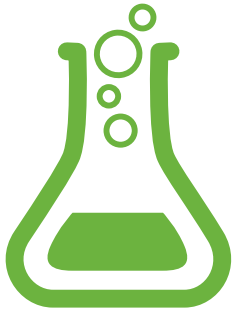

NIKE, INC., RESTRICTED SUBSTANCES LIST & SUSTAINABLE CHEMISTRY GUIDANCE

JANUARY 2016, Version 1.0

Always visit www.nikeincchemistry.com to verify that you have the most recent version of the RSL.

Please note: The online version of this document is official. All printed versions are uncontrolled copies.

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OVERVIEW

All materials manufactured for Nike, Nike Affiliate or Licensee products on or after April 14, 2016, must comply with the requirements in this document.

Please refer to Nike, Inc., RSL Implementation Guidance on page 22 for more information.

As part of NIKE, Inc.'s commitment to protect consumers, workers and the environment, we updated the Nike, Inc., Restricted Substances List & Sustainable Chemistry Guidance. This publication and future updates inform Nike, Inc.,'s manufacturers and suppliers about:

- **Restricted Substances List (RSL).** Generally based on the strictest global legislation.
- **Sustainable Chemistry Guidance (SCG).** Designed to inspire and drive innovations that could lead to more sustainable product.

The ultimate goals of the Nike, Inc., RSL and SCG are to:

- Ensure products comply with the strictest global legislation.
- Ensure targeted substances are limited or eliminated.
- Enable sustainable product innovation.

This publication also includes:

- Nike, Inc., Green Chemistry Program overview
- Manufacturing Restricted Substances List (MRSL)
- Nike, Inc., Nanotechnology Requirements
- Nike, Inc., Odor Management Guidelines
- Nike, Inc., Animal Skin Policy

COMPLIANCE

RSL Implementation Guidance, on page 22, lists the date when each RSL update becomes effective. It is our intent to give suppliers enough lead time to understand changes and take steps to become compliant; however, there may be special circumstances—such as breaking legislation—that will result in shorter notice.

SUPPLY AGREEMENTS

Nike, Inc., supply agreements reflect the need for compliance with RSL requirements. This compliance is in addition to our Code of Conduct, quality standards and other health and safety standards. All materials used in Nike, Affiliates and Licensee products must comply with RSL requirements.

SPECIAL REQUIREMENTS

- RSL test results will be valid for one year from the test date unless otherwise stated. Nike, Inc., reserves the right to request testing at any time on any material.
- No change to process or chemicals is allowed once an RSL PASS has been received for a material.
- Use of a subcontractor is not allowed unless it is approved by Sustainable Manufacturing & Sourcing and has RSL confirmation.

OVERVIEW

RSL TRAINING SIGN UP

Vendors

Please log into the Nike Vendor Portal. Download the PDF document "Chemistry Scoring Changes in 2016," and follow the instructions.

Factories and other manufacturers

If you do not have access to the Nike Vendor Portal, please contact your local Nike, Inc., representative. If you do not know your local Nike contact, please reach out to the most appropriate Nike, Inc., representative listed on page 60.

RSL & CHEMICALS MANAGEMENT TRAINING IN 2016

In early 2016, Nike will begin rolling out RSL training and chemicals management training events across our entire supply chain so that our partners Master the Fundamentals of the Nike RSL program and operate effective chemicals management systems. Training will be delivered in region and, in most cases, in local languages.

- **Day 1—Mandatory RSL training for all vendors and suppliers.** This workshop-based eight-hour session focuses on understanding Nike RSL policy, RSL implementation and test sample selection, submission of test samples and the failure-resolution process.
- **Day 2—Optional chemicals management and sustainability training.** This training focuses on procuring formulations that comply with the Manufacturing Restricted Substances List (MRSL), chemicals management in the facility, evaluating chemicals for hazards and review of tools and resources available for sustainable production. This second day of training is a prerequisite for engaging with Nike in the Validation of a Greening Effort Program, outlined later in this document.

Nike Materials Sustainability Index (Nike MSI) points are awarded to vendors completing these trainings. Please access the Nike Vendor Portal (www.nikemsivp.com) for complete details.

CRITICAL CHANGES IN NIKE MATERIAL SUSTAINABILITY INDEX SCORING

The way that Nike scores chemistry in Nike MSI is being revised for 2016. All vendors producing materials for Nike, Inc., need to participate in the RSL training program as soon as possible to avoid loss of Nike MSI points when the scoring update takes effect in October 2016. Note that the total number of points available to vendors for chemistry remains unchanged. Nike, Inc., vendors can find the complete details of the chemistry scoring revisions on the Nike Vendor Portal (www.nikemsivp.com).

NIKE, INC., RESTRICTED SUBSTANCES LIST

Chemical restrictions for every material and every component used in Nike Apparel, Footwear and Equipment.

NIKE RESTRICTED SUBSTANCES LIST

VOLUNTARY CHEMICAL RESTRICTIONS, PHASE-OUTS AND GUIDANCE

Nike has voluntarily restricted or phased out the following chemicals:

- **Long-chain, C8-based perfluorinated chemicals (PFCs)**
  Nike phased out the use of C8-based perfluorinated chemistries as of January 1, 2015.

- **Polyvinyl Chloride (PVC)**
  Nike has been committed to the complete phase-out of PVC from the supply chain since 2011.

- **Formaldehyde**
  Nike limits are more stringent than legislated limits. Nike requires ALL materials to be <75ppm for Little Kids, Big Kids and Adults.

- **Alkylphenol Ethoxylates (APEOs) and Alkyphenols (APs)**
  Nike is committed to a continued phase-out approach for APEOs and APs. Legislated limits are 1,000 mg/kg for APs and APEOs in finished products. Nike has a current target of 100 mg/kg, with a do-not-ship limit of 500 mg/kg. This reduction supports efforts to reach the 100mg/kg goal as listed in the Nike RSL.

- **Antimicrobials and biocides**
  Nike has strict guidance on the use of any antimicrobial or biocidal products. These limits are included in the RSL table that starts on page 7, and more information can be found in the Nike, Inc., Odor Management, Antimicrobial and Scented Material Guidelines.

- **Nanomaterials**
  Nike has strict guidance on the inclusion of any nanomaterials in Nike products. Find more information in the Nike, Inc., Nanotechnology Material Guidelines.

- **Manufacturing Restricted Substances List (MRSL)**
  Nike has expanded the MRSL to help manufacturers produce products that meet Nike RSL requirements and support our goal to achieving Zero Discharge of Hazardous Chemicals (ZDHC) by 2020. The MRSL has been developed in conjunction with all member brands of the ZDHC coalition. For more information, see page 46 and visit www.roadmaptozero.com.

NIKE, INC., RESTRICTED SUBSTANCES LIST (RSL)

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Alkylphenols (APs) Nonylphenols (CAS# multiple isomers) Octylphenols (CAS# multiple isomers)	Legislated and Nike, Inc., requirement NOTE: Separate legislated and Nike, Inc., limits designate the start of a phased approach toward removing these substances from the Nike, Inc., supply chain	Sum of NP and OP 50 mg/kg	Sum of NP and OP 10 mg/kg	NP/OP Solvent extraction, GC-MS or LC-DAD-MS
Alkylphenol Ethoxylates (APEOs) Nonylphenol ethoxylate (C2H4O)nC15H24O (CAS# multiple isomers) Octylphenol ethoxylate (C2H4O)nC14H22O (CAS# multiple isomers)	Legislated and Nike, Inc., requirement NOTE: Separate legislated and Nike, Inc., limits designate the start of a phased approach toward removing these substances from the Nike, Inc., supply chain	Sum of NPEO and OPEO 500 mg/kg 100 mg/kg (Nike, Inc., - product) Implications of limits >500 mg/kg DO NOT SHIP >100 mg/kg and <500 mg/kg Follow up required <100 mg/kg Meets all Nike, Inc., criteria	Sum of NPEO and OPEO 20 mg/kg	NPEO/OPEO Methanol extraction, LC-MS or LC-DAD. Calibration with isomeric mixtures and reported as sum of isomers (n=4 to n=14)
Asbestos Actinolite (77536-66-4) Amosite (12172-73-5) Anthrophyllite (77536-67-5) Chrysotile (12001-29-5) Crocidolite (12001-28-4) Tremolite (77536-68-6)	Legislated	Not detected	Not applicable	Nike, Inc., in-house method Microscopic examination; minimum magnification 1-250, polarized light filter attached; ratio of fiber length to diameter is at least 3:1

NIKE RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Bisphenol A (BPA) Food contact items including water bottles and mouth guards	Nike, Inc., requirement	Banned from use as a monomer in the production of items that come into contact with food.		
Chlorinated Phenols Pentachlorophenol (PCP), its salts and esters (87-86-5 PCP) Tetrachlorophenol (TeCP) (25167-83-3) Trichlorophenol (TCP), sum of isomers (No CAS number)	Legislated	Prohibited Nike, Inc., defined as <0.05 mg/kg Nike, Inc., defined as <0.2 mg/kg	0.05 mg/kg	§ 64 LFGB BVL B 82.02-8
Chromium VI (18540-29-9) See also: Leachable Metals, Apparel	Legislated	Not detected See test method detection limit	3 mg/kg Detection limit per test method	ISO 17075 Note: Test method detection limit is 3 mg/kg
Dimethyl Fumarate (624-49-7)	Legislated	0.1 mg/kg	0.1 mg/kg	Nike, Inc., in-house method Ultrasound extraction with organic solvent, GC-MS analysis

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Dioxins and Furans Group 1 2,3,7,8-Tetrachlorodibenzo-p-dioxin (1746-01-6) 1,2,3,7,8-Pentachlorodibenzo-p-dioxin (40321-76-4) 2,3,7,8-Tetrachlorodibenzofuran (51207-31-9) 2,3,4,7,8-Pentachlorodibenzofuran (57117-31-4) Group 2 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (39227-28-6) 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (19408-74-3) 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (57653-85-7) 1,2,3,7,8-Pentachlorodibenzofuran (57117-41-6) 1,2,3,4,7,8-Hexachlorodibenzofuran (70648-26-9) 1,2,3,7,8,9-Hexachlorodibenzofuran (72918-21-9) 1,2,3,6,7,8-Hexachlorodibenzofuran (57117-44-9) 2,3,4,6,7,8-Hexachlorodibenzofuran (60851-34-5) Group 3 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (35822-46-9) 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (3268-87-9) 1,2,3,4,6,7,8-Heptachlorodibenzofuran (67562-39-4) 1,2,3,4,7,8,9-Heptachlorodibenzofuran (55673-89-7) 1,2,3,4,6,7,8,9-Octachlorodibenzofuran (39001-02-0) Group 4 2,3,7,8-Tetrabromodibenzo-p-dioxin (No CAS #) 1,2,3,7,8-Pentabromodibenzo-p-dioxin (No CAS #) 2,3,7,8-Tetrabromodibenzofuran (No CAS #) 2,3,4,7,8-Pentabromdibenzofuran (No CAS #) Group 5 1,2,3,4,7,8-Hexabromodibenzo-p-dioxin (No CAS #) 1,2,3,7,8,9-Hexabromodibenzo-p-dioxin (No CAS #) 1,2,3,6,7,8-Hexabromodibenzo-p-dioxin (No CAS #) 1,2,3,7,8-Pentabromodibenzofuran (No CAS #)	Legislated	Sum of Group 1 1 µg/kg Sum of Groups 1 and 2 5 µg/kg Sum of Groups 1, 2 and 3 100 µg/kg Sum of Group 4 1 µg/kg Sum of Groups 4 and 5 5 µg/kg	0.1 µg/kg Per congener (Dioxin or Furan)	USEPA 8290
Dyes, Acid Acid Red 26 (3761-53-3)	Legislated	Prohibited	15 mg/kg (1 mg/L)	DIN 54231

