



Brooks Sports Restricted Substances List

Last updated February, 2020

1. INTRODUCTION

Brooks is committed to operating in a sustainable manner in order to protect consumers, workers, and the environment. As a participant in the Brooks supply chain, we expect suppliers to understand and comply with the requirements in this latest Brooks Restricted Substances List ("RSL") updated February, 2020. If you have any questions, please contact Victor Song (Victor.Song@brooksrunning.com).

2. SCOPE

The RSL applies to all Brooks materials and finished products.

3. RSL AGREEMENT

All materials used in any Brooks product must comply with the RSL. Tier 1 factories are responsible for all subcontractors. Use of a subcontractor is not allowed unless it has also agreed in writing to comply with this RSL. On behalf of _____ (supplier name), I, _____ (name) agree to comply with the requirements herein, including prohibitions and limitations. I understand that compliance with all applicable laws and the RSL is a condition to, and incorporated in, each and every order placed by Brooks Sports; each shipment constitutes our warranty that the goods shipped fully comply with the RSL; and any subcontractor we use has also agreed in writing to comply with this RSL. I understand Brooks sells its products worldwide and each and every product has to adhere to this RSL and the local laws of each jurisdiction where we sell products. If the laws in a particular jurisdiction are more strict than this RSL, the laws apply. We agree to defend and indemnify Brooks against any claim that a product, material, process, or component does not comply with the RSL or the applicable laws of any jurisdiction where Brooks sells product.

I am an owner, director, officer or managing agent of Supplier, and I am authorized to sign this RSL Agreement and bind Supplier. AGREED TO ON _____ (date)

By _____ (print name)

Signed _____ (signature)

Representative of _____ (supplier name)

4. ABBREVIATIONS

4.1. CAS

CAS registry numbers are unique numerical identifiers for chemical elements, compounds, polymers, biological sequences, mixtures and alloys. Chemical Abstracts Service (CAS), a division of the American Chemical Society, assigns these identifiers to every chemical that has been described in the literature. The intention is to make database searches more convenient, as chemicals often have many names. Almost all molecule databases today allow searching by CAS number.

4.2. Brooks Limit

The maximum limit of the substance allowed in the finished product.

4.3. Usage Ban

For several chemical substances or substance groups a usage ban is defined. For these substances or substance group intentional use in manufacturing of articles is prohibited. That means that chemical products used for manufacturing of articles must not intentionally contain these substances or substance groups.

The aim of a usage ban is to avoid release of harmful substances to the environment and to avoid occurrence in the manufactured article by precautionary principle.

5. RESTRICTED SUBSTANCES LIST

CAS NO.	Restricted Substance	Brooks Limit	Test Method and Comments
Acetophene and 2-Phenyl-2-Propanol			
98-86-2	Acetophenone (only for kids products)	50ppm	Extraction with acetone in 60°C for 30mins & GC-MS
617-94-7	2-phenyl-2-propanol (only for kids products)	50ppm	Extraction with acetone in 60°C for 30mins & GC-MS
AP (alkylphenols), APEO (alkylphenol ethoxylates)			
Various	NP (Nonylphenol) NPEO (Nonylphenol ethoxylates) OP (Octylphenol) OPEO (Octylphenol ethoxylates)	50ppm for sum of AP, 100ppm for sum of APEO	HPLC-MS and GC-MS
Asbestos (6 kinds)			
77536-66-4 12172-73-5 77536-67-5 12001-29-5 12001-28-4 77536-68-6	Actinolite Amosite Anthrophyllite Chrysotile Crocidolite Tremolite	Usage ban	REM/EDX BGI 505-46 or U.S EPA/600/R-93/116
Azo Dyes (28 Kinds)			
92-67-1 92-87-5 95-69-2 91-59-8 97-56-3 99-55-8 615-05-4 101-77-9 91-94-1 119-90-4 119-93-7 838-88-0 101-14-4 101-80-4 139-65-1 95-80-7 95-53-4 137-17-7 95-68-1 87-62-7 106-47-8 120-71-8 90-04-0 60-09-3 3165-93-3 553-00-4 39156-41-7 21436-97-5	4-Aminodiphenyl Benzidine 4-Chloro-o-toluidine 2-Naphthylamine o-Aminoazotoluene 2-Amino-4-nitrotoluene 2,4-Diaminoanisole 4,4'-Diamino-diphenylmethane 3,3'-Dichlorobenzidine 3,3'-Dimethoxybenzidine 3,3'-Dimethylbenzidine 3,3'-Dimethyl-4,4'-diaminodiphenylmethane 4,4'-Methylene-bis-(2-chloroaniline) 4,4'-Oxydianiline 4,4'-Thiodianiline 2,4-Toluenediamine o-Toluidine 2,4,5-Trimethylaniline 2,4-Xylidine 2,6-Xylidine p-Chloroaniline p-Cresidine o-Anisidine 4-Amino azobenzene 4-chloro-o-toluidinium chloride 2-Naphthylammonium acetate 2,4-diaminoanisole sulphate 2,4,5-trimethylaniline hydrochloride	Under 5ppm	Use methods EN ISO 14362-1/3: 2017 for detection of colorants in textiles. Use methods EN ISO 14362-1/3: 2017 for detection of colorants in textiles which may release 4-aminoazobenzene. Use EN ISO 17234-1:2015 for detection of colorants in Leather Use EN ISO 17234-2:2011 for detection of colorants in leather which may release 4-aminoazobenzene.
Bis-phenol A			
80-05-7	Bis-phenol A (BPA)	Usage ban (Under 1ppm)	HPLC/MS
Chlorophenols			
87-87-5 25167-83-3	Pentachlorophenol (PCP), its salts, esters Tetrachlorophenol (TeCP)	Not detected (under 0.05ppm textile; under 0.1ppm leather)	Textile: § 64 LFGB BVL B82.02.8 with alkaline digestion Leather: ISO 17070
Chlorinated Aromatic Hydrocarbons			
5216-25-1 98-07-7 100-44-7	α, α, α,4-tetrachlorotoluene α, α, α-trichlorotoluene α-chlorotoluene; benzyl chloride	1ppm each	EN 17137
Dimethylfumarate			
624-49-7	Dimethyl Fumarate (DMFu)	Usage ban (0.1ppm)	ISO/TS 16186

