

# TECHNICAL BULLETIN

**Date:** June 15, 2023  
**Subject:** RoHS, RoHS 2 & RoHS 3 (Restriction of Hazardous Substances) Directives Compliance  
**Products:** Monarch®

In accordance with current RoHS, RoHS 2, RoHS 3 (Restriction of the use of Hazardous Substances) and WEEE (Waste in Electrical and Electronic Equipment) legislation enacted by the EU and adopted by many other countries, Monarch® brand products contain no more than the allowed amounts (either less than 100 or 1000 ppm depending on substance) of the following hazardous substances:

<b>RoHS EU Directive (2002/95/EC)</b>	<b>Cadmium</b>	<b>Mercury</b>	<b>PBDE (Polybrominated Diphenyl Ethers)</b>
	<b>Lead</b>	<b>Hexavalent Chromium</b>	<b>PBB (Polybrominated Biphenyls)</b>

<b>RoHS 2 EU Directive (2011/65/EU)</b>	RoHS 2 is an updated / recast version of RoHS. It includes a CE-marking directive, with RoHS compliance now being required.
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<b>RoHS 3 EU Directive (2015/863/EU)</b>	RoHS 3 adds four more controlled substances (specific phthalates – see below) are added to the list in addition to the six restricted substances in original RoHS directive in 2002, as can be viewed in table above.		
	<b>BBP (Butyl benzyl phthalate)</b>	<b>DEHP (Bis (2-ethylhexyl) phthalate)</b>	
	<b>DBP (Dibutyl phthalate)</b>	<b>DIBP (Diisobutyl phthalate)</b>	

●	Armacell does not intentionally add lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls ( <b>PBB</b> ), polybrominated diphenyl ethers ( <b>PBDE</b> ) as well as arsenic, pentabromodiphenyl ether, decabromodiphenyl ether ( <b>DecaBDE</b> ) or octabromodiphenyl ether to any Monarch® product.
●	Armacell does not use BBP (Butyl benzyl phthalate), DBP (Dibutyl phthalate), DEHP (Bis (2-ethylhexyl) phthalate) and DIBP (Diisobutyl phthalate) in Monarch® products.
●	Monarch® products do not contain any Class I or Class II ozone depleting chemicals. No CFC's are used or released in the manufacturing process.
●	Monarch® products do not contain any of the compounds listed above the indicated thresholds. The response provided by Armacell for Monarch® brand products is based upon knowledge of the raw materials used in the manufacturing process.
●	To the best of our knowledge, Monarch® brand products (Spencer, WV Plant) fulfill the RoHS, RoHS 2, RoHS 3 & WEEE requirements.

If you have any questions, or need additional information concerning Armacell Component Foam products, please contact the component foam technical management & chemical regulatory compliance team at Armacell:

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