



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	
OSHA SELECT CARCINOGEN	PROBABLE CARCINOGEN	NOT LISTED	
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	CuN median lethal dosage is ~ 75 times that of penta. (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 <i>et al.</i> 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 <i>et al.</i> 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.