CAS NO.	Restricted Substance	Brooks Limit	Test Method and Comments
Disperse Dyes (22 kinds)			
2475-45-8 2475-46-9 3860-63-7 3179-90-6 12222-75-2 12222-97-8 12223-01-7 61951-51-7 23355-64-8 2581-65-2 730-40-5 13301-61-6 85136-74-9 119-15-3 2832-40-8 6373-73-5 6250-23-3 12236-29-2 54824-37-2 2872-52-8 2872-48-2 3179-89-3	Disperse Blue 1 Disperse Blue 3 Disperse Blue 26 Disperse Blue 7 Disperse Blue 35 Disperse Blue 102 Disperse Blue 106 Disperse Blue 124 Disperse Brown 1 Disperse Orange 1 Disperse Orange 3 Disperse Orange 37/59/76 Disperse Orange 149 Disperse Yellow 1 Disperse Yellow 3 Disperse Yellow 9 Disperse Yellow 23 Disperse Yellow 39 Disperse Yellow 49 Disperse Red 1 Disperse Red 11 Disperse Red 17	50ppm	DIN 54231: 2005
Carcinogenic Dyes (9 kinds)			
3761-53-3 569-61-9 548-62-9 632-99-5 1937-37-7 2602-46-2 2580-56-5 573-58-0 82-28-0	C.I. Acid red 26 C.I. Basic Red 9 C.I. Basic Violet 3 C.I. Basic Violet 14 C.I. Direct Black 38 C.I. Direct Blue 6 C.I. Basic Blue 26 C.I. Direct Red 28 Disperse Orange 11	50ppm	DIN 54231: 2005
Dioxins & Furans			
1746-01-6 40321-76-4 51207-31-9 57117-31-4 39227-28-6 19408-74-3 57653-85-7 57117-41-6 70648-26-9 72918-21-9 57117-44-9 60851-34-5 35822-46-9 3268-87-9 67562-39-4 55673-89-7 39001-02-0 50585-41-6 109333-34-8 67933-57-7 131166-92-2 110999-44-5 110999-46-7 110999-45-6 107555-93-1	Group 1: 2,3,7,8-Tetrachlorodibenzo-p-dioxin 1,2,3,7-Pentachlorodibenzo-p-dioxin 2,3,7,8-Tetrachlorodibenzofuran 2,3,4,7,8-Pentachlorodibenzofuran Group 2: 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin 1,2,3,7,8-pentachlorodibenzofuran 1,2,3,4,7,8-Hexachlorodibenzofuran 1,2,3,7,8,9-Hexachlorodibenzofuran 1,2,3,6,7,8-Hexachlorodibenzofuran 2,3,4,6,7,8-Hexachlorodibenzofuran Group 3: 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin 1,2,3,4,6,7,8-Heptachlorodibenzofuran 1,2,3,4,7,8,9-Heptachlorodibenzofuran 1,2,3,4,6,7,8,9-Octachlorodibenzofuran Group 4: 2,3,7,8-Tetrabromodibenzo-p-dioxin 1,2,3,7,8-Pentabromodibenzo-p-dioxin 2,3,7,8-Tetrabromodibenzofuran 2,3,4,7,8-Pentabromodibenzofuran Group 5: 1,2,3,4,7,8-Hexabromodibenzo-p-dioxin 1,2,3,7,8,9-Hexabromodibenzo-p-dioxin 1,2,3,6,7,8-Hexabromodibenzo-p-dioxin 1,2,3,7,8-Pentabromodibenzofuran	Sum of Group 1: 1 µg/kg Sum of Group 1 & 2: 5µg/kg Sum of Group 1, 2 & 3: 100 µg/kg Sum of Group 4: 1 µg/kg Sum of Group 4 & 5: 5 µg/kg	US EPA 8290 – (industry practice – not specified by the regulation)