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Dyes, Azo Restricted amines – from Azo dyes 4- Aminodiphenyl (92-67-1) Benzidine (92-87-5) 4-Chloro-o-Toluidine (95-69-2) 2- Napthylamine (91-59-8) o-Aminoazotoluene (97-56-3) 2-Amino-4-nitrotoluene (99-55-8) 2,4 Diaminoanisole (615-05-4) 4,4 Diaminodiphenylmethane (101-77-9) 3,3-Dichlorobenzidine (91-94-1) 3,3-Dimethoxybenzidine (o-Dianisidine) (119-90-4) 3,3-Dimethylbenzidine (o-Tolidine) (119-93-7) 3,3-Dimethyl-4,4'-diaminodiphenylmethane (838-88-0) p-Chloroaniline (106-47-8) p-Cresidine (120-71-8) 4,4-Methylene-bis-(2-chloroaniline) (101-14-4) 4,4-Oxydianiline (101-80-4) 4,4-Thiodianiline (139-65-1) 2,4-Toluenediamine (95-80-7) o-Toluidine (95-53-4) 2,4,5-Trimethylaniline (137-17-7) o-Anisidine (90-04-0) p-Amino-azobenzene (60-09-3) 2,4-Xylidine (95-68-1) 2,6-Xylidine (87-62-7)	Legislated	20 mg/kg Per listed amine in product	10 mg/kg Per listed amine in product	Nike, Inc., in-house method Textiles EN14362-1 :2012 Leather ISO 17234-1:2010 p-Aminoazobenzene Confirmation Textile EN 14362-3:2012 Leather ISO 17234-2:2011
Screening tests for all Nike, Inc., products p-Toluidine (106-49-0) m-Toluidine (108-44-1)	Information only			
Navy blue, multicomponent mixture Component 1 (118685-33-9) Component 2 (No CAS # listed) EC Index number 611-070-00-2		Prohibited	10 mg/kg	DIN 54231 Supplemental test only; not included in Azo dyes test package

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Dyes, Basic Basic Red 9 (569-61-9) Basic Violet 14 (632-99-5) Basic Blue 26 (2580-56-5)	Legislated	Prohibited	15 mg/kg (1 mg/L)	DIN 54231
Dyes, Direct Direct Black 38 (1937-37-7) Direct Blue 6 (2602-46-2) Direct Red 28 (573-58-0)	Legislated	Prohibited	15 mg/kg (1 mg/L)	DIN 54231
Dyes, Disperse — Sensitizing Disperse Blue 1 (2475-45-8) Disperse Blue 35 (12222-75-2) Disperse Blue 106 (12223-01-7) Disperse Blue 124 (61951-51-7) Disperse Red 1 (2872-52-8) Disperse Orange 3 (730-40-5) Disperse Orange 37/59/76 (13301-61-6) Disperse Yellow 3 (2832-40-8) Disperse Yellow 23 (6250-22-3) Additional Restricted Dyes Disperse Blue 3 (2475-46-9) Disperse Blue 7 (3179-90-6) Disperse Blue 26 (3860-63-7) Disperse Blue 102 (12222-97-8) Disperse Yellow 1 (119-15-3) Disperse Yellow 9 (6373-73-5) Disperse Yellow 39 (12236-29-2) Disperse Yellow 49 (54824-37-2) Disperse Orange 1 (2581-69-3) Disperse Orange 11 (82-28-0) Disperse Red 11 (2872-48-2) Disperse Red 17 (3179-89-3) Disperse Brown 1 (23355-64-8)	Legislated Nike, Inc., requirement	Prohibited For each dye listed See test method detection limit	5 mg/L in extract For each dye listed See test method detection limit	Nike, Inc., in-house method Modified E-DIN 54231 Note: Test method detection limit is 5 mg/L in extract

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Flame Retardants Tris-(2,3-dibromopropyl) phosphate (TRIS) (126-72-7) Polybromobiphenyls (PBB) (59536-65-1) Tris-(aziridinyl)-phosphineoxide (Tris-(1-aziridinyl) phosphineoxide) (TEPA) (545-55-1) Pentabromodiphenyl ether (PentaBDE) (32534-81-9) Octabromodiphenyl ether (OctaBDE) (32536-52-0) Bis-(2,3-dibromopropyl) phosphate (5412-25-9) Decabromodiphenyl ether (DecaBDE) (1163-19-5)	Legislated	Not detected For each flame retardant listed	5 mg/kg For each flame retardant listed	Flame Retardants Canada Health Product Safety test method & CEN/EC 52/WG 9/TG2
Fluorinated Greenhouse Gases As defined by (EC) No 842/2006	Legislated	Not detected	0.1 mg/kg	Headspace GC/MS Thermal Desorption GC/MS
Formaldehyde (50-00-0) All materials except Footwear Different limits apply for Infant/Toddler and Adults Infant /Toddler Legislation limits formaldehyde for kids up to 3 years of age.* Adults Legislation limits formaldehyde for Little Kids and Big Kids older than 3 years and Adults.* * 3 years is defined as 36 months — based on size ranges for Infant/Toddler. Footwear Different limits apply for different shoe sizes Shoes <160mm (Nike size 10C and smaller) Shoes >160mm (Nike size 10.5C and larger)	Legislated	All materials except Footwear Infant/Toddler 16 mg/kg Little Kids, Big Kids and Adults 75 mg/kg Footwear materials Shoes <160mm 16 mg/kg Shoes >160mm 75 mg/kg Note: Nike, Inc., limits are more stringent than legislated limits in that ALL Big Kid, Little Kid and Adult products must be <75 mg/kg formaldehyde	16 mg/kg is the stated reporting limit per ISO 14184-1 Per ISO 14184-1, all results less than 16 mg/kg are reported as "non-detect"	Textiles ISO 14184-1 Free and Hydrolyzed Formaldehyde Note: ISO 14184-1 is selected for its reliability and comparability between laboratories Leather ISO 17226-1

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Metals				Nike, Inc., in-house method
All Nike, Inc., Apparel, Footwear and Equipment				Total metal content by microwave digestion and ICP or AAS analysis (depending on reporting limit requirements)
Cadmium (7440-43-9)	Legislated	Cadmium prohibited; Nike, Inc., defined as <50 mg/kg	Cd 5 mg/kg	
Lead (7439-92-1)	Legislated	Lead 90 mg/kg	Pb 50 mg/kg	
Mercury (7439-97-6)	Legislated/Nike, Inc., requirement limit	Mercury 1 mg/kg	Hg 0.1 mg/kg	
Footwear (up to 14 years or 250 mm size)				For metal alloy analysis, use aqua-regia and hot plate digestion
Arsenic (7440-38-2)	Legislated	Arsenic <100 mg/kg	As 10 mg/kg	
Screening tests				
Natural leather and coated leather products		Natural and coated leather		
Total Chromium (7440-47-3) — screening test for Cr VI	Chromium (VI)	Chromium (total) 3 mg/kg Screening level only; if total Cr found >3 mg/kg, analyze for Cr VI	Cr (total) 3 mg/kg (Screening level only. If total Cr found >3 mg/kg, analyze for Cr(VI)	
All products		All materials		
Tin (7440-31-5) — screening test for organotins	Organotins legislated	Tin 0.1 mg/kg If Tin > 0.1 mg/kg, organotin analysis required	Tin 0.1 mg/kg If Tin >0.1mg/kg, organotin analysis required	

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Metals, Leachable				
Children's products (up to 12 years) Lead in surface coating (7439-92-1)	Legislated	90 mg/kg	50 mg/kg	CNS 4797-2
Apparel, Infant/Toddler (up to 36 months) Antimony (7440-36-0) Arsenic (7440-38-2) Chromium (7440-47-3) Chromium VI (18540-29-9) Cobalt (7440-48-4) Copper (7440-50-8) Lead (7439-92-1) Mercury (7439-97-6) Nickel (7440-02-0) Cadmium (7440-43-9)	Legislated	Apparel, Infant/Toddler Antimony: 30 mg/kg Arsenic: 0.2 mg/kg Chromium: 1 mg/kg Chromium VI: 0.5 mg/kg Cobalt: 1.0 mg/kg Copper: 25 mg/kg Lead: 0.2 mg/kg Mercury: 0.02 mg/kg Nickel: 1.0 mg/kg Cadmium: 0.1 mg/kg	Apparel, Infant/Toddler Antimony: 3 mg/kg Arsenic: 0.02 mg/kg Chromium: 0.1 mg/kg Chromium VI: 0.5 mg/kg Cobalt: 0.1 mg/kg Copper: 2.5 mg/kg Lead: 0.1 mg/kg Mercury: 0.005 mg/kg Nickel: 0.1 mg/kg Cadmium: 0.05 mg/kg	Cr, Cu, Pb – GB/T 17593.1 2006 As, Hg – GB/T 17593.4 2006 Pb, Cd – Leather & Fur: GB/T 22930 2008; Synthetic Leather & textile: GB/T 17593.1 2006 or GB/T 17593.2 2007 As – GB/T 17593.4 2006 or GB/T 17593.2 2007 Determination by ICP-MS or GFAAS
Footwear, Infant/Toddler (up to 36 months) Antimony (7440-36-0) Arsenic (7440-38-2) Barium (7440-39-3) Cadmium (7440-43-9) Chromium (7440-47-3) Lead (7439-92-1) Mercury (7439-97-6) Selenium (7782-49-2)	Legislated	Footwear, Infant/Toddler Antimony: 60 mg/kg Arsenic: 25 mg/kg Barium: 1000 mg/kg Cadmium: 75 mg/kg Chromium: 60 mg/kg Lead: 90 mg/kg Mercury: 60 mg/kg Selenium: 500 mg/kg	Footwear, Infant/Toddler Antimony: 5 mg/kg Arsenic: 0.5 mg/kg Barium: 100 mg/kg Cadmium:25 mg/kg Chromium: 3 mg/kg Lead: 50 mg/kg Mercury: 5 mg/kg Selenium: 50 mg/kg	EN 71-3

