

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



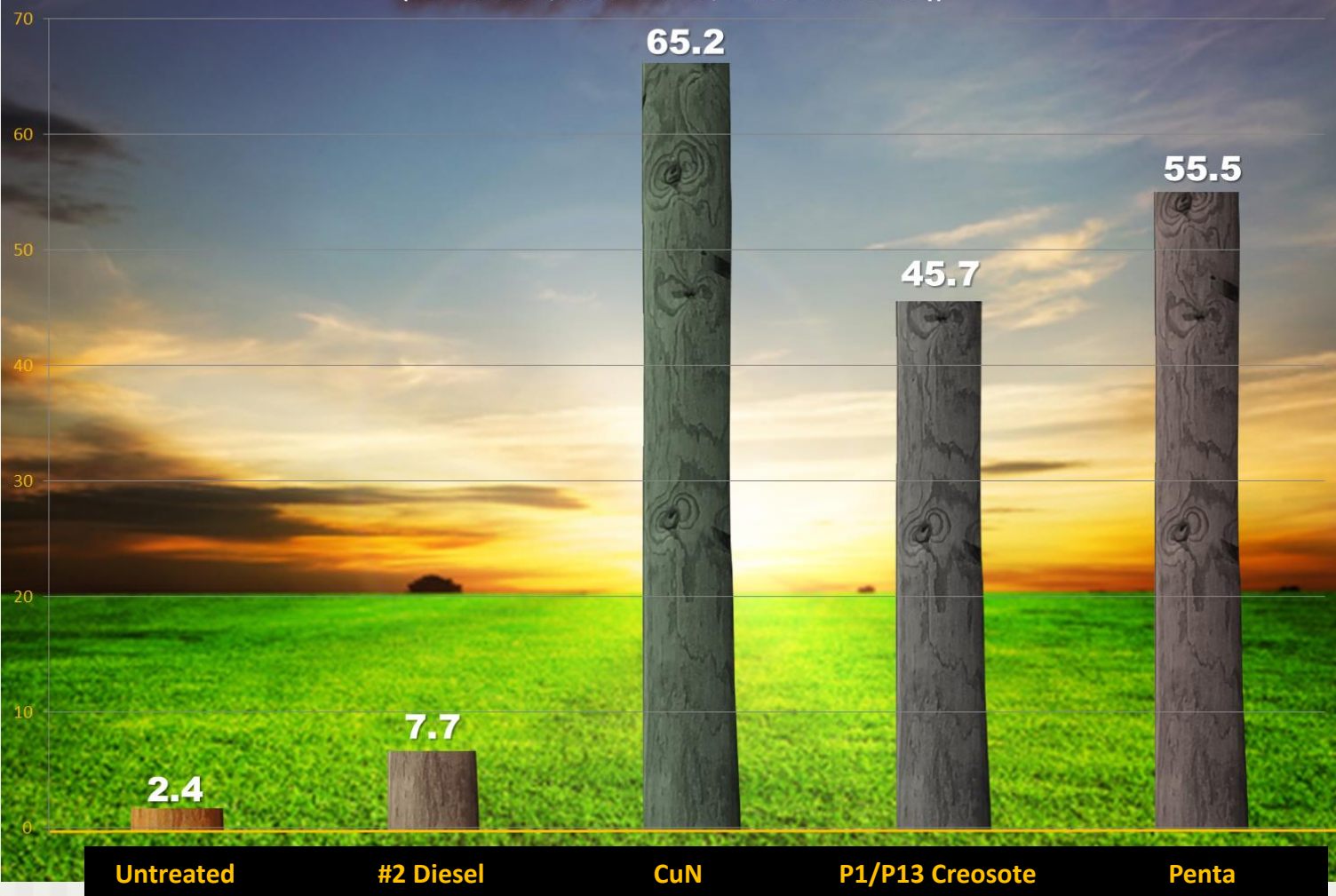
The image shows a close-up, slightly angled view of several horizontal wooden planks. The wood has a rich, aged appearance with various shades of brown, tan, and grey, showing natural grain patterns and some knots. Overlaid on the center of the image is the logo for QNAP. The letter 'Q' is a solid, vibrant green, while the letters 'NAP' are in a bold, black, sans-serif font. A registered trademark symbol (®) is positioned to the upper right of the 'P'. Below the 'QNAP' logo, the words 'COPPER NAPHTHENATE' are written in a smaller, bold, black, sans-serif font.