CAS NO.	Restricted Substance	Brooks Limit	Test Method and Comments
Flame Retardants (19 kinds)			
85535-84-8 85535-85-9 59536-65-1 25637-99-4 134237-50-6 134237-51-7 134237-52-8 32534-81-9 32536-52-0 Various 126-72-7 5412-25-9 545-55-1 1163-19-5 115-96-8 79-94-7 3296-90-0 13674-87-8 25155-23-1	Short-chain Chlorinated paraffins (SCCPs, C10 – C13) Medium-chain Chlorinated Paraffins (MCCPs, C14 – C17) Polybrominated biphenyls (PBBs) Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane Penta-bromodiphenyl ether (pentaBDE) Octa-bromodiphenyl ether (octaBDE) All other Polybrominated diphenyl ethers (PBDEs) Tris (2,3-dibromopropyl) phosphate (TRIS) Bis (2,3-dibromopropyl) phosphate Tris (1-aziridinyl)-phosphine oxide (TEPA) Decabromodiphenyl ether (DecaBDE) Tris (2-chloroethyl) phosphate Tetrabromobisphenol A (TBBPA) 2,2-bis(bromomethyl)-1,3-propanediol (BBMP) Tris(1,3-dichloro-isopropyl) phosphate (TDCPP) Trixylyl phosphate (TXP)	Usage ban (under 1,000 ppm for SCCP and MCCP; others under 5ppm)	Solvent extraction and GS-MS or LC-MS
Fluorinated Greenhouse Gases			
2551-62-4 75-46-7 75-10-5 593-53-3 138495-42-8 354-33-6 359-35-3 811-97-2 75-37-6 430-66-0 420-46-2 431-89-0 677-56-5 431-63-0 690-39-1 679-86-7 460-73-1 406-58-6 75-73-0 76-16-4 76-19-7 355-25-9 678-26-2 355-42-0 115-25-3	Sulfur hexafluoride - SF6 Hydrofluorocarbons (HFCs): HFC-23 - CHF3 HFC-32 - CH2F2 HFC-41 - CH3F HFC-43-10mee - C5H2F10 HFC-125 - C2HF5 HFC-134 - C2H2F4 HFC-134a - CH2FCF3 HFC-152a - C2H4F2 HFC-143 - C2H3F3 HFC-143a - C2H3F3 HFC-227ea - C3HF7 HFC-236cb - CH2FCF2CF3 HFC-236ea - CHF2CHF2CF3 HFC-236fa - C3H2F6 HFC-245ca - C3H3F5 HFC-245fa - CHF2CH2CF3 HFC-365mfc - CF3CH2CF2CH3 Perfluorocarbons (PFCs): Perfluoromethane - CF4 Perfluoroethane - C2F6 Perfluoropropane - C3F8 Perfluorobutane - C4F10 Perfluoropentane - C5F12 Perfluorohexane - C6F14 Perfluorocyclobutane - c-C4F8	Usage ban (under 0.1ppm)	Headspace GC-MS
Formaldehyde			
50-00-0	Formaldehyde	Kids(<12years) 20ppm Others (over 12 years): 75ppm	ISO 14184-1 Leather: ISO 17226-2 by UV method

CAS NO.	Restricted Substance	Brooks Limit	Test Method and Comments
Total Metals (4 kinds)			
7439-92-1 7440-43-9 7439-97-6 7440-38-2	Lead Cadmium Mercury Arsenic	Pb 40ppm Cd 90ppm Hg 1ppm As 100ppm	Total digestion // ICP
Extractable Metals (9 kinds)			
7439-92-1 7440-43-9 7439-97-6 7440-36-0 7440-38-2 7440-50-8 7440-47-3 7440-48-4 18540-29-9	Lead Cadmium Mercury Antimony Arsenic Copper Chromium Cobalt Chromium VI	Lead (Pb) 0.2ppm Cadmium (Cd) 0.1ppm Mercury (Hg) 0.02ppm Antimony (Sb) 5ppm Arsenic (As) 0.2ppm Copper (Cu) 25ppm Chromium (Cr) 1ppm Cobalt (Co) 4ppm Chromium VI (Cr VI) 1ppm	EN 16711-2:2016
18540-29-9	Chromium VI	Under 3ppm	EN ISO 17075-1 with aging confirmation by ISO 17075-2
7440-02-0	Nickel - Release	0.5 µg/cm ² /week	EN 12472
Nitrosamines (9 kinds)			
62-75-9 55-18-5 621-64-7 924-16-3 100-75-4 930-55-2 59-89-2 614-00-6 612-64-2	N-nitrosodimethylamine (NDMA) N-nitrosodiethylamine (NDEA) N-nitrosodipropylamine (NDPA) N-nitrosodibutylamine (NDBA) N-nitrosopiperidine (NPIP) N-nitrosopyrrolidine (NPYR) N-nitrosomorpholine (NMOR) N-nitroso N-methyl N-phenylamine (NMPhA) N-nitroso N-ethyl N-phenylamine (NEPhA)	0.1ppm	GB/T 24153:2009
Organotin Compounds (7 kinds)			
56573-85-4 200-268-0 668-34-8 1002-53-5 15231-44-4 2273-43-0 various	Tributyltin (TBT) Bis(tributyltin)oxide (TBTO) Triphenyltin (TPhT) Dibutyltin (DBT) Diocetyl tin (DOT) Monobutyltin (MBT) All tri-substituted organotin compounds	Not Detected for TBT, TBTO, TPhT (under 0.1ppm considered not detected) 1ppm for DBT, MBT, DOT 500ppm for others	ISO 16179
Ortho-phenylphenol			
90-43-7	o-Phenylphenol (o-PP)	1000ppm	Extraction with KOH, GCMS
Perfluorinated and Polyfluorinated Chemicals (PFCs)			
Various	PFOS (Perfluorooctane Sulfonate) and PFOS metallic salt, halogenide, amide and other derivatives	Under 1 µg/m ²	CEN/TS 15968
Various	PFOA (Perfluorooctanoic acid) and its salts, esters	Under 1 µg/m ² , total 25ppb	CEN/TS 15968
Various	PFOA related substances	Under 1,000ppb	CEN/TS 15968

