

TABLE A-8. SUMMARY OF PARTICLEBOARD PRESS EMISSION FACTOR CALCULATIONS (a)

Test Code	Unit code	Pollutant(b)	Test method(c)	Wood species(d)				Cat/ Scav.?	Wax applic. rate	Emission factor, Lb/MSF 3/4	Data rating	Comments
				Primary	%	Second.	%					
030-012193B	1P030	PM	M5	SY PINE	NS	NS	NS	Y	NS	0.082	D	Discarded--rated D
228-091992J	1P228	PM	M5	PINE SP	80	HWOOD	20	Y	123 lb/hr	0.030	B	
Filterable PM, UF resin, batch press									Average	0.030		
228-091992J	1P228	PM-10	M201A	PINE SP	80	HWOOD	20	Y	123 lb/hr	0.016	B	
Filterable PM-10, UF resin, batch press									Average	0.016		
1-1	1-1	PM-10	M201A	HWOOD	86	SWOOD	14			0.063	C	Discarded
166-100892A	1P166	PM&CPM	OD8	NS	NS	NS	NS	NS	NS	0.93	B	
166-100892B	2P166	PM&CPM	OD8	NS	NS	NS	NS	NS	NS	0.30	B	
PM&CPM, UF resin, batch press									Average	0.62		
NOT REPORTED IN AP-42									Minimum	0.30		
									Maximum	0.93		
228-091992J	1P228	PM10&CPM	M201A/2(	PINE SP	80	HWOOD	20	Y	123 lb/hr	0.077	B	Not reported as separate factor
CPM										0.061		Estimated as PM10&CPM - 1
Condensible PM, UF resin, batch press									Average	0.061		
030-012193C	1P030	VOC	M25A	SY PINE	NS	NS	NS	Y	NS	1.8	A	+ FOR(0.26) - nonVOC(0.01)
228-091992K	1P228	VOC	M25A	PINE SP	80	HWOOD	20	Y	116 lb/hr	1.3	B	+ FOR(0.26) - nonVOC(0.01)
167-102190B	1P167	VOC	M25A	ASPEN	NS	MAPLE	NS	NS	NS	0.43	B	+ FOR(0.26) - nonVOC(0.01)
039-102692E	1P039	VOC	M25A	HWOOD	55	SWOOD	45	Y	0.6%	0.95	B	+ FOR(0.26) - nonVOC(0.01)
167-102588B	1P167	VOC	M25	HWOOD	100	NS	NS	NS	NS	0.63	A	- nonVOC(0.013); FOR not
1-1	1-1	VOC	M25A	HWOOD	86	SWOOD	14			0.35	A	+ FOR(0.26) - nonVOC(0.01)
166-100892A	1P166	VOC	M25A	NS	NS	NS	NS	NS	NS	1.31	B	+ FOR(0.26) - nonVOC(0.01)
166-100892B	2P166	VOC	M25A	NS	NS	NS	NS	NS	NS	0.84	B	+ FOR(0.26) - nonVOC(0.01)
VOC, UF resin, batch press (+FOR - nonVOC)									Average	0.94		
nonVOC = acetone (0.013)									Minimum	0.35		
									Maximum	1.8		
									SD	0.48		
166-100892A	1P166	CO	M10	NS	NS	NS	NS	NS	NS	0.057	D	Discarded--rated D
166-100892B	2P166	CO	M10	NS	NS	NS	NS	NS	NS	0.025	D	Discarded--rated D

TABLE A-8. (Continued)