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Nickel – Release (7440-02-0) All metal items coming into direct and prolonged contact with skin	Legislated	Maximum release 0.28 µg/cm²/week	Maximum release 0.28 µg/cm²/week	Nickel release by EN 1811:2011 and 12472 - 2005 All samples will have abrasion and release performed.
N-Nitrosamine All Rubber Footwear materials N-nitrosodimethylamine (NDMA) (62-75-9) N-nitrosodiethylamine (NDEA) (55-18-5) N-nitrosodipropylamine (NDPA) (621-64-7) N-nitrosodibutylamine (NDBA) (924-16-3) N-nitrosopiperidine (NPIP) (100-75-4) N-nitrosopyrrolidine (NPYR) (930-55-2) N-nitrosomorpholine (NMOR) (59-89-2) N-nitroso N-methyl N-phenylamine (NMPhA) (614-00-6) N-nitroso N-ethyl N-phenylamine (NEPhA) (612-64-6)	Legislated	Not detected Nike, Inc., defined as <0.5 mg/kg	0.5 mg/kg	GB/T 24153-2009
Organotin Compounds All products Tributyltin (TBT) (56573-85-4) Triphenyltin (TPhT) (668-34-8) Dioctyltin (DOT) (Multiple CAS numbers) All products for Infant/Toddler <36 months Dibutyltin (DBT) (1002-53-5) Screening tests for Monobutyl tin (MBT), Monooctyl tin (MOT) and Tetrabutyl tin.	Legislated Some organotins are not currently restricted by legislation; however, suppliers are encouraged to investigate suitable substitutes for Nike, Inc.,	All products 0.5 mg/kg sum total of TBT and TPhT 100 mg/kg DOT All products for Infant/Toddler <36 months 1.0 mg/kg DBT, Nike, Inc., defined limits Note: Laboratories are also reporting data for Monobutyl tin (MBT), Monooctyl tin (MOT), Dioctyltin (DOT) and Tetrabutyl tin	0.1 mg/kg each for TBT, TPhT, DOT and DBT 0.1 mg/kg each for MBT, MOT and TeBT	Nike, Inc., in-house method Based on ISO 17353:2005 Extraction and derivatization, followed by GCMS analysis

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Perfluorooctane sulphonate (PFOS) and PFOS metallic salt, halogenide, amide and other derivatives	Legislated	1 µg/m^2	1 µg/m^2	Nike, Inc., in-house method Methanol extraction, followed by LC-MS analysis
Perfluorooctanoic acid (PFOA)	Legislated Effective June 2014	Textiles and coated consumer products 1 µg/m2	0.005 mg/kg Textiles and coated consumer products 1 µg/m2	Nike, Inc., in-house method Methanol extraction, followed by LC-MS-MS or LC-MS-TOF Nike, Inc., in-house method Extraction for both surface area and by weight
C8-based Perfluorinated Chemicals (PFCs)	Nike, Inc., requirement to phase out the use of these substances in Nike supply chain by January 1, 2015 www.nikeresponsibility.com/C8phaseout	Prohibited after January 1, 2015	Prohibited	Prohibited
Pesticides Aldicarb (116-06-3) Aldrin (309-00-2) Chlordane (57-74-9) Chlordimeform (6164-98-3) Dichloro-diphenyl-dichloro ethane (DDD) (72-54-8) Dichloro-diphenyl-dichloro ethylene (DDE) (72-55-9) Dichloro-diphenyl-trichloro ethane (DDT) (50-29-3) Dicofol (115-32-2) Dieldrin (60-57-1) Endrin (72-20-8) Heptachlor (76-44-8)	Legislated	Prohibited	0.5 mg/kg each pesticide	USEPA Methods 8081/8151

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Pesticides, continued Heptachlor epoxide (1024-57-3) Hexachlorobenzene (118-74-1) Hexachlorocyclohexane (HCH, all isomers) (608-73-1) Isodrin (465-73-6) Kelevane (4234-79-1) Kepone (chlordecone) (143-50-0) Lindane (58-89-9) Malathion (121-75-5) Methoxychlor (72-43-5) Methyl Parathion (298-00-0) Mirex (2385-85-5) Monomethyl-dibromo-diphenyl methane (99688-47-8) Monomethyl-dichloro-diphenyl methane (81167-70-8) Monomethyl-tetrachloro-diphenyl methane (76253-60-6) Parathion (56-38-2) Perthane (72-56-0) Quintozene (82-68-8) Strobane (8001-50-1) Telodrin (297-78-9) Timiperone (DTTB) (57648-21-2) Toxaphene.(8001-35-2) 2-(2,4,5-trichlorophenoxy) propionic acid (2,4,5-TP) (93-72-1) its salts, and 2-(2,4,5-trichlorophenoxy) propionyl compounds (No CAS #) 2,4,5-trichlorophenoxyacetic acid (2,4-T) (93-76-5), its salts and 2,4,5-trichlorophenoxyacetyl compounds (No CAS #) 2,4-Dichlorophenoxyacetic acid, its salts and compounds (94-75-7) Other pesticides voluntarily limited by Nike, Inc., Alpha Endosulfan (959-98-8) Beta Endosulfan (33213-65-9) Endosulfan (mix of alpha and beta isomers) (115-29-7)	Legislated	Prohibited	0.5 mg/kg each pesticide	USEPA Methods 8081/8151
pH All Products Textile Materials	Legislated	4.0 – 7.5	4.0 – 7.5	AATCC 81 GB/T7573-2009

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Phthalates All esters of o-phthalic acid, including but not restricted to: Di-isononyl phthalate (DINP) (28553-12-0) Di(ethylhexyl) phthalate (DEHP) (117-81-7) Di-n-octyl phthalate (DNOP) (117-84-0) Di-iso-decyl phthalate (DIDP) (26761-40-0) Butyl benzyl phthalate (BBP) (85-68-7) Dibutyl phthalate (DBP) (84-74-2) Di-isobutyl phthalate (DiBP) (84-69-5) 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) (68515-42-4) 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) (71888-89-6) 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear (68515-50-4) Bis-(2-methoxyethyl) phthalate (DMEP) (117-82-8) Diisopentylphthalate (DIPP) (605-50-5) N-pentyl-isopentyl phthalate (NPIPP) (776297-69-9) Di-n-pentylphthalate (DnPP) (131-18-0) Di-n-hexylphthalate (DnHP) (84-75-3) Dimethylphthalate (131-11-3) Diethylphthalate (84-66-2)	Legislated	Apparel, Footwear, and Equipment Infant/Toddler, Little Kids and Big Kids All materials <500 mg/kg (total) Adults All materials <1000 mg/kg (total)	50 mg/kg per Phthalate	Nike, Inc., in-house method Determination of defined Ortho-Phthalic Esters in Synthetic Fibers and Thermoplastics by LC-DAD-MS or GC-MS Confirmation of failure by fragmentation HPLC-MS
Polychlorinated Biphenyls (PCBs) (1336-36-3)	Legislated	Prohibited Nike, Inc.,-defined as <100 mg/kg	50 mg/kg	Nike, Inc., in-house method Modified USEPA 3550 Hexane:Acetone (1:1) extraction followed by GC/MS or GC/ECD analysis
Polychlorinated Terphenyls (PCTs) (No CAS #)	Legislated	Prohibited Nike, Inc.,-defined as <100 mg/kg	50 mg/kg	Nike, Inc., in-house method Modified USEPA 3550 Hexane:Acetone (1:1) extraction followed by GC/MS or GC/ECD analysis

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Polycyclic aromatic hydrocarbons (PAHs) Naphthalene (91-20-3) Acenaphthylene (208-96-8) Acenaphthene (83-32-9) Fluorene (86-73-7) Phenanthrene (85-01-8) Anthracene (120-12-7) Fluoranthene (206-44-0) Pyrene (129-00-0) Benzo(a)anthracene (56-55-3) Chrysene (218-01-9) Indeno(1,2,3-cd)pyrene (193-39-5) Benzo(b)fluoranthene (205-99-2) Benzo(k)fluoranthene (207-08-9) Benzo(a)pyrene (50-32-8) Dibenzo(a,h)anthracene (53-70-3) Benzo(g,h,i)perylene (191-24-2) Benzo(e)pyrene (192-97-2) Benzo(j)fluoranthene (205-82-3)	Legislated	Benzo(a)pyrene 1 mg/kg Benzo(e)pyrene 1 mg/kg Benzo(a)anthracene 1 mg/kg Chrysene 1 mg/kg Benzo(b)fluoranthene 1 mg/kg Benzo(j)fluoranthene 1 mg/kg Benzo(k)fluoranthene 1 mg/kg Dibenzo(a,h)anthracene 1 mg/kg Sum of 18 PAHs 10 mg/kg	0.2 mg/kg	CNS 3478 Clause 6.18 (plastic shoes) ZEK 01.4-8 (other)
Polyvinylchloride (PVC) (9002-86-2)	Nike, Inc., Requirement	Apparel, Equipment, Footwear All products, all materials* Not detected	PVC 10% Due to complexity of analysis, Nike, Inc., defines detection limit as 10%	Two tests for confirmation Beilstein's test* Burning test for the presence of chlorine Infrared Analysis* Spectroscopy (IR) with or without solvent extraction Positive results for both tests indicate PVC * PVC test methods are qualitative, therefore the 10% limit is estimated sensitivity

NIKE, INC., RSL, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Short Chain Chlorinated Paraffins (SCCP) with C10–C13 (85535-84-8)	Legislated	1,000 mg/kg	100 mg/kg	Solvent extraction, followed by GC/ECD analysis and GC/MS confirmation
Volatile Organics Pentachloroethane (76-01-7) Tetrachloromethane (Carbon tetrachloride) (56-23-5) 1,1,1,2-Tetrachloroethane (630-20-6) 1,1,2,2-Tetrachloroethane (79-34-5) 1,1,1-Trichloroethane (71-55-6) 1,1,2-Trichloroethane (79-00-5) 1,1-Dichloroethylene (75-35-4) Trichloroethylene (79-01-6) Tetrachloroethylene (127-18-4)	Legislated	1,000 mg/kg	100 mg/kg	Nike, Inc., in-house method Headspace GC/MS

NIKE RSL IMPLEMENTATION GUIDANCE

Comprehensive testing guidance for all materials and products.

NIKE, INC.,RSL IMPLEMENTATION GUIDANCE

This section contains detailed instructions for selecting test samples. Testing of materials is mandatory.

- **Vendor (material supplier) routine testing.** Select and test materials believed to be high risk.
- **Factory random testing.** Select and test across all material types, colors and uses.

SCOPE

All materials manufactured for Nike, Nike Affiliate, or Licensee products on or after April 14, 2016, must comply with the requirements in this document. This document is subject to updates. If requirements change, we will issue an effective date that allows suppliers time to comply. The most up-to-date version of this document can always be found at www.nikeincchemistry.com/restricted-substance-list.

Materials that are routinely or randomly tested prior to production should be sent to Nike, Inc.,-approved laboratories, which are listed on pages 58 and 59. Each material will be tested against the Nike, Inc., RSL Test Package for that material.