CAS NO.	Restricted Substance	Brooks Limit	Test Method and Comments
Pesticides (32 kinds)			
93-72-1	2-(2,4,5-trichlorophenoxy) propionic acid, its salts and compounds; 2,4,5-TP	Usage ban (under 0.5ppm)	US EPA 8081B, 3620B, 3630C
93-76-5	2,4,5-trichlorophenoxyacetic acid, its salts and compounds		
309-00-2	Aldrin		
57-74-9	Chlordane		
72-54-8	Dichloro-diphenyl-dichloro ethane (DDD)		
72-55-9	Dichloro-diphenyl-dichloro ethylene (DDE)		
50-29-3	Dichloro-diphenyl-trichloro ethane (DDT)		
60-57-1	Dieldrine		
72-20-8	Endrine		
76-44-8	Heptachlor		
1024-57-3	Heptachloroepoxide		
118-74-1	Hexachlorobenzene		
608-73-1	Hexachlorocyclohexane (HCH, all isomers)		
465-73-6	Isodrin		
4234-79-1	Kelevane		
143-50-0	Kepone (Chlordecone)		
58-89-9	Lindane		
72-43-5	Methoxychlor		
2385-85-5	Mirex		
72-56-0	Perthane		
82-68-8	Quintozene		
8001-50-1	Strobane		
297-78-9	Telodrine		
8001-35-2	Toxaphene		
Various	Halogenated naphthalenes, including polychlorinated naphthalenes (PCNs)		
116-06-3	Aldicarb		
6164-98-3	Chlordimeform		
115-32-2	Dicofol		
121-75-5	Malathione		
298-00-0	Methyl Parathion		
56-38-2	Parathion; Ethylparathione		
57648-21-2	Timiperone (DTTB)		

CAS NO.	Restricted Substance	Brooks Limit	Test Method and Comments
Phthalates (19 kinds)			
28553-12-0 117-81-7 117-84-0 26761-40-0 85-68-7 84-74-2 84-75-3 84-69-5 68515-42-4 71888-89-6 117-82-8 605-50-5 776297-69-9 84-66-2 131-18-0 84777-06-0 68515-50-4 84-61-7 various	di-isononyl phthalate (DINP) di(ethylhexyl) phthalate (DEHP) di-n-octyl phthalate (DNOP) di-iso-decyl phthalate (DIDP) butyl benzyl phthalate (BBP) dibutyl phthalate (DBP) di-n-hexyl phthalate (DnHP) Diisobutyl Phthalate (DIBP) 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) Bis(2-methoxyethyl) phthalate (DMEP) Diisopentylphthalate (DIPP) N-pentyl-isopentylphthalate Diethyl phthalate (DEP) Dipentyl phthalate (DPP) 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear Dicyclohexyl phthalate 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters	500ppm each Total 1,000ppm	GC-MS analysis CPSC-CH-C1001-09.4
PAHs (Polycyclic Aromatic Hydrocarbons) (18 kinds)			
56-55-3 50-32-8 205-99-2 192-97-2 205-82-3 207-08-9 218-01-9 53-70-3 191-24-2 193-39-5 91-20-3 83-32-9 208-96-8 120-12-7 206-44-0 86-73-7 85-01-8 129-00-0	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(e)pyrene (BeP) Benzo(j)fluoranthene(BjFA) Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Benzo(ghi)perylene Indeno(1,2,3-cd)pyrene Naphthalene Acenaphthene Acenaphthylene Anthracene Fluoranthene Fluorene Phenanthrene Pyrene	1 ppm each for yellow highlight 2 ppm for green highlight 10.0ppm for sum of 18 PAHs	AFPS GS 2019:01 PAK
Polyvinyl Chloride			
9002-86-2	Polyvinyl Chloride (PVC)	Not Detected	Beilstein test plus Fourier Transform-Infrared Spectroscopy

