

SAFEGUARDS

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SOFTLINES

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THE FIRST PHTHALATE STANDARD FOR TEXTILES

The first European Standard for determination of phthalate content in textile articles, EN 15777: 2009, has been published by European Committee for Standardization (CEN).

Currently, there are several standard methods to determine phthalate content in consumer products. The scopes of these standards mostly cover food wares and polyvinyl chloride plastic (Table 1). The new European Standard EN 15777: 2009 is the first standard to publish a specific standard for coated material or plastisol prints on textiles.

Phthalates are a class of compounds used most commonly as a softener for plastic or color coatings and have diverse other uses in modern commerce. In textile industries, phthalates are widely used within applied motifs, coated fabrics, plastisol prints, buttons, etc. Classified as endocrine disruptors and exhibiting bioaccumulative properties, certain phthalates are regulated in the US and EU markets¹. Therefore, phthalates are an important issue for textile manufacturers and retailers.



The European Standard EN 15777: 2009

The aim of the method in this standard is to extract the regulated phthalates² from the textile and related accessories e.g. coated fabrics and plastisol print. The specification of the method is to calculate the phthalate content based on the mass of the print to the mass of the whole sample.

¹ SGS SafeguardS 168/09 - [FULL COMPLIANCE TO PHTHALATES BAN IN TEXTILES](#)

² [Commission Directive 2005/84/EC Phthalates in toys and child care articles](#)

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Table 1: Summary of phthalate methods commonly adopted by textile industries

	Standard method			
	EN 15777: 2009	EN 14372: 2004	CPSC SOP CPSC-CH_C1001-09.2	ASTM D3421-75
Target phthalates	BBP, DBP, DEHP, DNOP, DIDP, DINP	BBP, DBP, DEHP, DNOP, DIDP, DINP	BBP, DBP, DEHP, DNOP, DIDP, DINP	Dicotyl phthalate with one or more homogenous polyester plasticizer or other simple phthalate polyester
Scope	Textile	Children's cutlery and feeding utensils (up to the age of 3)	Children's toys (up to the age of 12) and childcare article (up to the age of 3)	Vinyl chloride plastic
Extraction method	Soxhlet extraction - hexane	Soxhlet extraction - diethyl ether	Liquid extraction - THF	Soxhlet extraction - CCl ₄ /MeOH
Analytical instrument	GC/MS	GS/MS	GC/MS	GC/MS
Remark	Phthalate content is based on calculated mass of print to the mass of whole sample	/	/	/

In view of the market trend and based on our continued method development, SGS is capable of offering a wide range of phthalate testing for various products. We are ready to provide you with further information. Please do not hesitate to contact us.



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