

# SAFE GUARDS

SGS CONSUMER TESTING SERVICES

HARDLINES

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## US PRESIDENT SIGNED BILL REGULATING FORMALDEHYDE IN COMPOSITE WOOD PRODUCTS

The Formaldehyde Standards for Composite Wood Products Act was signed in to law by President Obama on July 7th, 2010. This bill sets the US nationwide emission standards to limit formaldehyde release from hardwood plywood, particleboard, and medium-density fiberboard used in manufacturing of composite wood based products.

On July 7th, 2010, US President Obama signed the "Formaldehyde Standards for Composite Wood Products Act"<sup>1,2</sup> (S. 1660) into law. With his signature, this bill became the amendment and Title VI of the "Toxic Substances Control Act", and set the standard for emissions of Formaldehyde from composite wood products, specifically hardwood plywood, particleboard and medium-density fiberboard sold, supplied, offered for sale, or manufactured in the United States. The new emission limits are based on the levels established for the State of California in 2007 by the California Air Resources Board (CARB)<sup>3</sup>, and provide uniformity and predictability to the market place.

Formaldehyde is a known carcinogen, and effects human health through widespread exposures in homes, offices and schools from building materials and furniture. The legislation represents an important step for reducing the health impacts of formaldehyde and help increase availability of low-formaldehyde and formaldehyde-free materials for the society.

This act listed emissions standards that start as early as July of 2011 (see table 1). The Environmental Protection Agency (EPA) is tasked to develop implementation rules to ensure compliance with the emission standards no later than January 1st, 2013.



<sup>1</sup> [Text of S. 1660: Formaldehyde Standards for Composite Wood Products Act](#)

<sup>2</sup> [SGS SafeGuard No. 115/10](#)

<sup>3</sup> [SGS SafeGuard No. 060/08](#)

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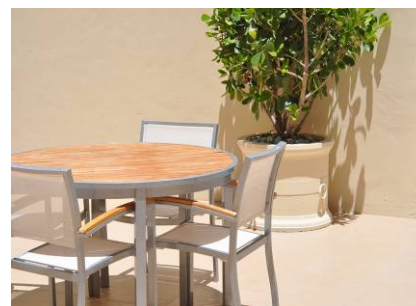
Table 1. Formaldehyde Emission Standards for HWPW, PB and MDF

Formaldehyde Emission Standards for Hardwood Plywood (HWPW), Particleboard (PB), and Medium Density Fiberboard (MDF)						
Methods	HWPW Veneer Core (ppm)	HWPW Composite Core (ppm)	PB (ppm)	MDF (ppm)	Thin MDF (< 8mm) (ppm)	Effective on
<b>Primary</b> ASTM E1333-96 (2002) or <b>Secondary</b> ASTM D6007-02	0.05					Effective date*
			0.18	0.21		After effective date* and before July 1st, 2011
			0.09	0.11		The later of July 1st, 2011 and effective date*
		0.08			0.21	After effective date* and before July 1st, 2012
		0.05			0.13	The later of July 1st, 2012 and effective date*

\* effective date = 180 days after promulgation of the regulation

This act listed the provisions that need to be promulgated by the EPA, including labeling, chain of custody requirements, sell-through provisions, definition of finished goods, third-party testing and certification, auditing and reporting of third-party certifiers, recordkeeping, enforcement, definition of laminated products and exceptions for products and components containing *de minimis* amounts of composite wood products.

This act also listed the requirements for no-added formaldehyde based resins and ultra low-emitting formaldehyde resin (see table 2).



No-added Formaldehyde based Resins and Ultra-low Emitting Formaldehyde (ULEF) Resin Emission Target and Cap Values (ppm) for Hardwood plywood, Particleboard and Medium Density Fiberboard				
	Hardwood plywood (ppm)	PB(ppm)	MDF (ppm)	Thin MDF (ppm)
No-added Formaldehyde-based resins - Target	0.04	0.04	0.04	0.04
No-added Formaldehyde-based resins - Cap	0.06	0.06	0.06	0.06
ULEF - Target	0.05	0.05	0.06	0.08
ULEF - Cap	0.05	0.08	0.09	0.11

Table 2. No-added formaldehyde-based and ultra-low emitting formaldehyde resin emission target and cap values for composite wood products.

Under certain conditions, the EPA may reduce the testing requirements if the products meet the above emission limits. When the products meet the emission target of 0.04 ppm and cap of 0.05 ppm, the administrator may exempt a manufacturer from third party certification requirements.

The regulation makes provision for a "sell-through" period for the existing inventory of composite wood products. Certain composite wood products are exempt from the regulation. Listed exemptions include hardboard, structural plywood, wood packaging, and composite wood products used inside new vehicles, rail cars, boats, aerospace craft, or aircraft.

Right now, relevant industries are waiting for the release of the detailed regulation. However, the relationship between the existing CARB certification and the new federal level certification scheme and the importation requirements of the regulation may pose some challenges to the industry.

SGS has a very comprehensive composite wood products testing and certification program. Throughout our global network of laboratories, we are able to provide a range of services, including testing and certification for composite wood products for US markets. Please do not hesitate to contact us for further information.

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