CAS NO.	Restricted Substance	Brooks Limit	Test Method and Comments
	Volatile Organics (30 kinds)		
75-12-7 68-12-2 127-19-5 872-50-4	Formamide Dimethyl formamide (DMFa) Dimethylacetamide (DMAC) N-Methyl-2-pyrrolidone (NMP)	200ppm for Formaldehyde 1ppm for Benzene 10ppm for Phenol	ISO/TS 16189 Headspace GC/MS for Benzene
50-00-0 75-15-0 108-94-1 71-43-2 100-41-4 108-95-2 108-88-3 75-35-4 79-01-6 127-18-4	Formaldehyde Carbon Disulfide Cyclohexanone Benzene Ethylbenzene Phenol Toluene 1,1-Dichloroethylene Trichloroethylene Tetrachloroethylene	1000ppm for sum of VOCs For EAV, PU or TPU film, Synthetic leather, only check the yellow highlighted substances. For adhesive, primer, ink, please check all VOCs.	
95-48-7 108-39-4 106-44-5 1330-20-7 85-47-6 108-38-3 106-42-3	Cresol (Methylphenole): o-cresol, m-cresol, p-cresol Xylene: o-xylene m-xylene, p-xylene		
75-09-2 67-66-3 56-23-5 107-06-2 71-55-6 79-00-5 630-20-6 79-34-5 76-01-7	Dichloromethane Chloroform Carbon tetrachloride 1,2-Dichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Pentachloroethane		
	UV Inhibitors (4 kinds)		
3846-71-7 3864-99-1 25973-55-1 36437-37-3	2-benzotriazol-2-yl-4,6-di-tert-butylphenol 2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol	1,000ppm each	ADIN EN 62321-6: 2016-05
CAS NO.	Restricted Substance	Brooks Limit	Test Method
1336-36-3 53469-21-9	Halogenated biphenyls, including Polychlorinated Biphenyls (PCBs)	Not detected (under 50ppm)	US EPA 3550B/8082A
	Halogenated terphenols, including Polychlorinated Terphenyls (PCTs)	Usage ban (under 50ppm)	US EPA 8082
121-14-2	2,4-Dinitrotoluene (DNT)	1000ppm	Screening by GC-MS
91-22-5	Quinoline	50ppm	AFPS GS 2014

CAS NO.	Parameter	Brooks Limit	Test Method
	pH value	Textile: 4.0 – 7.5 Leather: 3.5 – 7.5	Textile: BS EN ISO 3071 Leather: ISO 4045
	Odor Odor test for components and finished products (not always required)	≤ Grade 2	SNV195 651

6. RESTRICTED SUBSTANCES TESTING PROCESS

6.1. Routine Tests

Brooks RS team will identify materials by color, vendor, ingredient and production origin for RS testing via the Brooks Test Request Form (Appendix 5). Suppliers must arrange and pay for testing.

6.2. Random Tests

Brooks may randomly test materials, components or finished products at any stage of production. Testing is a prerequisite for shipping.

6.3. Frequency of Testing

Material Type	Color	Minimum Required Frequency
All materials used in Brooks' product		Once per year
Mesh and PU	Neon and metallic colors	Each Year or Each season
	Base colors (including red, yellow, blue, black, white)	Once per year (note: the number of colors and tests can vary by supplier)
Polymers (rubber, EVA, TPU or other)	Neon or metallic colors	Each year or each season
	Other colors	Once per year
Recycled outsole/midsole polymers		Consult with Brooks RS team.

6.4. Approved Testing Laboratories

All the tests must be done in a Brooks-approved testing laboratory, see Appendix 1.

6.5. Failed Tests

For any failed test, the Supplier must notify Brooks immediately and complete the Brooks Corrective Action Form (Appendix 2). The Corrective Action Plan must be implemented within one week. You must consult with Brooks to determine next steps. Even if you choose to re-test you must still report the failed test to Brooks immediately. Note: Brooks reserves the right to reject the material or all material from a supplier as a result of multiple failed tests.

7. TESTING MATRIX

7.1. Key Chemical Test List – Footwear

The following table provides test requirements for different material types used in Brooks footwear and identifies high risk parameters for RS testing.

