

TABLE OF CONTENTS: 2011 AWPAA BOOK OF STANDARDS

Introduction – Page 1

Introduction.....1

Use Category System Standards – Page 5

U1-11: User Specification for Treated Wood

1. Introduction to the Use Category System.....5
 2. Service Conditions for Use Category Designations6
 3. Guide to Treated Wood End Uses.....8
 4. Standardized Preservatives.....12
 5. Species and Species Groupings.....14
 6. Commodity Specifications19
 A. Sawn Products20
 B. Posts.....38
 C. Crossties and Switchties44
 D. Poles46
 E. Round Timber Piling.....52
 F. Wood Composites.....54
 G. Marine Applications61
 H. Fire Retardant Treated Products68
 I. Nonpressure Applications70
 J. Nonpressure Composites71
 K. Barrier Protection Systems72

T1-11: Processing and Treatment Standard

Introduction.....73
 1. General Requirements74
 2. Treatment75
 3. Results of Treatment76
 4. Preservatives79
 5. Quality Control and Inspection79
 6. Retreatment79
 7. Drying After Treatment.....79
 8. Special Requirements by Commodity80
 A. Sawn Products80
 B. Posts.....85
 C. Crossties and Switchties88
 D. Poles89
 E. Round Timber Piles96
 F. Pressure Treated Composites98
 G. Marine Applications102
 H. Fire Retardant Treated Products105
 I. Millwork Products.....106
 J. Nonpressure Composites107
 K. Barrier Protection Systems (*reserved*)109

Preservative Standards – Page 110

P1/P13-09: Standard for Creosote Preservative 110
 P2-09: Standard for Creosote Solution..... 111
 P3-09: Standard for Creosote-Petroleum Solution 112

P4-11: Standard for Petroleum Oil for Blending with
 Creosote 113
 P5-10: Standard for Waterborne Preservatives 114
 P8-11: Standard for Oil-Borne Preservatives 120
 P9-10: Standards for Solvents and Formulations for
 Organic Preservative Systems..... 122
 P18-10: Nonpressure Preservatives..... 124
 P19-04: Standard for Oligomeric Alkylphenol
 Polysulfide (PXTS) Preservative 126
 P20-08: All Barrier Protection Systems 127
 P21-11: Standard for Acid Copper Chromate (ACC) 129
 P22-10: Standard for Ammoniacal Copper Zinc
 Arsenate (ACZA)..... 130
 P23-10: Standard for Chromated Copper Arsenate
 Type C (CCA-C)..... 131
 P24-09: Standard for Alkyl Ammonium Compound,
 Waterborne (AAC)..... 133
 P25-10: Standard for Inorganic Boron (SBX)..... 134
 P26-11: Standard for Alkaline Copper Quat Type A
 (ACQ-A)..... 135
 P27-11: Standard for Alkaline Copper Quat Type B
 (ACQ-B) 136
 P28-11: Standard for Alkaline Copper Quat Type C
 (ACQ-C) 137
 P29-11: Standard for Alkaline Copper Quat Type D
 (ACQ-D) 138
 P30-08: Standard for Copper bis
 dimethyldithiocarbamate (CDDC) 139
 P31-10: Standard for Copper Azole Type A (CBA-A)
 (Withdrawn)..... 140
 P32-10: Standard for Copper Azole Type B (CA-B) 141
 P33-10: Standard for Copper HDO Type A (CX-A)..... 142
 P34-11: Standard for Copper Naphthenate,
 Waterborne (CuN-W) 143
 P35-10: Standard for Pentachlorophenol (PCP)..... 144
 P36-11: Standard for Copper Naphthenate (CuN) 145
 P37-08: Standard for Oxine Copper (Cu8)..... 146
 P38-09: Standard for Alkyl Ammonium Compound,
 Oilborne (AAC) 147

