

SAFEGUARDS

CONSUMER GOODS AND RETAIL

ELECTRICAL & ELECTRONICS

NO. 132/14 JULY 2014

EU - REVIEW OF THE LIST OF PRIORITY RESTRICTED SUBSTANCES UNDER ROHS 2

The final report of the "Study for the review of the list of restricted substances under RoHS 2 – Analysis of impacts from a possible restriction of several new substances under RoHS 2" was published by Oeko-Institut e.V. on 26 May 2014¹.

Directive 2011/65/EU (RoHS 2) sets the rules for amending the list of restricted substances in Article 6(1). A review and amendment of restricted substances in Annex II is to be considered by the Commission before 22 July 2014, and periodically thereafter. In preparation of the 2014 review, the Austrian Umweltbundesamt GmbH (AUBA) conducted a first study that started in 2012 and ended at the beginning of 2014. The final report issued by AUBA² listed many priority substances for Annex II restrictions besides four substances (HBCDD, DEHP, BBP and DBP) prioritized already in RoHS 2, Recital 10.

As requested by the Directorate-General for the Environment of the European Commission, Oeko-Institut e.V. undertook the task to evaluate the quantitative usage data about priority substances identified earlier by AUBA. The number of substances indicated in Table 1 below went way beyond the limited number of priority substances already indicated in RoHS 2, covering even materials like polyvinylchloride which is highly used by the EEE industry.



TABLE 1.

SUB-GROUP	PRIORITY	RECOMMENDATION	SUBSTANCE	QUANTITY ESTIMATION FOR EEE
1	High use volume in EEE	Higher priority to assess if environmental benefits justify restriction - check if there are sub-substances that need to be reviewed as with PVC rigid, soft and recycled.	Polyvinylchloride (PVC)	330,000 tonnes
2	Medium use volume in EEE	Medium priority to assess if environmental benefits justify	Medium chained	15,000 tonnes for PVC cable
			Antimony trioxide	20,000 tonnes

¹ RoHS 2

² AUBA

			Tetrabromo bisphenol A (TBBPA)	1,000 to 2,500 tonnes manufactured and/or used in the EU for EEE manufacture. 6,000-20,200 tonnes may reflect amounts entering the EU through import of components and products.
3	Low use volume in EEE	Lower priority to assess if environmental benefits justify restriction - check if there are substances that need to be reviewed as with PVC rigid, soft and recycled.	Indium phosphide	Between 100 and 250 tonnes - uncertainty is high though this is more probably an under estimation as quantities are expected to grow.
			Beryllium metal and containing alloys	25 to 28 tonnes per year 0.2 tonnes per year
			Beryllium oxide	2 to 3 tonnes per year
4	Annex XIV substance assumed not to be in use in light of EU use trends – needs to be confirmed in the supply chain, particularly of articles imported from outside the EU. Restriction may be more relevant to ensure that substance is not brought in through import of components and products.	Assessment can be made at a later stage in light of the lower relevance to EEE. Main focus would be to realize if there is an impact to competitiveness in light of the Authorisation requirement or if manufacture has just moved elsewhere). It may be beneficial to have a survey of the supply chain in cooperation with industry, to clarify if its use in EEE is relevant and would justify a restriction to ensure the level of environmental safety is the same and whether the different trend of use causes impacts on competition between EU and non EU manufacturers.	Di-arsenic trioxide	3,000 tonnes per year used as intermediates and not necessarily present in articles placed on the market.
			Di-arsenic	Below 10 tonnes per year
			Tris(2-chloroethyl)	
			Nonylphenol	Low quantities
5	Varying use volume with low anticipation for presence in final product in light of intermediate applications Varying use volume with low anticipation for presence in final product in light of intermediate applications; Annex XIV definition pending.	Assessment can be prepared at later stage as restriction aimed at quantities present in end product and thus impact on use needs to be revisited.	Nickel sulphate	10,000 - 100,000 tonnes in use – not only for EEE.
			Nickel bis (sulfamidate) /Nickel sulfamate	100 to 1,000 tonnes in use – not only for EEE.
			Cobalt dichloride	Less than 200 tonnes per year not necessarily all for EEE.
			Cobalt sulphate	Less than 500 tonnes per year not necessarily all for EEE.

6	Low use volume in EEE	Lower priority to assess if environmental benefits justify restriction - check if there are sub-substances that need to be reviewed as with PVC rigid, soft and recycled.	Cobalt metal	Quantities not known but expected to be low.
	Assumed not to be in use in light of EU use trends – needs to be confirmed in the supply chain, particularly of articles imported from outside the EU.	Assessment can be made at a later stage. It may be beneficial to have a survey of the supply chain in cooperation with industry, to clarify if its use in EEE is relevant and would justify a restriction to ensure the level of environmental safety is the same and whether the different trend of use causes impacts on competition between EU and non EU manufacturers.	Diethyl phthalate (DEP)	Apparently not in use
			2,3-dibromo- 1-propanol	Apparently not in use
			Dibromoneopentyl glycol	Apparently not in use

Another substance under review in this study, but not included in the above list, is diisobutyl phthalate (DIBP). DIBP is widely used as plasticizer in glues, printing inks, toys and childcare articles and many other consumer products. Despite the wide spread use of DIBP the substance is identified as a substance of very high concern (SVHC) because of its reproductive toxicity and included in REACH Annex XIV. Even if DIBP currently seems not to be in use in the EEE sector the Oeko-Institute does recommend the restriction of DIBP together with the other priority phthalates as a preventive measure to avoid the move of industry from potentially restricted phthalates to DIBP in the future.

SGS is committed to keeping you up to date on the latest regulations and policies concerning the use of hazardous substances in consumer products. Furthermore, through its global expertise and network of chemical labs, SGS can support you in ensuring your products comply with relevant hazardous substances requirements on

all relevant markets around the world.

Whether you are in need of hazardous substances testing or other third party verification, certification or inspection services, SGS is ideally positioned to satisfy all your business's needs.



FOR ENQUIRIES:

Global Competence Support Centre:
gpsc@sgs.com

CN– Ryan Liu, Tel: +86 21 61402677 or
Ryan-L.Liu@sgs.com

Asia – Hong Kong,
 Tel: +852 2334 4481,
mktg.hk@sgs.com

Australasia – Perth.
 Tel: +61 (0) 3 9790 3418
au.cts@sgs.com

Europe – London – UK.
 Tel: +44(0) 203 008 7860
gb.cts.sales@sgs.com

Africa & Middle East – Turkey.
 Tel: +90 212 368 40 00
sgs.turkey@sgs.com

Americas – USA.
 Tel: +1 973 575 5252
uscts.inquiries@sgs.com

www.sgs.com/cgmr

© SGS Group Management SA – 2014– All rights reserved - SGS is a registered trademark of SGS Group Management SA. This is a publication of SGS, except for 3rd parties' contents submitted or licensed for use by SGS. SGS neither endorses nor disapproves said 3rd parties contents. This publication is intended to provide technical information and shall not be considered an exhaustive treatment of any subject treated. It is strictly educational and does not replace any legal requirements or applicable regulations. It is not intended to constitute consulting or professional advice. The information contained herein is provided "as is" and SGS does not warrant that it will be error-free or will meet any particular criteria of performance or quality. Do not quote or refer any information herein without SGS's prior written consent.