The Nike, Inc., RSL Test Request Form (TRF) must accompany all samples sent to the lab to ensure that testing and reporting meet Nike, Inc., standards and to obtain special prices we have negotiated on behalf of our suppliers. Data from labs that are not on the approved Laboratory List will not be accepted as proof of compliance. Download the current TRF at www.nikeincchemistry.com.

TABLE 1. KIDS' SIZING

	Infant/ Toddler	Little Kids	Big Kids
	0–36 months	3–7 years	7–14 years
Apparel Size United States	0–4T	4–7 boys 4–6x girls	8–20 boys 7–14 girls
Apparel Size Europe	68–98 cm	104–128 cm	128–182 cm boys 128–176 cm girls
Apparel Size Asia	< 85 cm	85–120 cm	120–170 cm
Footwear	≤ 16 cm	16.5–22 cm	22.5–25 cm
Equipment	Pee Wee	Junior	Youth

SAMPLE SELECTION CRITERIA

Test samples are selected based on material type, thickness, color and/or style. In some cases, two materials may be selected using the same criteria but are tested differently once they are in the lab. For example, natural leather and synthetic leather are both chosen based on thickness, surface treatment and color, but lab testing is distinct for the two materials because of differing base chemistry. Nike, Inc., requires two types of RSL testing:

- **Core testing.** The substance is restricted by legislation or Nike, Inc., requirements AND the substance has historically been used in the manufacturing process for that material type. Any item requiring "core" testing will undergo testing every time an item is requested.
- **Supplemental testing**. The substance is restricted by legislation or Nike, Inc., requirements, but is not likely to be found and is not traditionally used in the manufacture of that material type. Items requiring "supplemental" tests should be tested randomly to ensure compliance.

Regardless if testing is listed as core or supplemental, all materials must meet the requirements in the RSL.

The Materials Testing Matrix on page 23 shows whether Core or Supplemental testing is required for each material type. Specific guidance for selecting test samples for all material types can be found in the following pages. Use the size chart in Table 1 for reference when using this guide.

MATERIALS TESTING MATRIX

Restricted Substance	Natural Fibers	Synthetic Fibers Nylon, PET	Natural and Synthetic Fiber Blends	Synthetic Leather, Thermoplastics, Polymers EVA, PU, Rigid Plastic, TPU, Foam, Rubber	Natural Leather	Coated Leather	Inks, Paints, Heat Transfers Screen Print Inks	Adhesives	Screenprint Strike-offs	Sublimation Prints, Digital Prints	Metal Items	Other Rhinestones, sequins, etc.
Alkylphenols (NP, OP)	S	S	S	S	S	S	S	S	S	S		
Alkylphenol Ethoxylates (NPEO, OPEO)	C	C	C	C	C	C	C	C	C	C		
Asbestos	S	S	S									
Chromium VI					C4	C4						
Dyes (Azo)	C	S	C	S	C	C	C1			C		
Dyes (All Disperse)		C	C	S						C		
Dyes (Acid, Basic, Direct)	S	S	S	S						S		
Flame Retardants	S	S	S	S								
Formaldehyde	C	C	C	C	C	C	C	C	C	C		C3
Heavy Metals (Cd, Pb, Hg and As in Footwear materials for children up to 14 years or 250 mm in size)	S	S	S	C	C	C	C	C		C	C	C3
Leachable Metals (As, Cd, Co, Cr, Cu, Hg, Pb, Ni, Sb)	S5	S5	S5									

MATERIALS TESTING MATRIX, CONTINUED

Restricted Substance	Natural Fibers	Synthetic Fibers Nylon, PET	Natural and Synthetic Fiber Blends	Synthetic Leather, Thermoplastics, Polymers EVA, PU, Rigid Plastic, TPU, Foam, Rubber	Natural Leather	Coated Leather	Inks, Paints, Heat Transfers Screen Print Inks	Adhesives	Screenprint Strike-offs	Sublimation Prints, Digital Prints	Metal Items	Other Rhinestones, sequins, etc.
Nickel – Release (All metal items in direct and prolonged contact with skin)											C	C3
Nitrosamines				S								
Organotin Compounds	S2	S2	S2	C2	C2	C2	C2	C2		C2		
PAH				S			S					
pH	S	S	S									
Chlorinated Phenols (TeCP, TCP, PCP)	S		S		S	S						
Pesticides	S		S									
Phthalates				C		C	C	C	C	C		C3
Polyvinyl-chloride (PVC)				C		C	C	C	C	C		C3
Volatile Organics				S			S	S				

C = Core testing	C1 = Screen print ink only	C3 = Core tests vary by material type; consult with lab or Nike RSL team	S5 = Leachable (China GB / Indonesia)
S = Supplemental testing	C2/S2 = If Tin in sample >0.1 mg/kg	C4 = If total Cr screening is >3-mg/kg, analyze for Cr(VI)	

Note: Additional testing packages are available for items containing multiple material types, such as woven crests that may contain synthetic fibers, natural fibers, metallic threads and adhesives. These packages are available on the Test Request Form and are used only in very specific cases.

NIKE, INC., RSL IMPLEMENTATION GUIDANCE

FIGURE 1. TESTING GUIDANCE FOR TEXTILES: NATURAL, SYNTHETIC AND BLENDED FIBERS

Textiles

Natural, synthetic or blended fibers that directly or indirectly come into contact with skin.

Routine Testing

All Apparel, Footwear and Equipment materials and all denim. Select materials at 5% of total number of unique material/color combinations on a seasonal basis.

Random Testing

Apparel, Footwear and Equipment materials in any color can be randomly verified at any time.

A Note About Denim

Denim materials must be tested after any garment treatment, including but not limited to overdyeing, sanding and acid washing. This test may be performed on samples that represent production-ready materials.

TEXTILES: NATURAL, SYNTHETIC OR BLENDED FIBERS

The Nike RSL defines unique textiles as a combination of:

- Material
- Color
- Construction
- Warp or weft
- Vendor (material supplier)

In addition, each textile type (natural, synthetic or blend compositions) and chemical finish is considered a unique material. For example, 100% cotton, 100% polyester, 60/40 cotton/poly, 50/50 cotton/poly, etc. are all unique and subject to routine and/or random testing.

Each season, suppliers must test 5% of all natural, synthetic and blended fibers, or materials composed of these fibers, on the basis unique material/color combinations, choosing those materials with the highest production volume. For example, a supplier that produces 100 unique material/color combinations in a season must test their top five unique material/color combinations by production volume. This testing guidance is summarized in Table 2.

Notes: For any calculated value, the result must be rounded up to the highest whole number; for example, 45 material/color combinations x 5% = 2.25, which would require three total tests (not two).

For guidance on items produced from yarn to finished good without a material phase, contact RSLSupport@nike.com.

TABLE 2. CALCULATING THE NUMBER OF TEST SAMPLES FOR TEXTILES

Material Identification	Linear Yards	Total Number of Color Combinations	Test This Material?	Total Number of Tests Required
Unique material/color combination 1	50,000	100	Yes	Supplier produces 100 unique material/color combinations, as shown in Material Identification column 5% Testing Requirement = **Five (5) Total Tests** Choose top five materials by production volume, as shown in Linear Yards column
Unique material/color combination 2	25,000		Yes	
Unique material/color combination 3	40,000		Yes	
Unique material/color combination 4	15,000		Yes	
Unique material/color combination 5	60,000		Yes	
Unique material/color combination 6	2,200		No	
Unique material/color combination 7	1,000		No	
Materials 8–100 92 separate materials	20,000 combined		No	

NIKE, INC., RSL IMPLEMENTATION GUIDANCE

LEATHER AND SYNTHETIC LEATHER

The Nike, Inc., RSL defines leather or synthetic leather as unique materials for any combination of:

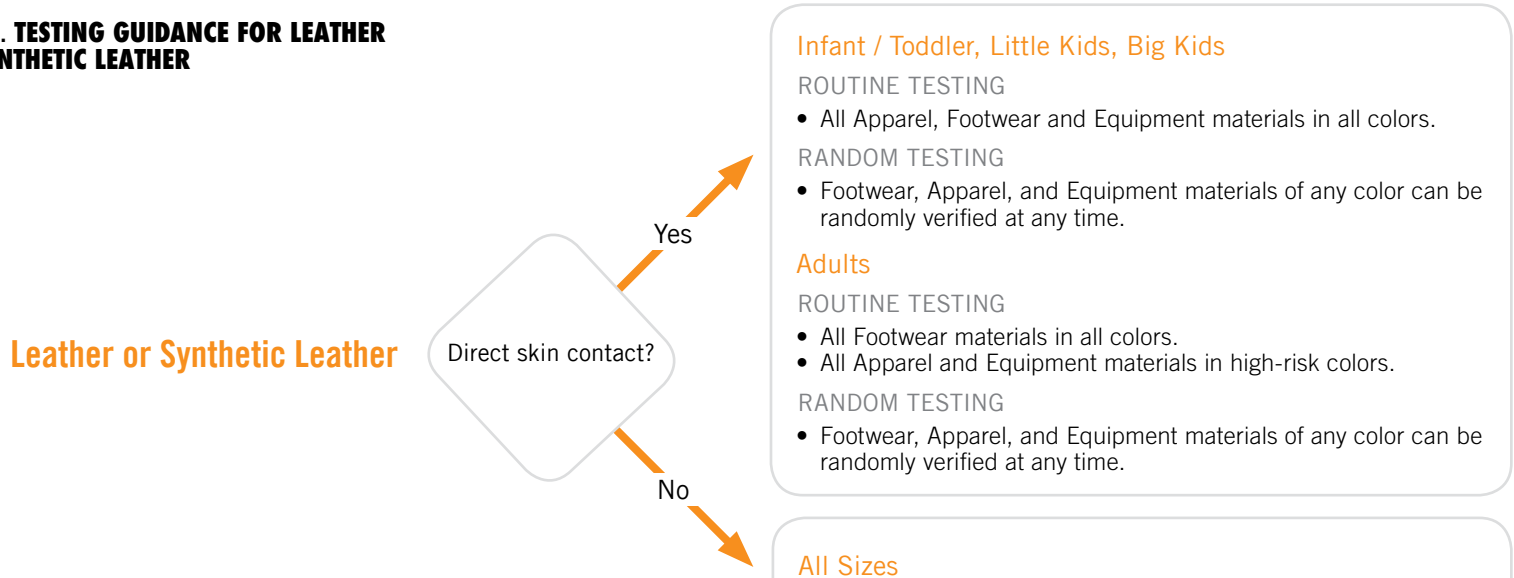
- Color
- Thickness
- Grain
- Vendor (material supplier)

A difference in any of these properties means that the leather or synthetic leather has changed and may be subject to testing.

In cases where texture is the only unique difference (chemistry, thickness, color, etc. are the same), one RSL test is sufficient.