Test Code	Unit code	Pollutant(b)	Test method(c)	Wood species(d)				Cat/ Scav.?	Wax applic. rate	Emission factor, Lb/MSF 3/4	Data rating	Comments
				Primary	%	Second.	%					
039-102692E	1P039	CO	M10	HWOOD	55	SWOOD	45	Y	0.6%	0.11	B	
1-1	1-1	CO		HWOOD	86	SWOOD	14	NS	NS	0.068	A	
CO, UF resin, batch press									Average	0.090		
									Minimum	0.068		
									Maximum	0.11		
1-2	1-2	111-T-CH-E	M0030	HWOOD	86	SWOOD	14	NS	NS	0.00022	A	Veneer press
1,1,1-Trichloroethane, UF resin, veneer press									Average	0.00022		
030-012193A	1P030	2-5-DMBENZ	M0011	SY PINE	NS	NS	NS	S	NS	0.00032	B	
2,5 Dimethyl benzaldehyde, UF resin, batch press									Average	0.00032		
1-2	1-2	ACETALD	M0011	HWOOD	86	SWOOD	14	NS	NS	9.9E-05	A	Veneer press
Acetaldehyde, UF resin, veneer press									Average	9.9E-05		
030-012193A	1P030	ACETALD	M0011	SY PINE	NS	NS	NS	S	NS	0.034	A	
228-091992H	1P228	ACETALD	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.0049	B	
1-1	1-1	ACETALD	M0011	HWOOD	86	SWOOD	14	NS	NS	0.0035	A	
Acetaldehyde, UF resin, batch press									Average	0.014		
									Minimum	0.0035		
									Maximum	0.034		
030-012193A	1P030	ACETONE	M0011	SY PINE	NS	NS	NS	S	NS	0.017	A	
228-091992H	1P228	ACETONE	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.0082	B	
Acetone, UF resin, batch press									Average	0.013		
									Minimum	0.0082		
									Maximum	0.017		
030-012193A	1P030	ACROLEIN	M0011	SY PINE	NS	NS	NS	S	NS	0.0025	A	
228-091992H	1P228	ACROLEIN	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.0013	B	
Acrolein, UF resin, batch press									Average	0.0019		
									Minimum	0.0013		
									Maximum	0.0025		
030-012193A	1P030	BENZALD	M0011	SY PINE	NS	NS	NS	S	NS	0.0030	A	
228-091992H	1P228	BENZALD	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.0015	B	
1-1	1-1	BENZALD	M0011	HWOOD	86	SWOOD	14	NS	NS	0.00088	A	
Benzaldehyde, UF resin, batch press									Average	0.0018		
									Minimum	0.00088		
									Maximum	0.0030		

TABLE A-8. (Continued)

Test Code	Unit code	Pollutant(b)	Test method(c)	Wood species(d)				Cat/ Scav.?	Wax applic. rate	Emission factor, Lb/MSF 3/4	Data rating	Comments
				Primary	%	Second.	%					
030-012193A	1P030	BUTYLALDE	M0011	SY PINE	NS	NS	NS	S	NS	0.0031	A	
228-091992H	1P228	BUTYLALDE	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.0014	B	
1-1	1-1	BUTYLALDE	M0011	HWOOD	86	SWOOD	14	NS	NS	0.00092	A	
Butylaldehyde, UF resin, batch press									Average	0.0018		
									Minimum	0.00092		
									Maximum	0.0031		
1-2	1-2	BUTYLALDE	M0011	HWOOD	86	SWOOD	14	NS	NS	0.00014	A	Veneer press
Butylaldehyde, UF resin, veneer press									Average	0.00014		
228-091992H	1P228	CROTONALDE	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.00050	B	
Crotonaldehyde, UF resin, batch press									Average	0.00050		
030-012193A	1P030	FOR	M0011	SY PINE	NS	NS	NS	S	NS	0.49	A	Scavenger used
039-102692E	1P039	FOR	TO-5	HWOOD	55	SWOOD	45	Y	0.6%	0.056	B	
228-091992H	1P228	FOR	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.40	B	
1-1	1-1	FOR	M0011	HWOOD	86	SWOOD	14	NS	NS	0.11	A	
Formaldehyde, UF resin, batch press									Average	0.26		
									Minimum	0.056		
									Maximum	0.49		
1-2	1-2	FOR	M0011	HWOOD	86	SWOOD	14	NS	NS	0.0062	A	Veneer press
Formaldehyde, UF resin, veneer press									Average	0.0062		
166-100892A	1P166	FOR	N3500	NS	NS	NS	NS	NS	NS	0.28	D	NIOSH 3500
167-102190B	1P167	FOR	N3500	ASPEN	NS	MAPLE	NS	NS	NS	0.018	D	NIOSH 3500
167-102588B	1P167	FOR	N3500	HWOOD	100	NS	NS	NS	NS	0.18	D	NIOSH 3500
166-100892B	2P166	FOR	N3500	NS	NS	NS	NS	NS	NS	0.29	D	Discarded--rated D
202-030194A	1P202	FOR	M0011	PINE SP	70	SWOOD	30	NS	NS	0.077	D	Discarded--rated D
202-030194B	2P202	FOR	M0011	PINE SP	70	SWOOD	30	NS	NS	0.11	D	Discarded--rated D
030-012193A	1P030	HEXALD	M0011	SY PINE	NS	NS	NS	S	NS	0.020	A	
228-091992H	1P228	HEXALD	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.0047	B	
1-1	1-1	HEXALD	M0011	HWOOD	86	SWOOD	14	NS	NS	0.11	A	
Hexaldehyde, UF resin, batch press									Average	0.045		
									Minimum	0.0047		
									Maximum	0.11		
1-2	1-2	HEXALD	M0011	HWOOD	86	SWOOD	14	NS	NS	0.11	A	Veneer press
Hexaldehyde, UF resin, veneer press									Average	0.11		

