


## RESTRICTED SUBSTANCES IN FOOTWEAR COMPONENTS

SUBSTANCE	LEGISLATION	TEST METHOD	REASON FOR CONCERN
Azo Dyes and Azo Colourants	REACH 1907/2006 Annex XVII Entry 43	Textiles: EN 14362-1 & EN 14362-3 Leather - CEN ISO/TS 17234	The prohibited amines are carcinogenic
Nickel	REACH 1907/2006 Annex XVII Entry 27	EN 1811 + A1 Coated materials tested after EN 12472	Nickel can cause skin allergies
Lead and its compounds	REACH 1907/2006 Annex XVII Entry 63	EN 16711-1 & EN ISO 16711-2	Harmful to the environment Toxic for reproduction
Cadmium	REACH 1907/2006 Annex XVII Entry 23 EU Regulations 494/2011 & 835/2012	BS EN 1122 Method B	Carcinogenic. Harmful to the environment.
PFOS -Perfluorooctane Sulphonates	POP Directive 850/2004 as amended EU by Regulation 757/2010	Solvent extraction followed by LC-MS	Persistent in the environment, bioaccumulative harmful to mammals
Phthalates	REACH 1907/2006 Annex XVII Entries 51 & 52	EN 14372 Textiles EN ISO 14389	Carcinogenic, endocrine disruptors
Dimethyl Fumarate	REACH 1907/2006 Annex XVII Entry 61	Solvent extraction followed by GC-MS	Causes painful skin contact dermatitis, itching, irritation, redness and burns
Chromium VI	REACH 1907/2006 and Regulation 201/2014	ISO 17075	Carcinogenic
NPEO (Nonyl Phenyl Ethoxylate) & APEO (Alkyl Phenyl Ethoxylate)	REACH 1907/2006 Annex XVII Entry 46 as amended by Regulation 2016/26	AFIRM method - Textiles: EN ISO 18254-1 / Leather: EN ISO 18512-1 & EN ISO 18512-2	Bio-accumulative, toxic to the environment and to human health; reprotoxic
Flame Retardants	REACH 1907/2006 Annex XVII	Solvent extraction followed by GC-MS or LC-MS. EN ISO 17881-1/EN 17881-2	Persistent organic pollutant; carcinogen; reprotoxic; mutagen
SCCP Short Chain Chlorinated Paraffins	REACH 1907/2006 Annex XVII Entries 32 to 38. POP Regulation 850/2004 as amended by Regulation 2015/2030	Solvent Extraction followed by NCI-GC-MS	Toxic to the Environment
Chlorinated Phenols (Pentachlorophenol)	REACH 1907/2006 Annex XVII Entry 22	DIN 53313 for Leather	Bio-accumulative; persistent in the environment, toxic to aquatic species; suspected carcinogen
Biocides	EU Biocidal Product Directive 98/9/EC	Solvent extraction followed by GC-MS or LC-MS.	Harmful to health and environment
Polycyclic Aromatic Hydrocarbons (PAH)	REACH 1907/2006 Annex XVII 50 as amended by Regulations 1272/2013 and 326/2015	AFPS GS 2014 - Footwear: ISO/TS 16190	Carcinogenic
Allergenic Disperse Dyes	Eco-labelling schemes	DIN 54231 - Textiles	Irritant
Carcinogenic Disperse Dyes	Eco-labelling schemes	DIN 54231 - Textiles	Carcinogenic

	Animal Fibers	Cellulosic Textile	Synthetic Textile	PVC Plastic & Coating	Non PVC Plastic & Coating	Leather	Metal	Rubber	Adhesives	Paints & Coatings	Foam	Paper
												
Azo Dyes		✓	✓			✓						
Allergenic / Carcinogenic Disperse Dyes			✓									
Chromium VI						✓	✓			✓		
Phthalates				✓					✓			
Flame Retardants HBCDD TRIS TEPA Deca-BDE	✓	✓	✓	✓	✓						✓	
Nickel (release)							✓					
Diaminodiphenylmethane (MDA)					✓			✓	✓	✓		
Total Lead / Lead Compounds				✓	✓					✓		
Soluble Heavy Metals				✓	✓	✓				✓		✓
Formaldehyde	✓	✓	✓			✓			✓		✓	
Dimethylacetamide			✓									
Organic Tin				✓		✓		✓		✓		
Alkyl/Nonyl Phenyl ethoxylates (APEO/NPEO)	✓	✓	✓									✓
Dimethyl Formamide (DMF)					✓					✓		
Perfluorooctanate sulphonate (PFOS) <sup>2</sup>	✓	✓	✓			✓						
Polycyclic Aromatic Hydrocarbons			✓		✓	✓		✓				
Short Chain Chlorinated Phenols (SCCP) <sup>3</sup>		✓	✓					✓		✓		