Supplier material names will be used to identify leather grains ('Griffy,' 'Comfort E,' 'Mellowbuck,' etc.). Each grain is considered a unique material due to chemical differences. The same material could have different embossing without a change in chemical properties.

FIGURE 2. TESTING GUIDANCE FOR LEATHER AND SYNTHETIC LEATHER



NIKE, INC., RSL IMPLEMENTATION GUIDANCE

Example for leather thickness, color and emboss: Four materials (same grain) have the same chemical properties (same supplier). A change in the example is shown in orange.

TABLE 3. DETERMINING IF LEATHER TESTING IS REQUIRED

Material Identification	Color	Treatment	Thickness	Test This Material?
Material 1	High-risk color 1	Emboss 1	Thickness 1.2 mm	Test required
Material 1	High-risk color 1	Emboss 2	Thickness 1.2 mm	New test NOT required
Material 2	High-risk color 2	Emboss 1	Thickness 1.2 mm	New test required
Material 3	High-risk color 1	Emboss 1	Thickness 1.8 mm	New test required

PLASTICS, THERMOPLASTICS AND POLYMERS: EVA, PU, RIGID PLASTICS, LAMINATES AND RUBBER

Contact the Nike, Inc., Chemistry team for detailed RSL requirements related to plastic materials intended for drinking water bottles, mouth guards, adhesive stickers for the skin, etc.

Plastics, Thermoplastics and Polymers for Apparel, Footwear and Equipment

Nike identifies unique plastic, TPU or laminates as a combination of:

- Material
- Color
- Thickness
- Vendor (material supplier)

A change to any of these properties will identify a new material for routine or random testing.

Plastics for Food-Contact Bottles, Mouth Guards, Skin Adhesive Stickers and Related Products

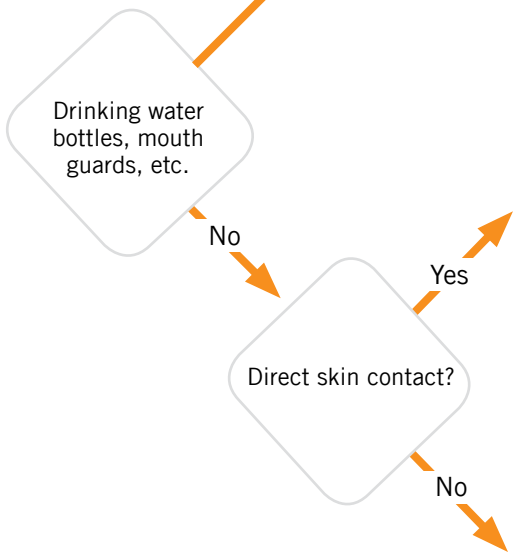
Plastic materials intended for drinking water bottles, mouth guards, adhesive stickers for the skin, etc. must meet chemical safety requirements that are specific to the products and their intended use and distribution. Use the information on page 57 to contact the Nike Chemistry team for detailed RSL requirements.

NIKE, INC., RSL IMPLEMENTATION GUIDANCE

FIGURE 3. TESTING GUIDANCE FOR PLASTICS, THERMOPLASTICS AND POLYMERS

Plastics, Thermoplastics and Polymers

EVA, PU, Rigid Plastics, Laminates, Foam and Rubber



All Materials

All materials used in products that come into contact with food or skin (such as drinking water bottles, mouth guards, adhesive stickers for application to the skin, etc.) must meet RSL requirements specific to the items, their intended use and distribution.

CONTACT THE NIKE, INC., CHEMISTRY TEAM FOR SPECIFIC RSL REQUIREMENTS.

A Note About High-Risk Colors

All materials with the following colors as part of the description are considered high risk.

ALL SIZES

- Black
- Brown
- Orange*
- Red*
- Silver*

INFANT/TODDLER, BIG KIDS, LITTLE KIDS

- Blue
- White

* Subject to change

All Materials

ROUTINE TESTING

- All Apparel, Footwear and Equipment materials in all colors.

RANDOM TESTING

- Apparel, Footwear and Equipment materials of any color can be randomly verified at any time.

All Materials

ROUTINE TESTING

- All Apparel, Footwear and Equipment materials in high-risk colors.

RANDOM TESTING

- Apparel, Footwear and Equipment materials of any color can be randomly verified at any time.

NIKE, INC., RSL IMPLEMENTATION GUIDANCE

PREPARING COLOR SYSTEM SAMPLES FOR SUBMISSION TO LABORATORIES

The loading of pigment into the base must exceed that used in production by a minimum of 10% and can be no less than a 20% loading. Any additives used in the application must also be added prior to the curing process.

For example, if 12% pigment loading is used on products, then the ink sample submitted for testing must be a 22% loading.

Ready-to-use (RTU) ink products must be submitted as-is, with no changes to the formulation. All products must be cured and dried in a manner consistent with the ink manufacturer's recommendations or the actual conditions used in production.

Currently, it is not acceptable to submit a composite ink sample (more than one pigment in a base).

INKS, PAINTS, PIGMENTS AND ADHESIVES

Nike, Inc., considers inks, paints, pigments and adhesives to be high risk for RSL non-compliance. These materials MUST be tested prior to production in an "as applied" state; for example, ink that has cured, paint that has dried, etc.

All inks, paints, pigments and adhesives must be tested annually and receive an RSL PASS result prior to application to any product. They must be retested every time a change is made to the color system formulation or on an annual basis, whichever comes first.

For Nike, Inc., RSL purposes, a color system is defined as the set of base colors, pigments and all additives or thinners used to mix colors. (See Figure 4 on the next page.) Once a color system is RSL-compliant — all base colors and additives have received an RSL PASS — no substitutions can be made to any of the base colors or additives without testing the new component. For testing, all of the color system components must be in the "as-applied" state. This means that ink bases and pigments must be dried and cured following routine curing practices as used in production before sending to laboratories for testing. Laboratories are not allowed to perform the drying and curing steps. The material must be dried at the same rate and temperature as will be used for the final product. Refer to the sidebar on this page for specific guidance on preparing color system samples for submission to laboratories. Strike-off testing is also required, as covered in the next section.

SCREEN PRINT INKS, HEAT TRANSFERS AND SIMILAR EMBELLISHMENTS

Nike, Inc., considers screen print inks, heat transfers and similar embellishments to be at high risk for RSL non-compliance. They must be tested annually and receive an RSL PASS result prior to application to any product. They must be retested every time a change is made to the color system formulation or on an annual basis, whichever comes first.

Strike-off Testing

For screen prints, heat transfers and similar embellishments, the factory must test strike-offs at a rate of 2% by style (not color). The selected 2% must represent those production styles with the highest volume.

> **Example:** A factory makes 100 different styles. The factory must test 2% of styles produced (100 styles x 2% = 2 strike-off tests). The two styles with the highest production volume are chosen for testing. If greater than 50 styles are produced, a minimum of one strike-off test is required. (See Figure 5 for guidance.)

Tiered Approach to Strike-Off Testing

When a supplier successfully submits and passes all required strike-off tests over a one-year period, they will only have to test 1% of strike-offs moving forward. To achieve this reduced level of testing, suppliers must provide documentation that the number of strike-off tests performed reflects actual production volumes and number of styles, and submit the list of passing test report IDs.

To request a Tiering Verification Form, please contact RSLsupport@nike.com.

Factories are expected to maintain accurate records of test results for color system components and strike-offs. Nike, Inc., and/or its Affiliates may request copies of these records at any time.

Figure 4. REQUIRED COLOR SYSTEM TESTING FOR ALL INKS, PAINTS AND PIGMENTS

\+ Additives + Thinners = **COLOR SYSTEM**

- ALL base colors must undergo annual testing.
- Each component of a color system — pigments, additives and thinners — must undergo initial testing before use in any Nike, Inc., product and receive an RSL PASS.
- Color system must be retested whenever a component — pigment, additive or thinner — of the formula changes.

Figure 5. REQUIRED STRIKE-OFF TESTING OF TOP 2% OF STYLES BY PRODUCTION VOLUME

DEFINITION OF STYLES

- 1 Apparel style with 3 colorways

- 3 Apparel styles

- 1 Equipment style with 4 colorways

- 4 Equipment styles

- Choose the top 2% of styles by production volume for strike-off testing, rotating colorways. Style numbers should not include the color code.

DEFINITION OF TOP 2% OF STYLES BY PRODUCTION VOLUME

Styles	Production Volume	Strike-off Test Required for This Style?
Style 1	50,000	Yes
Style 2	500	No
Style 3	20,000	No
Style 4	30,000	Yes
Style 5	40,000	Yes
Styles 6 – 148	400	No

In this example, a factory produces 148 styles:
- 148 styles x 2% = 2.96
- Top 3 styles by production volume must undergo RSL testing

NIKE, INC., RSL IMPLEMENTATION GUIDANCE

DIGITAL AND SUBLIMATION PRINTS

Digital and sublimation prints must be tested once per year. The sample should be prepared by printing each color individually on an RSL-compliant fabric representative of production material. The samples must be applied with production transfer paper and on production equipment.

DIMENSION WELDS

All dimension welds are considered high risk and require testing. No substitutions can be made unless the substitute is also compliant (proven by testing).

METAL PARTS

All metal items are considered high risk and each component must be tested annually or when a base metal is changed.

OTHER: RHINESTONES, SEQUINS, ETC.

These materials, due to the reliance on metal and plastic, are generally considered very high risk for RSL non-compliance. Each component must be tested annually or when a base metal is changed. Testing will vary based upon material type and use. Consult the testing lab or the Nike, Inc., RSL team for guidance.

TOYS, ELECTRONIC AND ELECTRICAL EQUIPMENT, AND FOOD CONTACT MATERIALS

The testing requirements for Toys, Electronic and Electrical Equipment and Food Contact materials differ from the testing requirements of general Nike Apparel, Footwear and Equipment products. Please refer to the specific RSL lists below. Because these products may also require technical files or additional labeling, please consult your Nike, Inc.,RSL contact when developing a product that has the characteristics of a toy, electronic or food contact material.

NIKE, INC., RSL IMPLEMENTATION GUIDANCE

TEST ADMINISTRATION

The testing specified above applies to both new and existing materials. All testing must be performed on production-ready material—material that is identical to that used in actual product. During the time period in which materials or products are undergoing RSL testing, they cannot be shipped or used in production until Nike, Inc., receives a passing RSL report.

