



Formaldehyde Requirements for Wood Composite Panels for products to be sold in USA

07	Phil Smith	Tod Cole	19-Oct- 2018	22-Oct-2018
06	Phil Smith	Tod Cole	13 Apr - 2018	1 June -18
05	VVR/PKS	Tod Cole	12-Dec-2015	1-Jan-16
04	Phil Smith	Joe Melfi	21-May-08	1-Nov-08
03	Phil Smith	Joe Melfi	6-May-08	1-Nov-08
02	Phil Smith	Michael Mis	1-Oct-07	15-Oct-07
01	Alain Masse	Thomas Whalen	6-Apr-06	6-Apr-06
	Alain Masse	Thomas Whalen	2-Nov-05	2-Nov-05
Revision	Originator	Approver	Release Date	Effective Date



WSI – Formaldehyde Requirement for wood-based panels

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Purpose

The purpose of this specification is to provide vendors with our labelling requirements when it comes to Formaldehyde content in wood-based panels such as MDF, particleboard and plywood panels (including bent wood components).

1. APPLICATION

This standard applies to all WSI products that contain MDF, Particleboard and Plywood (Veneer Core and Composite Core) as a substrate. Also applies to wood-based materials as well as to foils, paper, edge-bands and veneer attached to these by glue or adhesive, and to processes for attaching these (and for attaching wood).

This label will replace the CARB label currently in use.

2. **GENERAL REQUIREMENT**

Raw material vendors and finished product manufactures must provide third party certification stating that their board products comply with the emission requirements as stated under 40 CFR part 770 / Toxic Substances Control Act Title VI.

3. QUALITY SPECIFICATION FOR MDF

The table below shows **minimum** requirement regarding the overall quality of the MDF panel. Values are based according to a board thickness ranging in between 12 and 19mm.

	UNIT	VALUE
Moisture content max.	%	8
Density	Kg/m3	700
Modulus of Elasticity (MOE)	N/mm2	2200
Modulus of Rupture (MOR)	N/mm2	30
Screw holding - face	N	1000
Screw holding – edge	N	800



4. QUALITY SPECIFICATION FOR PARTICLE BOARD

The table below shows **minimum** requirement regarding the overall quality of particleboard panel. Values are based according to a board thickness ranging in between 15 and 19mm.

	UNIT	VALUE
Moisture content max.	%	8
Density	Kg/m3	650
Modulus of Elasticity (MOE)	N/mm2	1500
Modulus of Rupture (MOR)	N/mm2	13
Screw holding - face	N	400
Screw holding – edge	N	350

5. 40 CFR PART 770 / TOXIC SUBSTANCES CONTROL ACT TITLE VI FORMALDEHYDE REGULATIONS

Starting 12 December 2018, composite wood products should follow the below emission standards regardless of whether the composite wood product is in the form of a panel, a component part, or incorporated into a finished goods

Table 1				
EPA TSCA Title VI	HWPW-VC	PB	THIN	MDF/HDF
	Hard Wood Plywood Veneer Core	Particle Board	MDF/HDF	Medium Density
			(≤ 8 mm)	(> 8 mm)
	HWPW-CC			
	Hard Wood Plywood Composite Core			
ASTM E 1333 or	0.05 ppm	0.09 ppm	0.13 ppm	0.11
ASTM D 6007				



Requirements for "gluing processes" when using **formaldehyde-containing resins** (other than board production) (uncoated materials) by the Vendors / Manufacturing the components or products using the EPA TSCA Title VI certified board materials

Process	Test Standard	Limit	Documentations
Gluing of cardboard to wood based material Gluing of surface coverings (foils, Laminates, melamine paper etc.) Gluing of edge band Gluing of board to board to make thicker board Board on frame-, (i.e. frame and veneer)	ASTM E 1333 or ASTM D- 6007	Based on type of board (ref: Table 1)	Process Control + Batch testing *Yearly Test report by the vendor WSI approved 3 rd party lab

Conditions: the material shall be tested before any surface coating or covering has been applied. Sampling for testing of unfinished material is to be done in the stage immediately preceding the application of the surface coating or surface covering.