Substances	Natural Fibers	Synthetic Fibers	Blends	Coating & Printing on textile/leather	Polymer (EVA, TPU, Foam)	Rubber	Natural Leather	Synthetic leather	Ink, Paint, Pigment	Adhesive, Solvent, Primer	Metal Items	Paper insole
AZO Dyes	●	●	●	●			●	●				
Disperse/Carcinogenic Dyes	●	●	●	●			●	●				
PCP/ TeCP	●		●	●			●					●
Total Metal				●	●	●	●	●	●		●	●
Nickel – Release											●	
Chromium VI							●					
Extractable Metal	●	●	●	●				●				
Formaldehyde	●	●	●	●			●	●				●
AP, APEO	●	●	●	●	●	●	●	●	●	●		
Organotin Compounds				●	●	●	●	●	●	●		
Phthalates				●	●	●		●	●	●		
PVC				●	●							
Nitrosamines						●						
DMFu							●					
PAHs				●	●	●		●	●			
VOCs				●	●			●	●	●		
PFOS/PFOA	○	○	○	○				○				

● Must be tested.

○ Only for water repellent functions.

Notes:

- PVC, DMFu and PFOS/PFOA (including all C8-based perfluorinated chemicals) must not be used in Brooks footwear.
- AZO Dyes and Disperse Dyes are exempt from the testing requirement if the color is white or transparent.
- All Brooks Products must adhere to the requirements of the REACH Substances of Very High Concern (SVHC), see Appendix 3.

7.2. Key Chemical Test List – Apparel

The following table provides test requirements for different material types used in Brooks footwear and identifies high risk parameters for RS testing.

Substances	Natural Fibers	Synthetic Fibers	Blends	Polymer (EVA, TPU, Foam, RB)	Natural Leather	Synthetic leather	Ink, Paint, Pigment	Metal Items
AZO Dyes	●	●	●		●	●		
Disperse Dyes	●	●	●		●	●		
Carcinogenic Dyes	●	●	●		●	●		
PCP/ TePC	●		●		●			
Pesticides	●		●					
Nickel – Release								●
Chromium VI					●			
Total Metal				●	●	●	●	●
Extractable Metals	●	●	●					
Formaldehyde	●	●	●		●	●		
AP, APEO	●	●	●	●	●	●	●	
Organotin Compounds	●	●	●	●	●	●	●	
Phthalates				●		●	●	
PVC				●				
VOCs				●		●	●	
Ph value	●	●	●		●	●		
PFOS/PFOA	○	○	○			○		
Flame Retardants	○	○	○	○	○	○		

● Must be tested.

○ Only for water repellent functions or if the material is treated by flame retardants.

Notes:

- PVC, Flame Retardants, Pesticides and PFOS/PFOA must not be used in Brooks apparel.
- AZO Dyes, Carcinogenic Dyes and Disperse Dyes are exempt from the testing requirement if the color is white or transparent.
- For fabrics, neon and metallic colors should be tested each season, rather than annually. Base colors are checked annually, including red, yellow, blue, black, white. The number of colors and tests can vary by Supplier.
- All Brooks Products must adhere to the requirement of the REACH Substances of Very High Concern (SVHC), see Appendix 3.

8. MANUFACTURING RESTRICTED SUBSTANCES LIST (MRSL)

Brooks requires manufacturers to meet the standards in the Zero Discharge of Hazardous Chemicals (ZDHC) [MRSL](#). Suppliers must not intentionally introduce chemicals listed in the ZDHC MRSL, especially where there are substitutes for them.

Document all chemicals used in the manufacturing process as well as the supplier of each on the Brooks Chemical Register Form (Appendix 4). This list must include (but is not limited to) all outsole and midsole raw material, inks, primers, adhesives, paint, dye and related dyeing process chemicals, leather tanning chemicals, equipment maintenance chemicals. Suppliers must keep a Material Safety Data Sheet (MSDS) on file for each chemical.

This Chemical Register Form (Appendix 4) will help supplier identify chemical potential risk based on ZDHC MRSL. Once potential risk is identified, supplier needs verify any claim to conform to ZDHC MRSL. Valid claim includes 3rd party test report, accepted 3rd party certification, accepted self-declaration, etc. Brooks may request all documents related for further check. If raw chemical material can not comply with ZDHC MRSL, the supplier related has to make and implement a corrective action plan. Brooks will supervise the implementation.

9. PACKAGING RESTRICTED SUBSTANCES REQUIREMENTS

Packaging includes, but is not limited to:

- Hand Tags
- Shoe Boxes
- Swifttachs
- Clamshells
- Labels (UPC, case lot and carton)
- Hangers
- Retail, Gift and Specialty Boxes
- Bags and Polybags
- Corrugated Cartons
- Shipping Pallets
- Slip Sheets
- Tissue Paper
- Foam
- Size Strips
- Inserts
- Tape

Anything used for the containment, protection, handling, delivery and presentation of goods, is considered packaging.

You are required to keep the following two documents on file for any packaging material you use, and you must be able to produce these to Brooks at any time upon our request:

1. Material Data Safety Sheet
2. Test Report

9.1. Testing Requirements

Before production begins, you are required to obtain third party testing of any new packaging material. After the first test, material should be re-tested at least every year. Retain copies of test results and be able to submit them to Brooks immediately upon request.

Paper Packaging needs to be tested: Metal, Formaldehyde, Odor.

Plastic Packaging needs to be tested: Metal, Phthalates, Formaldehyde, BHT, PVC.