TABLE A-8. (Continued)

Test Code	Unit code	Pollutant(b)	Test method(c)	Wood species(d)				Cat/ Scav.?	Wax applic. rate	Emission factor, Lb/MSF 3/4	Data rating	Comments
				Primary	%	Second.	%					
030-012193A	1P030	ISOVALALD	M0011	SY PINE	NS	NS	NS	S	NS	0.00094	A	
228-091992H	1P228	ISOVALALD	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.0013	B	
Isovaleraldehyde, UF resin, batch press									Average	0.0011		
									Minimum	0.00094		
									Maximum	0.0013		
228-091992H	1P228	MEK	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.00032	C	
1-1	1-1	MEK	M0011	HWOOD	86	SWOOD	14	NS	NS	0.0025	A	
Methyl ethyl ketone, UF resin, batch press									Average	0.0014		
									Minimum	0.00032		
									Maximum	0.0025		
1-2	1-2	MEK	M0011	HWOOD	86	SWOOD	14	NS	NS	0.00035	A	Veneer press
1-2	1-2	2-BUTANONE	M0030	HWOOD	86	SWOOD	14	NS	NS	0.00020	A	Veneer press
Methyl ethyl ketone (2-butanone), UF resin, veneer press									Average	0.00028		
									Minimum	0.00020		
									Maximum	0.00035		
1-2	1-2	A-PINENE	M0030	HWOOD	86	SWOOD	14	NS	NS	0.00054	A	
Alpha pinene, UF resin, batch press									Average	0.00054		
1-2	1-2	B-PINENE	M0030	HWOOD	86	SWOOD	14	NS	NS	0.00011	A	
Beta pinene, UF resin, batch press									Average	0.00011		
228-091992H	1P228	PROPIONALD	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	7.2E-05	C	
Propionaldehyde, UF resin, batch press									Average	7.2E-05		
1-2	1-2	TOLUENE	M0030	HWOOD	86	SWOOD	14	NS	NS	0.00047	A	
Toluene, UF resin, batch press									Average	0.00047		
030-012193A	1P030	VALALD	M0011	SY PINE	NS	NS	NS	S	NS	0.0058	A	
228-091992H	1P228	VALALD	M0011	PINE SP	80	HWOOD	20	Y	105 lb/hr	0.0020	B	
Valeraldehyde, UF resin, batch press									Average	0.0039		
									Minimum	0.0020		
									Maximum	0.0058		

(a) Factors for VOC on a propane basis and corrected by adding formaldehyde factor (0.26) and subtracting factor for nonVOC's (0.013 for acetone). NS = not

(b) Pollutant codes are identified in Table 4-6.

(c) Test methods: M5 = EPA Method 5; M201A = EPA Method 201A; OD8 = Oregon Department of Environmental Quality (ODEQ) Method 8; M201A/202 = EPA Method 201A followed by EPA Method 202; M25A = EPA Method 25A; M25 = EPA Method 25; M10 = EPA Method 10; M0030 = EPA Method 0030 (volatile organic sampling train); M0011 = BIF Method 0011 for aldehydes and ketones; TO-5 = TO-5, Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air; N3500 = NIOSH Method 3500.

(d) Wood species: SY PINE = Southern yellow pine; PINE SP = unknown pine species; HWOOD = unspecified hardwood species; ASPEN = aspen; MAPLE SWOOD = unspecified softwood species.