6. VENDOR RESPONSIBILITY

7.1 Traceability and process control

7.1.1 Vendor is responsible to ensure that the board materials purchased are from EPA TSCA Title VI Certified Panel Producer who has a valid third party certification (TPC) from EPA TSCA Title VI Accreditation Body and have received an EPA TSCA Title VI TPC number. Panel Producer that have valid TPCs that have been approved by CARB to certify composite wood products have until March 22, 2019, to become accredited by an EPA TSCA Title VI AB's . WSI will require compliance to EPA TSCA Title VI for all veneer core and composite board products produced as of 12 December 2018.

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^{*}Exemption from yearly test: Glues approved as formaldehyde-free are glues/resins made from polyvinyl acetate (PVAc) or EPI-resins for the above "gluing process" requirement is not applicable.

This is recommended by WSI.



- 7.1.2 The vendor must demonstrate that they have taken reasonable precautions by obtaining bills of lading, invoices, or comparable documents and to provide the same to WSI, including a written statement that the composite wood products are TSCA Title VI compliant by declaring Certificate of Compliance to WSI in each shipment.
- 7.1.3 The vendor must maintain the following records for a period of three years from the import date or the date of the purchases or shipment, the Bills of Lading, Invoices, or comparable documents that include a written statement from the supplier that the composite wood products are TSCA Title VI compliant or that the composite wood products were produced before December 12, 2018.
- 7.1.4 Upon request, the Vendor must be able to provide within 24hrs a valid third party certificate from the board manufacturer stating that all wood-based materials comply with the WSI formaldehyde requirement.

7.2 IDENTIFICATION / LABELING AND VERIFICATION BY TEST LAB

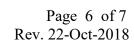
- 7.2.1 Finished goods containing composite wood products must label every finished good product they produce or every Master Carton box.
 - If the label is applied to the product, then the label does not need to be applied to the master carton/packaging
 - If the label is applied to the master carton/packaging, then the label does not need to be applied on the product

Vendors need to follow the below labelling template for all brands:

WILLIAMS-SONOMA, INC. (MM/YY) EPA TSCA Title VI / 40 CFR Part 770 compliant for formaldehyde

1"

3"



7.2.2 The vendor must furnish valid Third Party certificate/s for the materials used in the product and declare the Bill of Material when the product is sent for testing at WSI approved 3rd party lab or WSI own labs for verification and obtain PASSED test report.

Example of Bill Of Material for product – to be submitted for product test.

Part of Items	Type of	Material	Material	TSCA Title VI
	Material	Designation	Suppliers/Board	Certification/Doc.
		(Measure/color)	Producers	number
e.g: Door	MDF	19mm	Abcon	CN/TSCA/2019 / 05/ 1001
Side panel	Particle Board	18mm	Ace boards	HK/TSCA / 2019 / 2018 /05/1002
Тор	Foil	brown	Taicun ltd	
Glue for foil	Glue	Urea FA 203	Aks ltd	
Side panel	Lacquer	409 v WB	Rons pte ltd	

7.2.3 **De Minimis amount of regulated composite wood products**: Finished goods, containing only a de minimis amount of regulated composite wood product are excepted from the labeling requirements, provided that the composite wood product does not exceed 144 square inches, based on the surface area of its largest face. (example: Picture Frame or a 24" x 6" Wall Shelf, etc.)

The exception does not apply to finished goods or component parts that are designed to be used in combination or in multiples to create larger surfaces, finished goods, or component parts.

7.3 RANDOM TESTING

- 7.3.1 WSI reserves the right to verify compliance of final products or of materials taken from final products. Such verification may be part of a WSI audit or as an additional test by WSI in case of doubt. If the product fails to meet the WSI requirements the vendor takes responsibility to settle all the cost incurred for the products in the supply chain and test costs.
- 7.3.2 Vendor needs to perform random testing of EPA TSCA Title VI board material as requested by WSI to verify the compliance and track results. The frequency of random test as per WSI request based on the risk level identified by WSI.

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7.4 SUB-SUPPLIERS/SUB CONTRACTORS

7.4.1 The WSI's key vendor is responsible for making sure that their subsuppliers meet above WSI formaldehyde requirements.