH: (503) 504-1496
<http://www.conradfp.com/>
<https://coxwood.com/>

Hoover Treated Wood Products Inc.

2901 Dixie Wood Drive
PO Box 7807 (71611)
Pine Bluff, AR 71602

Tim Borris

VP of Sales
tborris@frtw.com
800 531 5558
<http://www.frtw.com/>

McFarland Cascade-Stella Jones

22125 Rock Creek Rd.
PO Box 40
Sheridan OR 97378

Kevin Comerford

VP of Sales
kcomerford@stella-jones.com
PH: (800) 430-2371

Mixon Brothers Wood Preserving

P.O. Box 327
Idabel, OK 74745

Bob Mixon

PH: (580) 286-9494
<http://www.mixonbros.com/>

Ozark Timber Treating Corporation

14445 N. Highway 65
St. Joe, AR 72675

Eddie Martin

ozarktimber.net
PH: (870) 439-2212
<http://ozarktimber.net/>

Permapost Products Co.

4066 SE Tualatin Valley Hwy.
P.O. BOX 100,
Hillsboro, OR 97123

David Bond

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PH: (503) 648-4156
<http://www.permapost.com/>

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Goshen, VA 24439

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Wheeler Lumber

P.O. Box 8
Whitewood, SD 57793

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<http://www.wheeler-con.com/>



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