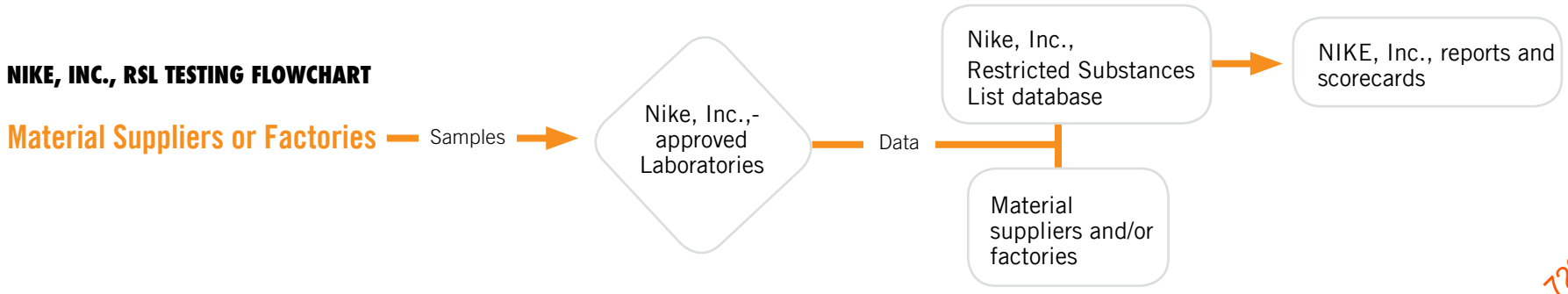
If a material fails RSL testing, all materials affected by that failure must be immediately quarantined until product disposition occurs and the failure resolution process is completed with Nike, Inc. Only materials that pass both Adult and Kid (Infant / Toddler, Little Kids and Big Kids) RSL testing requirements can be used for products intended for children, including any "take down" product.

Prior to production, suppliers must provide factories with test results proving compliance with the Nike, Inc., RSL. All testing must be performed at a Nike, Inc.,-approved laboratory. All samples sent to the laboratory must be accompanied by a Test Request Form (TRF) available at www.nikeincchemistry.com. Test results will be valid for one year from the RSL test report date unless otherwise stated. Nike, Inc., reserves the right to request testing documentation at any time for any material.

Handling RSL Data

- As shown in Figure 6, Nike, Inc.,-approved labs will conduct the tests and send all results to Nike, Inc., for inclusion in the online RSL database.
- The Nike, Inc., RSL database will store data and create test reports that the lab will distribute to the supplier.
- Nike, Inc., will use the database to generate supplier scorecards and other evaluation reports.

FIGURE 6. **NIKE, INC., RSL TESTING FLOWCHART**



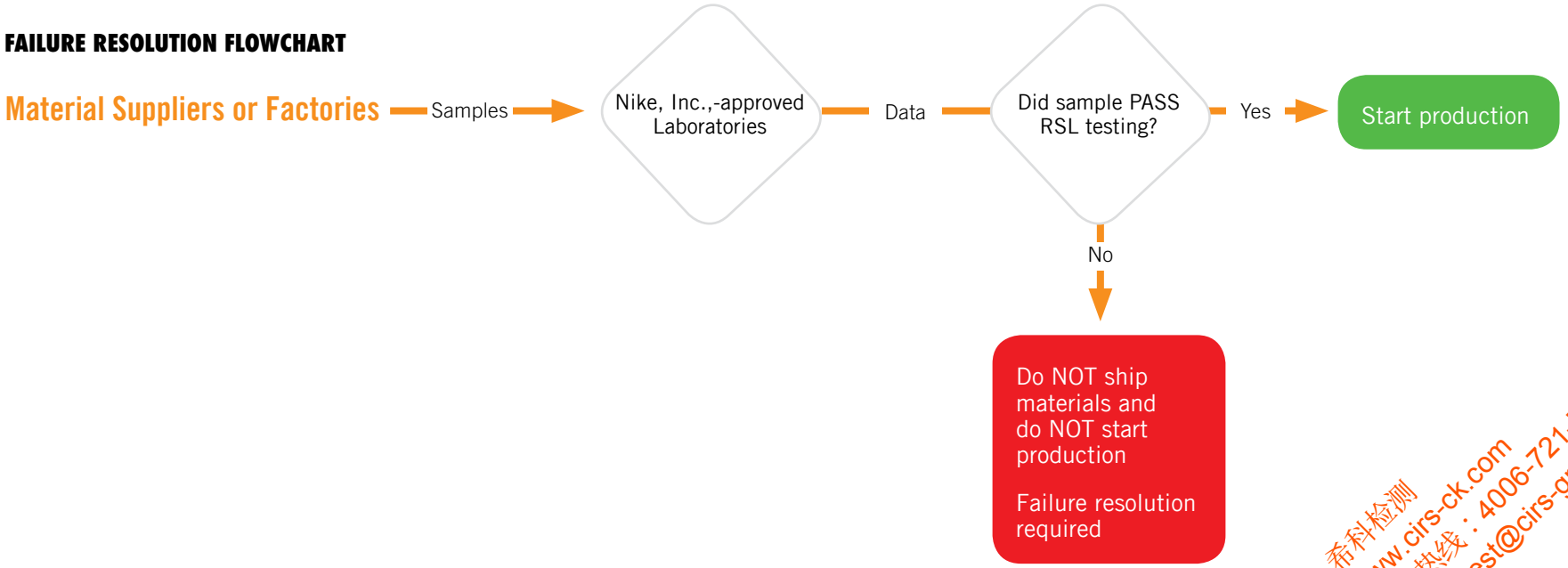
NIKE RSL IMPLEMENTATION GUIDANCE

FAILURE RESOLUTION

Vendors must perform due diligence to ensure that all shipped materials meet Nike, Inc., RSL requirements. In the event that a factory/supplier-initiated test results in a FAIL or KID FAIL rating, there are a number of consequences:

- The factory/supplier is responsible and must bear the cost for all material returns and replacements. Failing materials must be quarantined immediately.
- The factory/supplier must complete the Nike, Inc., RSL Failure Resolution Form (FRF), which is attached to each test report issued with a FAIL or KID FAIL rating. The FRF collects information to determine root cause as well as to create short- and long-term corrective action plans to help remediate issues. The completed FRF should be submitted to the appropriate Nike, Inc., contact listed in the "Testing and Contact Information" section of the FRF.
- When the cause of the failure has been remediated, the material must be retested. Retesting should only be performed after receiving instruction to do so from Nike, Inc., or Affiliate. This instruction will be given after the failure resolution process is completed. Retesting may require a full or partial test package, depending on the corrective action plan.
- If a vendor is deemed unreliable due to multiple material RSL failures, Nike, Inc.,, at its sole discretion, may place that vendor on probationary status. This will result in increased testing requirements.
- If a vendor on probation continues to supply non-compliant material, Nike, Inc., and/or Affiliates may initiate further measures at its sole discretion. Measures include termination of all business dealings with the vendor.

FIGURE 7. **FAILURE RESOLUTION FLOWCHART**



ELECTRICAL AND ELECTRONIC COMPONENTS

Electrical and electronic equipment (EEE) components are defined as any component dependent on electric current or electromagnetic fields to function properly. All components must meet the limits of the Nike, Inc., RSL for Electronics. Both EEE testing and standard RSL testing are required in cases where electronics are embedded into other products.

NIKE, INC., RESTRICTED SUBSTANCES LIST (RSL) FOR ELECTRONICS

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component	Per substance concentration in product	
Metals in Battery or Button Cell End-users must be able to easily remove batteries contained in consumer products.				
Cadmium (7440-43-9)	Legislated	5 mg/kg	0.5 mg/kg	Nike, Inc., in-house method Aqua regia/hydrogen peroxide digestion, followed by ICP/ VGA-AAS analysis
Lead (7439-92-1)		1,000 mg/kg	100 mg/kg	
Mercury (7439-97-6)		Prohibited	0.5 mg/kg	
Electrical and Electronic Equipment Applicable to equipment that is dependent on electric currents or electromagnetic fields to function properly; is designed for use with a voltage rating not exceeding 1000 volt a.c. or 1500 volt for d.c.; and falls under the categories set out in Annex 1A of 2002/96/EC. Sampling and analysis is based on the test request requirements.				
Butyl benzyl phthalate (BBP) (85-68-7)	Legislated	1,000 mg/kg The restriction of phthalates DEHP, BBP, DBP and DiBP shall not apply to cables or spare parts for the repair, reuse, updating of functionalities or upgrading of capacity of EEE placed on the market before July 22, 2019.	50 mg/kg	IEC 62321, Ed.1, 2008
Dibutyl phthalate (DBP) (84-74-2)				
Di(ethylhexyl) phthalate (DEHP) (117-81-7)				
Di-isobutyl phthalate (DiBP) (84-69-5)				
Cadmium (7440-43-9)		100 mg/kg	10 mg/kg	
Chromium (VI) (7440-47-3)		1,000 mg/kg	100 mg/kg	
Lead (7439-92-1)		1,000 mg/kg	100 mg/kg	
Mercury (7439-97-6)		1,000 mg/kg	100 mg/kg	
PBDEs and PBBs		1,000 mg/kg	100 mg/kg	

TOYS

A toy is defined as any product or material with play value intended for children of less than 14 years of age. Testing requirements apply to products both sold and given away.

TOYS

Toys must meet the limits of the Nike, Inc., RSL for Toys, Toy Components and Toy Materials as well as the Nike, Inc., RSL. Toys must also pass strict mechanical and safety testing beyond these chemical requirements. Always consult with your Nike, Inc., product safety contact before starting any testing.

The Testing Guidance table specifies toys, toy components and toy materials as well as applicable chemicals that should not be released above the limits in the following pages. This table is based on the requirements of EN71-3:2013 and EN71-9:2005 in association with EN71-10:2005 and EN71-11:2005. In addition, the Lead Poisoning Prevention Act (LPPA) of the U.S. state of Illinois enforces a warning label provision if the lead content of paint on toys exceeds 40 mg/kg but is within the U.S. federal limit of 90 mg/kg (for surface coating in CSPIA).