P39-08: Standard for 4,5-Dichloro-2-N-Octyl-4-Isothiazolin-3-One (DCOI)	148	A3-08: Standard Methods for Determining Penetration of Preservatives and Fire Retardants	196
P40-08: Standard for 3-Iodo-2-Propynyl Butyl-Carbamate (IPBC)	149	A4-11: Standard Methods for Sampling Wood Preservatives	202
P41-08: Standard for Tebuconazole (TEB)	150	A5-11: Standard Methods for Analysis of Oil-Borne Preservatives	208
P42-08: Standard for Propiconazole (PPZ)	151	A6-09: Standard Method for the Determination of Retention of Oil-Type Preservatives from Small Samples	223
P43-08: Standard for Chlorpyrifos (CPF)	152	A7-04: Standard for Wet Ashing Procedures for Preparing Wood for Chemical Analysis	226
P44-08: Standard for Permethrin (PER)	153	A9-08: Standard Method for Analysis of Treated Wood and Treating Solutions by X-Ray Spectroscopy	228
P45-10: Standard for Propiconazole Tebuconazole Imidacloprid (PTI)	154	A12-09: Wood Densities for Preservative Retention Calculations	232
P46-08: Standard for Cyproconazole (CPZ)	155	A13-11: Standard Method of Analysis for Acid Number of Naphthenic Acids in Copper Naphthenate	234
P47-08: Standard for DCOI/Imidacloprid/Stabilizer, Waterborne (EL2)	156	A14-11: Standard Method for Determination of Water-Extractable Copper in Copper Naphthenate	237
P48-10: Standard for Copper Azole Type C (CA-C)	157	A15-09: Referee Methods	239
P49-10: Standard for Fire Retardant FR-1 (FR-1)	158	A16-08: Standard for HPLC Method for Didecyldimethylammonium Chloride Determination in Treated Wood	240
P50-10: Standard for Fire Retardant FR-2 (FR-2)	159	A17-09: Standard for Determination of Didecyldimethylammonium Chloride in ACQ Solutions	241
P51-10: Standard for Zinc Borate (ZB)	160	A18-05: Standard for Determination of Quaternary Ammonium Compounds in Wood by 2-Phase Titration	242
P52-09: Standard for IPBC-SB-1 (IPBC-SB-1)	161	A19-08: Standard Method for Sample Preparation for Determining Penetration of Preservatives in Wood	244
P53-09: Standard for IPBC/PPZ/TEB-SB-1 (IPBC/PPZ/TEB-SB-1)	162	A20-11: Standard Method for Chlorothalonil Assay	246
P54-09: Standard for Alkaline Copper DCOI (ACD)	163	A21-08: Standard Method for Analysis of Wood and Wood Treating Solutions by Inductively Coupled Plasma Emission Spectrometry	248
P55-10: Standard for Alkaline Copper Betaine (KDS)	164	A22-06: Standard Method for the Quantitative Determination of Creosote in AWPA P3 Creosote-Petroleum Oil Solutions	252
P56-10: Standard for Alkaline Copper Betaine Type B (KDS-B)	165	A26-08: Standard Method for Analysis of Fire Retardant Solutions and Wood by Titration	254
P57-10: Standard for Alkaline Copper Betaine (KDS) (<i>nonpressure use</i>)	166	A28-08: Standard Method for Determination of Propiconazole and Tebuconazole in Wood, in Waterborne Formulations and in Treating Solutions by HPLC	256
P58-10: Standard for 3-Iodo-2-Propynyl Butyl Carbamate/Permethrin (IPBC/PER)	167	A30-08: Standard Method for the Determination of 4,5 Dichloro-2-N-Octyl-4-Isothiazolin-3-One (DCOI) in Wood by High Performance Liquid Chromatography (HPLC)	258
P59-11: Standard for Chemically Modified Wood, Type A (CM-A)	168		
 Hydrocarbon Solvent Standards – Page 169			
HSA-11: Standard for Hydrocarbon Solvent, Type A	169		
HSC-11: Standard for Hydrocarbon Solvent, Type C	171		
HSF-11: Standard for Hydrocarbon Solvent, Type F	173		
HSG-11: Standard for Hydrocarbon Solvent, Type G	174		
 Analysis Method Standards – Page 176			
A1-11: Standard Methods for Analysis of Creosote and Oil-Type Preservatives	176		
A2-11: Standard Methods for Analysis of Waterborne Preservatives and Fire-Retardant Formulations	186		

Abridged Volume and Specific Gravity Correction Tables for Petroleum Oils and Pentachlorophenol and Copper Naphthenate Solutions.....	538	Miscellaneous Conversion Factors and Correction Tables.....	558
Volumes of Round Forest Products.....	542	Approximate Pole Weight Tables.....	560
Volume Correction Table for Creosote-Petroleum Solutions.....	556	Glossary of Terms Used in Wood Protection.....	567
Volume Correction Factors for Preservative Salt Solutions.....	557	Index to AWWPA Standards.....	579

Recently Withdrawn AWWPA Standards

A11-93: Standard Method for Analysis of Treated Wood and Treating Solutions by Atomic Absorption Spectroscopy

A23-94: Analysis of Wood and Solutions for Propiconazole by HPLC

A24-94: Analysis of Wood and solutions for Propiconazole by Gas Chromatography (GC)

A25-01: Standard Method of Analysis of Copper Dimethyldithiocarbamate (CDDC) Treated Wood by Colorimetry

A27-99: Standard Method for Analysis of Wood for Chlorpyrifos by Gas Chromatography

A29-00: Standard for the Determination of Oxine Copper in Treating Solutions and Treated Wood by Potentiometric Bromination Titration

M20-01: Guidelines for Minimizing Oil-Type Wood Preservative Migration

N1-06: All Millwork Products – Preservative Treatment by Nonpressure Processes

N2-05: Standard for the Preservative Treatment of Composite Wood Products by Nonpressure Processes

P17-02: Fire Retardant Formulations

P31-10: Standard for Copper Azole, Type A (CBA-A)

Notes:

AWPA "C Standards" (e.g., C1, C2, C9, etc.) were last updated during the Fall 2002 Standardization Cycle and final editions were printed in the 2003 and 2004 AWWPA Books of Standards. All specifications for treated wood products from the C Standards are now found in the AWWPA Use Category System Standards U1 and T1. If you are a specifier, you may simply change all of your C Standard references to AWWPA Standard U1. If you are a manufacturer of treated wood products, you will need to refer to Standard T1 for the treating requirements to enable you to determine conformance with Standard U1. If references to the C Standards are still needed, individual standards may be purchased online at www.awpa.com or by contacting AWWPA to purchase older editions of the Book of Standards.

AWPA "F Standards" (e.g., F1, F2, etc.) were withdrawn as AWWPA Standards during the Fall 2008 Standardization Cycle, and are now printed as "other information" in the back of the AWWPA Book of Standards.