

Palram Report for Palram 4U

Environment Friendly Use of PVC Sheets



August 2018

R&D and Technology



Environment Friendly Use of PVC Sheets

Technological Background

From its first days, 55 years ago, Palram has based its PVC production on **heavy metal-free technology** (no lead and no cadmium) becoming unique among other PVC producers in its environment-friendly products offered around the globe.

Palram has a unique production setup which **reduces the PVC waste** through the production process to less than 1%.

Depending on the final application, Palram sheets are manufactured with 10-70% **recycled material**. The recycled material is sourced from Palram's own scrap, from cuts off collected from its customers (including Palram 4U), and from external recycled material suppliers, thoroughly selected and controlled in terms of composition and quality of the recycled material.

Palram uses recycled PVC from its own production in most of its products and sells regrind to further thermoplastic processors. Throughout the world, PVC recycling technology is well proven and the recovery of energy from PVC offers an environmental alternative.

Since Palram is **committed to REACH** (European Community Regulation on chemicals and their safe use ([EC 1907/2006](#))) we have developed new grades which are safe alternatives for Dibutyltins and we are proud to inform you that the products which are supplied to our customers are **free of Dibutyltin**.

As DEHP also appears in the SVHC Candidate List, we have developed **DEHP-free** rigid (U-PVC) sheets, which we supply to our customers.

On a regular basis and as the ECHA updates and includes new substances in the SVHC Candidate List, our REACH-dedicated Team verifies with our raw material suppliers among the Supply Chain, that these substances are not present in the materials they supply us with.

No toxic substances are released from PVC sheets during their life cycle as all materials are bound in the polymer matrix.

It is the target of REACH to ban toxic substances but only after it will have been proven that no safer alternative exists for the specific application. No thorough study has been performed yet to check whether an alternative material can replace PVC for each of the numerous applications where it is used. In fact, regulatory agencies like the U.S. Food and Drug Administration (**FDA**) and others throughout the world **have approved** (with very conservative specific migration limits) the use of certain tin stabilizers in critical applications like food wrap and pipes that carry drinking water.

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A study made in the USA by an independent organization (the NSF) about Tin leaching from PVC pipes used for drinking water shows that losses are very low and decline very fast to concentrations well below levels which are safe to human health.

In healthcare, many millions of blood and plasma transfusion sets have been produced in PVC films and tube because of its ability to preserve blood quality. PVC is widely used in pharmaceutical packaging where three years of safety testing are essential before approval and use.

Interesting links:

<http://www.vinylplus.eu/>

<http://www.stabilisers.org>

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Samples of Palram global offer of PVC products & Uses

Country	Application	Photos	
Russia	Sandwich Panels for Window Frames		
Canada	Roofing in Dairy Farms		
Middle East	Roofing in Livestock Farms		
Europe	Exhibitions Stands		
UK	Formed Door Panels		
Middle East	Flooring, Wall Covering and Outdoor Furniture made of Decking Board		
Europe	Hygienic Wall Cladding in Healthcare, Food Industry and more.		
China & Europe	Wayfinding and Signage		
USA	Trimboard Wood Replacement		

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Palram's declaration on EU's REACH new standards



Palram Industries Ltd



Palram REACH Declaration - Brief No. 17

Update: December 3th, 2017

Dear Customer,

In order to ensure proper implementation of the REACH regulation, we have established a dedicated team of professionals to examine the obligations of our products and substances according to the REACH rules. Our team is managing a detailed inventory of all substances used in Palram products, including the yearly amount of each substance exported to our EU customers, in order to enable a profound understanding of the activities that must be accomplished. Under REACH regulation, our products are defined "Articles" and as such are subject to requirements related to "substances in Articles" as defined in Articles 7 & 33 of the regulation, namely Registration, Notification and the duty to communicate Information throughout our supply chains. Details of our obligations, activities and commitments within REACH are as follows:

Registration: The comprehensive examination conducted by our REACH team on polymer articles manufactured by Palram proved that no intended substance release from the polymeric matrix of Palram's products occurred under normal and foreseeable conditions of use. Therefore, to the best of our knowledge, substances contained in our products are exempt from registration obligation (Art. 7.1).

Notification: The obligation of notification is effective since June 1st 2011. No substance from the current Candidate List for Authorization (SVHC updated by ECHA on July 7th, 2017) found in Palram's products ([LINK](#) to last updated Candidate List, [LINK](#) to candidate list substances in articles) therefore there is no need for additional measures to be taken concerning notification activity. Nevertheless, Palram continuously examines the Candidate List for Authorization, which is updated regularly, and so is its applicability to our products.

Information: Palram products do not contain substances currently defined by ECHA as Substances of Very High Concern (SVHC) above the applicable threshold (0.1%). If it is detected, as a result of the next Candidate List updates, that some of our products' constituents are included in the SVHC list, we will provide all our customers with data regarding substances contained in our products in order to allow safe usage (Article 33). Palram, as a downstream user, works closely with its suppliers to receive the most updated information regarding the presence of SVHC in the products supplied to Palram from them.

Palram will continue to keep up to date with the evolving REACH regulation and make sure it fully satisfies all requirements.

Palram Industries Ltd

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Technology Department



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Palram ROHS declaration



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Thermoplastic Sheets for Construction, Industry, Advertising and Agriculture

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To whom it may concern:

The entire range of Palram products complies with the requirements of the European Union's RoHS Directive 2011/65/EC regarding the concentrations of heavy metals and heavy metal compounds of lead (Pb), cadmium (Cd), mercury (Hg) and hexavalent chromium (Cr VI), and concentrations of flame retardants based on polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).

Sincerely,

Sandra Gallant
PVC Technologist
Palram Industries