TESTING GUIDANCE FOR TOYS, TOY COMPONENTS AND TOY MATERIALS

Specific Toy or Toy Component	Material	Flame Retardants	Colorants	Primary Aromatic Amines	Monomers	Solvents – Migration	Solvents – Inhalation	Wood Preservatives	Preservatives	Plasticizers	Heavy Metals
Toys intended to be mouthed by children of less than three years of age	Polymeric				X	X				X	X
Toys or accessible components with a mass of 150 g or less, intended to be played with in the hands by children of less than three years of age	Polymeric				X	X				X	X
	Wood		X	X				X			X
	Paper		X	X							X
Toys or accessible components intended for children of less than three years of age	Textile	X	X	X							X
	Leather		X	X					X		X
Mouthpiece components of mouth-actuated toys	Polymeric				X	X				X	X
	Wood		X	X				X			X
	Paper		X	X							X
Inflatable toys with a surface area of greater than .5 m^2 when fully inflated	Polymeric						X				X

TESTING GUIDANCE FOR TOYS, TOY COMPONENTS AND TOY MATERIALS, CONTINUED

Specific Toy or Toy Component	Material	Flame Retardants	Colorants	Primary Aromatic Amines	Monomers	Solvents – Migration	Solvents – Inhalation	Wood Preservatives	Preservatives	Plasticizers	Heavy Metals
Toys worn over the mouth and nose	Polymeric				X		X				X
	Textile		X	X			X				X
	Paper		X	X							X
Toys a child can enter	Polymeric										X
	Textile										X
Components of graphic instruments sold as toys or used in toys	Polymeric				X					X	X
Toys and accessible conponents of toys for indoor use	Wood							X			X
Toys and accessible conponents of toys for outdoor use	Wood							X			X
Toys and components of toys that mimic food	Polymeric				X	X				X	X
Solid toy materials intended to leave a trace	All		X	X							X
Colored accessible liquids in toys	Liquid		X	X					X		X
Non-colored accessible liquids in toys	Liquid								X		X
Modeling clay, play clay and similar	All		X	X					X		X
Balloon-making compounds	All		X	X			X				X
Imitation tattoos with adhesive	All		X	X		X			X		X
Imitation jewelry	Polymeric		X	X	X	X				X	X
	Metal										X

NIKE, INC., RESTRICTED SUBSTANCES LIST (RSL) FOR TOYS, TOY COMPONENTS AND TOY MATERIALS

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component*	mg/kg = toy material basis mg/L = aqueous extract basis	
Aromatic Amines Benzidine (92-87-5) 2-Naphthylamine (91-59-8) 4-Chloroaniline (106-47-8) 3,3'-Dichlorobenzidine (91-94-1) 3,3'-Dimethoxybenzidine (119-90-4) 3,3'-Dimethylbenzidine (119-93-7) o-Toluidine (95-53-4) o-Anisidine (90-04-0, 2-methoxyaniline) Aniline (62-53-3)	Legislated	Not detected For each restricted amine * See laboratory reporting limit for test method detection limit	5 mg/kg	EN71-11
Dyes Disperse Blue 1 (2475-45-8) Disperse Blue 3 (2475-46-9) Disperse Blue 106 (12223-01-7) Disperse Blue 124 (61951-51-7) Disperse Yellow 3 (2832-40-8) Disperse Orange 3 (730-40-5) Disperse Orange 37/76 (12223-33-5, 13301-61-6) Disperse Red 1 (2872-52-8) Solvent Yellow 1 (60-09-3) Solvent Yellow 2 (60-11-7) Solvent Yellow 3 (97-56-3) Basic Red 9 (569-61-9) Basic Violet 1 (8004-87-3) Basic Violet 3 (548-62-9) Acid Red 26 (3761-53-3) Acid Violet 49 (1694-09-03)	Legislated	Not detected For each restricted dye * See laboratory reporting limit for test method detection limit	10 mg/kg	EN71-11

NIKE, INC., RSL FOR TOYS, TOY COMPONENTS AND TOY MATERIALS, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component*	mg/kg = toy material basis mg/L = aqueous extract basis	
Elastomers Toys intended for use by children of less than 36 months of age or intended to be placed in the mouth. N-nitrosodiethanolamine (1116-54-7) N-nitrosodimethylamine (62-75-9) N-nitrosodiethylamine (55-18-5) N-nitrosodipropylamine (621-64-7) N-nitrosodiisopropylamine (601-77-4) N-nitrosodibutylamine (924-16-3) N-nitrosodiisobutylamine (997-95-5) N-nitrosodiisononylamine (1207995-62-7) N-nitrosomorpholine (59-89-2) N-nitrosopiperidine (100-75-4) N-nitrosodibenzylamine (5336-53-8) N-nitroso-N-methyl-N-phenylamine (614-00-6) N-nitroso-N-ethyl-N-phenylamine (612-64-6)	Legislated	N-nitrosamines ≤ 0.01 mg/kg N-nitrosatable substance ≤ 0.1 mg/kg	N-nitrosamines ≤ 0.01 mg/kg N-nitrosatable substance ≤ 0.1 mg/kg	EN71-12
Flame Retardants Pentabromodiphenyl ether (PentaBDE) 3-isomers (32534-81-9) Octabromodiphenyl ether (OctaBDE) 4-isomers (32536-52-0) Decabromodiphenyl ether (DecaBDE) (1163-19-5) Tri-o-cresyl phosphate (78-30-8) Tris(2-chloroethyl) phosphate (115-96-8)	Legislated	1,000 mg/kg For each flame retardant sum of isomers Not detected * See laboratory reporting limit for test method detection limit	5 mg/kg 50 mg/kg	Solvent extraction and analysis by GC-MS or LC-MS EN71-11
Total Lead in Paint on Toys	Legislated	Warning label required if lead content is greater than 40 mg/kg but less than 90 mg/kg	40 mg/kg	Nike, Inc., in-house method

NIKE, INC., RSL FOR TOYS, TOY COMPONENTS AND TOY MATERIALS, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component*	mg/kg = toy material basis mg/L = aqueous extract basis	
Metals	Legislated	Values in parentheses refer to modeling clay, play clay and similar		
Antimony (7440-36-0)		60 mg/kg	5 mg/kg	
Arsenic (7440-38-2)		25 mg/kg	0.5 mg/kg	
Barium (7440-39-3)		1,000 mg/kg (250 mg/kg)	100 mg/kg	
Chromium (7440-47-3)		60 mg/kg (25 mg/kg)	3 mg/kg	
Cadmium (7440-43-9)		75 mg/kg (50 mg/kg)	25 mg/kg	
Lead (7439-92-1)		90 mg/kg	50 mg/kg	
Mercury (7439-97-6)		60 mg/kg (25 mg/kg)	5 mg/kg	
Selenium (7782-49-2)		500 mg/kg	50 mg/kg	

Metals	Legislated	Category 1	Category 2	Category 3	Category 1	Category 2	Category 3	EN 71-3:2013
Aluminium		5,626 mg/kg	1,406 mg/kg	70,000 mg/kg	50 mg/kg	50	50 mg/kg	
Antimony		45 mg/kg	11.3 mg/kg	560 mg/kg	1 mg/kg	1	10 mg/kg	
Arsenic		3.8 mg/kg	0.9 mg/kg	47 mg/kg	0.5	0.5	10 mg/kg	
Barium		1,500 mg/kg	375 mg/kg	18,750 mg/kg	50	50	50 mg/kg	
Boron		1,200 mg/kg	300 mg/kg	15,000 mg/kg	50	50	50 mg/kg	
Cadmium		1.3 mg/kg	0.3 mg/kg	17 mg/kg	0.1	0.1	5 mg/kg	
Chromium (III)		37.5 mg/kg	9.4 mg/kg	460 mg/kg	1	1	1 mg/kg	
Chromium (VI)		0.02 mg/kg	0.005 mg/kg	0.2 mg/kg	0.018	0.005	0.18 mg/kg	
Cobalt		10.5 mg/kg	2.6 mg/kg	130 mg/kg	0.5	0.5	10 mg/kg	
Copper		622.5 mg/kg	156 mg/kg	7,700 mg/kg	50	50	50 mg/kg	
Lead		13.5 mg/kg	3.4 mg/kg	160 mg/kg	0.5	0.5	10 mg/kg	
Manganese		1,200 mg/kg	300 mg/kg	15,000 mg/kg	50	50	50 mg/kg	
Mercury		7.5 mg/kg	1.9 mg/kg	94 mg/kg	0.5	0.5	10 mg/kg	
Nickel		75 mg/kg	18.8 mg/kg	930 mg/kg	10	10	10 mg/kg	
Selenium		37.5 mg/kg	9.4 mg/kg	460 mg/kg	5	5	10 mg/kg	
Strontium		4,500 mg/kg	1,125 mg/kg	56,000 mg/kg	50	50	50 mg/kg	
Tin		15,000 mg/kg	3,750 mg/kg	180,000 mg/kg	0.36	0.08	4.9 mg/kg	
Organic Tin		0.9 mg/kg	0.2 mg/kg	12 mg/kg	0.2	0.14	0.5 mg/kg	
Zinc		3,750 mg/kg	938 mg/kg	46,000 mg/kg	50	50	50 mg/kg	

Category 1: Dry, brittle, powder-like or pliable toy material

Category 2: Liquid or sticky toy material

Category 3: Scraped-off toy material

NIKE, INC., RSL FOR TOYS, TOY COMPONENTS AND TOY MATERIALS, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component*	mg/kg = toy material basis mg/L = aqueous extract basis	
Monomers Acrylamide (79-06-1) Bisphenol A (80-05-7) Formaldehyde (50-00-0) Phenol (108-95-2) Styrene (100-42-5)	Legislated	Not Detected 0.1 mg/L 2.5 mg/L 15 mg/L 0.75 mg/L	0.02 mg/L 0.01 mg/L 0.2 mg/L 1.0 mg/L 0.2 mg/L	EN71-11 Limits are in terms of mg monomer per liter of simulant
Plasticizers Triphenyl phosphate (115-86-6) Tri-o-cresyl phosphate (78-30-8) Tri-m-cresyl phosphate (563-04-2) Tri-p-cresyl phosphate (78-32-0)	Legislated	Not detected For each listed plasticizer	0.03 mg/L For each phosphate plasticizer listed	EN71-11
All esters of phthalic acid, including but not restricted to: Di-isononyl phthalate (DINP) (28553-12-0) Di(ethylhexyl) phthalate (DEHP) (117-81-7) Di-n-octyl phthalate (DNOP) (117-84-0) Di-iso-decyl phthalate (DIDP) (26761-40-0) Butyl benzyl phthalate (BBP) (85-68-7) Dibutyl phthalate (DBP) (84-74-2)		Not detected Sum total of all phthalic acid esters	50 mg/kg Sum total of all phthalic acid esters	Nike, Inc., in-house method Determination of defined Ortho-Phthalic Esters in Synthetic Fibers and Thermoplastics by LC-DAD-MS or GC-MS Confirmation of failure by fragmentation HPLC-MS
Polycyclic aromatic hydrocarbons (PAHs) Benzo(a)pyrene Benzo(e)pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(j)fluoranthene Benzo(k)fluoranthene Dibenzo(a,h)anthracene	Legislated	For items coming into contact with mouth or skin <0.5 mg/kg for each PAH	0.2 mg/kg	CNS 3478 Clause 6.18 (plastic shoes) ZEK 01.4-8 (other)

NIKE, INC., RSL FOR TOYS, TOY COMPONENTS AND TOY MATERIALS, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component*	mg/kg = toy material basis mg/L = aqueous extract basis	
Preservatives	Legislated			EN71-11
Pentachlorophenol (PCP) and its salts		Not detected	2 mg/kg	
Lindane (58-89-9)		Not detected	2 mg/kg	
Cyfluthrin (68359-37-5)		Not detected	10 mg/kg	
Cypermethrin (52315-07-8)		Not detected	10 mg/kg	
Deltamethrin (52918-63-5)		Not detected	10 mg/kg	
Permethrin (52645-53-1)		Not detected	10 mg/kg	
Phenol (108-95-2)		Not detected	10 mg/kg	
1,2-Benzylisothiazolin-3-one (2634-33-5)		Not detected	5 mg/kg	
2-methyl-4-isothiazolin-3-one (2682-20-4) 5-chloro-2-methyl-4-isothiazolin-3-one (26172-55-4)		15 mg/kg (sum total)	10 mg/kg (sum total)	
Formaldehyde (50-00-0)		500 mg/kg	400 mg/kg	
Solvents — Inhalation	Legislated			EN71-11
Toluene (108-88-3)		260 µg/m³		
Ethylbenzene (100-41-4)		5,000 µg/m³		
o,m,p-xylene (95-47-6, 108-38-3, 106-42-3)		870 µg/m³ (total)		
Mesitylene (1,3,5-trimethylbenzene 108-67-8)		2,500 µg/m³		
Trichlorethylene (79-01-6)		Not detected		
Dichloromethane (75-09-2)		3,000 µg/m³		
n-Hexane (110-54-3)		1,800 µg/m³		
Nitrobenzene (98-95-3)		Not detected		
Cyclohexanone (108-94-1)		136 µg/m³		
Isophorone (78-59-1)		200 µg/m³		
Benzene (71-43-2)		Not detected		