Q **NAP**®
COPPER NAPHTHENATE

QNAP UTILITY POLES LAST LONGER

Estimated Average Years of Service Life

(60th Percentile; USDA FPL RN-01; MS So. Pine Post Study)



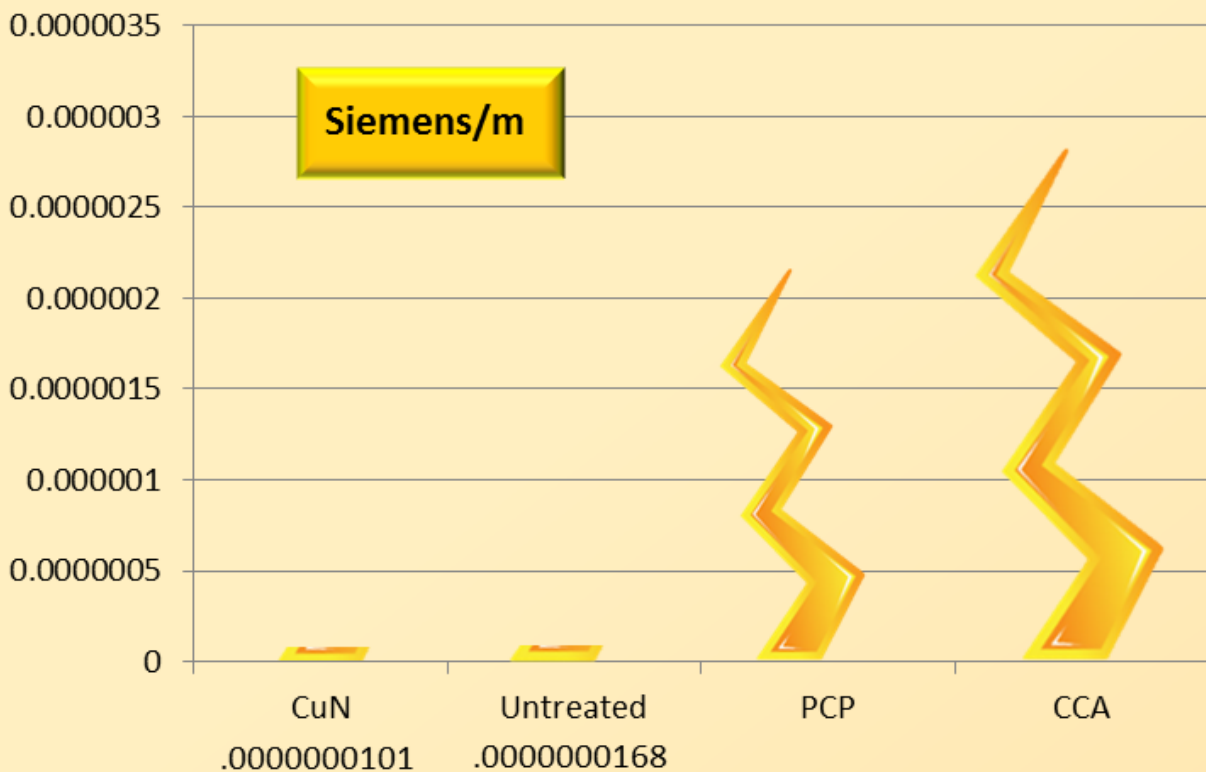


ENVIRONMENTAL COMPARISON

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. AWPA. 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 A 150 LB PERSON, GRAMS	1.8	136	QNAP median lethal dosage is ~75 times that of pentachlorophenol (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. AWPA. <u>107</u> : 150-152.
CONDUCTIVITY (Siemens/meter) (Untreated pole = 1.68 x 10 ⁻⁸) (Lower value = less conductive)	2.13 x 10 ⁻⁶	1.01 x 10 ⁻⁸	Penta is >200 times more conductive QNAP is essentially identical to untreated wood. Ref: Ragon et al. 2010. Proc. AWPA. <u>106</u> : 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 COPPER NAPHTHENATE IS LESS CONDUCTIVE THAN PENTACHLOROPHENOL OR CHROMATED COPPER ARSENATE

Treated Wood Resistivity
Copper Naphthenate is Non-Conductive





INTRODUCING QNAP² COPPER NAPHTHENATE RTU

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

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

QNAP2 can be used for:

- Bridges
- Pilings
- Utility Poles
- Crossarms
- Railroad Ties
- Lumber



For More Information Contact:
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Note: Will have a slight green tint



Smart Preservatives

800-264-0870 • www.nisuscorp.com



Smart Preservatives

800-264-0870 • www.nisuscorp.com

COPPER NAPHTHENATE UTILITY POLES ARE AVAILABLE FROM THESE TREATMENT PLANTS

Amerities Holdings LLC
100 Tie Plant Road
PO Box 1608
The Dalles, OR 97058
John McGinley
jmcginley@amerities.com
(405) 359 3235
Preservative: Copper Naphthenate
Amerities
359 Hwy 278
Hope, AR 71801
Preservative: Cellu-treat borate

Conrad Forest Products/Cox Wood Preserving
Conrad Forest Products
Arbuckle Plant
7085 Eddy Rd
Arbuckle, CA 95912-9789
John Tomlin
Phone: 541 756 2595
Mitch Seitzinger
Phone: 503 504 1496
Preservative: Copper Naphthenate
Products: Utility Poles & Pilings

Cahaba Pressure Treated Forest Products
P. O. Box 160
Brierfield, AL 35035-0160
Phil Myers
Business Development Manager
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PH: (205)-926-9888
FAX: (205)-926-7625
Preservatives: Copper Naphthenate, Cellu-treat borate
Products: Utility Poles & Pilings

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22125 ROCK CREEK ROAD
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Preservatives: Copper Naphthenate
Products: Utility Poles & Pilings

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Preservatives: Copper Naphthenate
Products: Douglas Fir Timber, Ties & Pilings
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