9.2. Packaging Restricted Substances List (PRSL)

CAS NO.	Restricted Substance	Brooks Limit	Test Method
7439-92-1 7440-43-9 7439-97-6 18540-29-9	Metals Lead Cadmium Mercury Chromium VI	Total sum of all metals: 100ppm	Microwave digestion with nitric acid, analysis by ICPMS
28553-12-0 117-81-7 117-84-0 26761-40-0 85-68-7 84-74-2 84-69-5	Phthalates Di-isononyl phthalate (DINP) Di(ethylhexyl) phthalate (DEHP) Di-n-octyl phthalate (DNOP) Di-iso-decyl phthalate (DIDP) Butyl benzyl phthalate (BBP) Dibutyl phthalate (DBP) Di-isobutyl phthalate (DIBP)	Not Detected for DEHP, BBP and DBP Total 500ppm for others	CPSC-CH-C1001-09.4
9002-86-2	(Polyvinyl Chloride) PVC	Must not be used	Beilstein test plus Fourier Transform-Infrared Spectroscopy
80-05-7	Bis-phenol A (BPA)	Not Detected	Analysis is conducted by HPLC/MS
128-37-0	Butylhydroxytoluene (BHT)	Must not be used	Industry practice – not specified by the regulation
50-00-0	Formaldehyde	75ppm	ISO 14184-1 Leather: ISO 17226-2
624-49-7	Dimethyl Fumarate	Must not be used	ISO/TS 16186
	Active packaging	Must not be used	Visual confirmation
	Odor test	≤ Grade 2	SNV195 651

APPENDIX 1: APPROVED LABORATORIES FOR RESTRICTED SUBSTANCES TESTING

Use only these Brooks-approved laboratories for third party testing. Retain all test results and upon request, immediately produce test results to Brooks.

Lab	Address	Contact
Footwear		
Intertek - GZ	Intertek South China, E201, No.7-2, Caipin Road, Guangzhou Science City, GETDD Guangzhou. 510663	Kammy Jin kammy.jin@intertek.com Lisa Liu lisa.qi.liu@intertek.com Tel: 86-20-82139019
Intertek - Vietnam	Intertek Vietnam, 8 th floor of Lobby D at S.O.H.O Biz Office Building No 38 Huynh Lan Khanh St., Ward 2, Tan Binh District, HCM City	Thanh NQ Nguyen thanh.nq.nguyen@intertek.com Nhung Thi Hong Nguyen Hongnhung.nguyen@intertek.com Tel: 84-28 62971099-ext 172
CTI - SZ	Centre Testing International Corporation, F5, CTI Building, No.4, Liuxian 3 rd Road, Xin'an Street, Bao'an Dis Shenzhen, P.R. China, 518101	Simon Simon.peng@cti-cert.com Tel:86-755-33683434; Merry Merry.Lan@cti-cert.com Tel: 86-75-33681919
TUV - GZ	TUV SUD China 5F, Communication Building, 163 Pingyun Rd, Huangpu Ave. West Guangzhou 510656 P.R. China	Jay Jay.guo@tuv-sud.cn Tel: 86-20-38153468
BV - Vietnam	Lot C7-C9, Conurbation 2, Cat Lai Industrial Zone, Thanh My Loi Ward District 2, HCMC Vietnam	Kiara Nguyen Kiara.Nguyen@bureauveritas.com Tel: 84-2837421604 Nancy Tran Nancy.Tran@bureauveritas.com Tel: 84-2837423888
SGS - HK	SGS Hong Kong Ltd. 4/F On Wui Centre, 25 Lok Yip Road, Fanling, N.T., Hong Kong, China	Sarah Wang Sarah-sh.wang@sgs.com Tel: 852-60182983
SGS - GZ	198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663	Kitty Zhang Kitty.Zhang@sgs.com Tel: 86-20-82155601
SGS - Vietnam	Lot III/21, 19/5A Street, Industrial Group III, Tan Binh Industrial Zone, Tay Thanh Ward, Tan Phu District, Ho Chi Minh City, Vietnam	Ngan Thai Ngan.Thai@sgs.com Tel: 84-28 38160999 (ext.193)
Apparel		
Intertek – Taiwan	Intertek Taiwan Office, 8F, No. 423, Ruiguang Road, Neihu District, Taipei, 11492	Tel: +886 2 66022888 www.intertek.com
Bureau Veritas – Guatemala	Bureau Veritas, Consumer Products Services, Guatemala, S.A.L OO	Tel: +502 2300 9000 www.bureauveritas.com
Intertek – Guatemala	Intertek Guatemala 46 Calle 21-53 zona 12, Expo 46. Edificio No.10, Guatemala City, Guatemala 01012	Tel: +502 2303 5800 www.intertek.com
Intertek – El Salvador	Col. Rasa #2 Calzada #1 Casa# 39, Acajutla, Sonosonate	Tel: +503 2452 4607 /2452 5415 Tel: +503 2452 5809

Each Brooks approved laboratory is a global testing house. They have different branches or labs in different areas and countries. If you wish to use a branch which is not listed, please contact Victor Song:
Victor.Song@brooksrunning.com.

APPENDIX 2: BROOKS RSL CORRECTIVE ACTION FORM

Supplier Name & address:	Material/Component/Product description:	Color tested:	Laboratory tested:
Contact person name, phone & email:	Test Report No & Date tested:	Failure parameter & result:	Brooks Requirements:
Factory Supplied to & Quantity Supplied:			

Why is this chemical used in your process?

Were you aware that this chemical was in the Brooks RSL?

What is your corrective action plan & schedule, including how to prevent failures in future, the material replacement or production process change to ensure Brooks RSL compliance?

Who will be responsible to manage the action plan and communicate back to Brooks, including material vendor and related factories?

Signature:

Date:

Submit form to: victor.song@brooksrrunning.com

By signing this form, the Supplier acknowledge that their material or process has been found to be non-compliant to Brooks RSL and that they will implement the documented corrective action. The Supplier is responsible for retesting costs to ensure the corrective action is being sustained.

APPENDIX 3: SUBSTANCES OF VERY HIGH CONCERN (SVHC) LIST

Brooks expects all suppliers to comply with all applicable laws of the countries in which we distribute Brooks products. Below we provide a reference guide of certain laws and guidelines, but we do not represent that this is an exhaustive list. You are responsible for knowing the laws and regulations about the manufacturing and production processes you use.

- REACH – Annex I: <http://echa.europa.eu/web/guest/candidate-list-table>
- Prop 65 and applicable consent decrees (footwear)

APPENDIX 4: BROOKS CHEMICAL REGISTER FORM

List all chemicals used in any component or finished Brooks product (or packaging) in the form on the following page. You are responsible for updating this list with any changes and sending a copy to Brooks with any updates or new information. All chemicals must be identified and listed in the form and must be tested or verified to ensure ZDHC MRSL compliance, including ink, paint, pigment, solvent, primer, cleaner, adhesive, dye, dye related chemicals, leather tanning chemicals, outsole and midsole related raw chemicals and other chemicals. Suppliers are responsible for all subcontractors' chemical register forms, chemical traceability and have to provide all documents when requested.

BROOKS CHEMICAL REGISTER FORM

Factory Name & Location:

Quarterly Checked by & Date:

[illegible]

APPENDIX 5 : BROOKS TEST REQUEST FORM

Test Lab:		Submit Date:	
<input type="checkbox"/> Footwear	<input type="checkbox"/> Accessory & gear	<input type="checkbox"/> Apparel	
Supplier Information			
Vendor Name:			
Supplier Address:			
Contact Person:		Email:	
TEL:		FAX:	
Invoice to:			
Sample Information			
Sample Description:		Color:	
Finished Product Factory Name:			
Product Category <input type="checkbox"/> Adults <input type="checkbox"/> Kids			
Testing Information (Material Test Package)			
<input type="checkbox"/> Natural Fibers	<input type="checkbox"/> Synthetic Fibers	<input type="checkbox"/> Blends	
<input type="checkbox"/> Polymer	<input type="checkbox"/> Rubber	<input type="checkbox"/> Natural Leather	
<input type="checkbox"/> Synthetic Leather	<input type="checkbox"/> Ink, Paint & Pigment	<input type="checkbox"/> Chemical, Solvent adhesive & Primer	
<input type="checkbox"/> Paper Insole	<input type="checkbox"/> Packaging	<input type="checkbox"/> Coating & Printed Textile	
Testing Information (Individual Test)			
<input type="checkbox"/> AZO Dyes	<input type="checkbox"/> Disperse/Carcinogenic Dyes	<input type="checkbox"/> Ph Value	
<input type="checkbox"/> PCP/TePC	<input type="checkbox"/> Total Metals	<input type="checkbox"/> Extractable Metals	
<input type="checkbox"/> Chromium VI	<input type="checkbox"/> Nickel - Release	<input type="checkbox"/> DMFu	
<input type="checkbox"/> Formaldehyde	<input type="checkbox"/> AP, APEO	<input type="checkbox"/> Organotin Compounds	
<input type="checkbox"/> Phthalates	<input type="checkbox"/> PVC	<input type="checkbox"/> Nitrosamines	
<input type="checkbox"/> Pesticides	<input type="checkbox"/> PAHs	<input type="checkbox"/> VOCs	
<input type="checkbox"/> PFOS, PFOA	<input type="checkbox"/> Flame Retardants	<input type="checkbox"/> Acetophenone	
<input type="checkbox"/> 2-phenyl-2-propanol			
Test Type: <input type="checkbox"/> First Test <input type="checkbox"/> Retest (Previous Report No.:)			
Service Requested (Working days start at sample receipt) <input type="checkbox"/> Regular: 5 working days <input type="checkbox"/> Express: 3 working days (surcharge)		Remark: All test reports should be copied to Victor.song@brooksrrunning.com	