NIKE, INC., RSL FOR TOYS, TOY COMPONENTS AND TOY MATERIALS, CONTINUED

Restricted Substance or Group Name (CAS #)	Reason for Restriction	Nike, Inc., Limit	Required Laboratory Reporting Limit	Test Method and Comments
		Maximum allowable concentration in component*	mg/kg = toy material basis mg/L = aqueous extract basis	
Solvents — Migration	Legislated			EN71-11
Trichloroethylene (79-01-6)		Not detected	0.02mg/L	
Dichloromethane (75-09-2)		0.06 mg/L	0.03 mg/L	
2-Methoxyethyl acetate (110-49-6) 2-Ethoxyethanol (110-80-5) 2-Ehtoxyethyl acetate (111-15-9) Bis-(2-methoxyethyl) ether (111-96-6) 2-methoxypropyl acetate (70657-70-4)		0.5mg/L (sum total)	0.1 mg/L	
Methanol (67-56-1)		5 mg/L	1.0 mg/L	
Nitrobenzene (98-95-3)		Not detected	0.02 mg/L	
Cyclohexanone (108-94-1)		46 mg/L	3 mg/L	
3,5,5-trimethyl-2-cyclohexen-1-one (isophorone 78-59-1)		3 mg/L	0.6 mg/L	
Toluene (108-88-3)		2 mg/L	0.5 mg/L	
Ethylbenzene (100-41-4)		1 mg/L	0.1 mg/l	
o,m,p-xylene (95-47-6, 108-38-3, 106-42-3)		2 mg/L (sum total)	0.5 mg/L (sum total)	
Benzene (71-43-2)		5 mg/kg	1 mg/kg	

MANUFACTURING CHEMISTRY GUIDANCE

Manufacturing Chemistry Guidance applies to chemicals that could be used within the manufacturing environment to process raw materials and assemble Nike, Inc., products. Included is a Manufacturing Restricted Substances List (MRSL) focused on textile production as well as Nike general guidance on the use of chemicals within Footwear and Equipment manufacturing.

MANUFACTURING CHEMISTRY GUIDANCE

Managing chemicals within our supply chain goes beyond setting strict chemical limits for our products. As an essential tool for providing guidance to finished goods factories and raw material vendors, Nike, Inc., has used a Manufacturing Restricted Substance List (MRSL) for more than 10 years throughout the supply chain to control the use of certain chemicals. While we could continue to expand our own MRSL, we recognize that truly reducing the impact of our industry and protecting workers and the environment requires collective effort and a harmonized approach to chemical standards and input management. In a shared supply chain, this approach is a necessity.

TEXTILES, SYNTHETIC LEATHER AND LEATHER MANUFACTURING

Through the Zero Discharge of Hazardous Chemicals (ZDHC) coalition, we collaborated with other brands to help create the ZDHC MRSL. This industry-wide tool sets limits for priority chemicals that could potentially be used within manufacturing processes used to create textiles, synthetic leather and natural leather. Supporting an industry standard that sets limits to control upstream use of chemical formulations will enable Nike, Inc., and other companies to achieve our goal of Zero Discharge of Hazardous Chemicals by 2020.

Nike, Inc., has adopted the ZDHC MRSL. Facilities within our supply chain should use this standard when purchasing chemical formulations. It is important to note that chemicals listed in the MRSL must not be intentionally used by our suppliers, and chemical formulations purchased and used to process raw materials (such as dyes) must meet the strict chemical limits outlined in the standard. Nike, Inc., encourages its supply chain to contact their chemical suppliers and communicate the ZDHC MRSL standard to them. Chemical suppliers should be able to confirm which of their products meet this standard and help guide procurement of compliant formulations.

A copy of the most current ZDHC MRSL can be downloaded from the ZDHC website. (www.roadmaptozero.com)

ALL OTHER RAW MATERIALS AND PRODUCT MANUFACTURING

While the ZDHC MRSL is a powerful tool to help drive industry change, it will take time to expand it to include all chemicals relevant to all Nike, Inc., materials. While this work is progressing within the ZDHC, we recognize that we must provide interim guidance to achieve our goal of minimizing the impact of product creation. The inventory of chemicals outlined below requires stronger control and management within finished goods factories (production creation/assembly) and raw materials manufacturing not covered by the ZDHC MRSL (i.e. metal trims and polymers). Until these chemicals can be completely eliminated or safer alternatives substituted, every effort should be made to tightly control their use and minimize exposure to the environment, worker and consumer.

NIKE MANUFACTURING RESTRICTED SUBSTANCES LIST (MRSL) FOR FOOTWEAR AND EQUIPMENT

Restricted Substance or Group Name (CAS #)	Synonyms	Common Potential Uses
Alkylphenols (APs) and Alkylphenol Ethoxylates (APEOs) Nonylphenols (CAS# multiple isomers) Octylphenols (CAS# multiple isomers) Nonylphenol ethoxylate (C2H4O)nC15H24O (CAS# multiple isomers) Octylphenol ethoxylate (C2H4O)nC14H22O (CAS# multiple isomers)		Detergent, surfactant, cleaning agents, agents in textile and leather processing, formulas of biocides and pesticides, cements and glues, metal processing
Benzene (71-43-2)	Benzol, phenyl hydride	Solvent, cleaner
Class I and II Ozone Depleting Substances		Solvent, cleaner
Cresol (1319-77-3) m-Cresol (108-39-4) o-Cresol (95-48-7) p-Cresol (106-44-5)	Cresylic Acid	Nylon and plastic primers and resins
N,N-Dimethylacetamide (127-19-5)	DMAC	Solvent in primers, adhesives and resins
Dimethylsulpoxide (67-68-5)	DMSO	Solvent, cleaner
Dimethyl formamide (68-12-2)	DMF	Solvent, cleaner
Ethylene glycol monobutyl ether (111-76-2)	EGBE/Butyl cellusolve	Solvent, cleaner
Formaldehyde (50-00-0)	Formic aldehyde	Solvent, cleaner, anti-shrinkage resin, mold inhibitor
Methylene Chloride (75-09-2)	Dichloromethane, Methylene Dichloride	Solvent, cleaner
n-hexane (110-54-3)	Hexane	Solvent, cleaner
n-methyl pyrrolidone (872-50-4)	NMP, 1-methyl-2-pyrrolidinone	Solvent, cleaner
4,4'-methylenebis (2-chloraniline) (101-14-4)	MOCA	Press pad
Phenol (108-95-2)	Carbolic acid, phenyl alcohol, phenyl hydroxide	Solvent in primers, adhesives and resins for nylon and plastics
Tetrachloroethylene (127-18-4)	Perchloroethylene, PERC	Solvent, cleaner

NIKE MRSL FOR FOOTWEAR AND EQUIPMENT, CONTINUED

Restricted Substance or Group Name (CAS #)	Synonyms	Common Potential Uses
1,1,1-trichloroethane (71-55-6)	1,1,1 – TCA, methyl chloroform	Solvent, cleaner
Toluene (108-88-3)	Methylbenzene	Solvent in primers, adhesives, paints and inks
2,4-toluene diisocyanate (584-84-9) Toluene-2,6-Diisocyanate (91-08-7)	TDI	Activator in some polyurethane foams
Trichloroethylene (79-01-6)	TCE, trichlorethene	Solvent, cleaner
Xylene — all isomers (1330-20-7)	Ethylbenzene, o,m,p-xylene	Solvent in primers, adhesives, paints and inks
Trichloromethane (67-66-3)	Chloroform	Solvent, cleaner
1,1,2-Trichloroethane (79-00-5)	Vinyl trichloride	Solvent, cleaner
1,1-Dichloroethylene (75-35-4)	1,1-dichloroethene	Solvent, cleaner

SUSTAINABLE CHEMISTRY GUIDANCE

Programs and tools to help reduce and eliminate hazardous chemicals, and drive Sustainable Innovation.

SUSTAINABLE CHEMISTRY GUIDANCE

INTRODUCTION TO GREEN CHEMISTRY

The reduction/elimination of hazardous chemicals in products and processes is one aspect of Nike, Inc.,'s long-term sustainability goals. We ask every supplier to better understand their chemical impact and to search for more environmentally friendly ways to manufacture. The Nike, Inc., Chemistry team encourages all suppliers to use the Principles of Green Chemistry, listed in Figure 8, to inspire innovation. Designing and producing materials using these principles at any stage in the supply chain can help increase sustainability as well as protect consumers, employees, communities and the environment.

FIGURE 8. PRINCIPLES OF GREEN CHEMISTRY

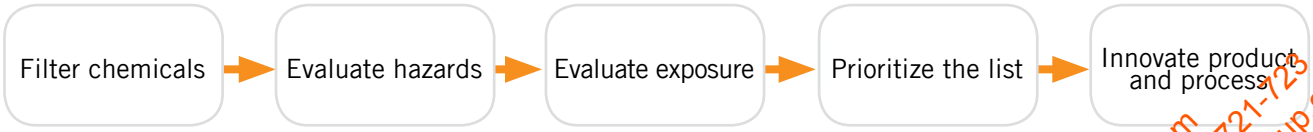
1. Prevention
2. Atom economy
3. Less hazardous chemical syntheses
4. Designing safer chemicals
5. Safer solvents and auxiliaries
6. Design for energy efficiency
7. Use of renewable feedstocks
8. Reduce derivatives
9. Catalysis
10. Design for degradation
11. Real-time analysis for pollution prevention
12. Inherently safer chemistry for accident prevention

Source: Anastas, P. T.; Warner, J. C.; Green Chemistry: Theory and Practice, Oxford University Press: New York, 1998, p.30. (Retrieved from www.epa.gov/greenchemistry/pubs/principles.html)

NIKE, INC., GREEN CHEMISTRY PROGRAM

The Nike, Inc., Green Chemistry Program is designed to drive innovations in product chemistry, particularly those around several of the Green Chemistry Principles. The effort to reduce hazardous chemicals uses a systematic, risk-based approach to assess chemicals in product or processes, as outlined in Figure 9. With the goal of protecting consumers, employees, communities and the environment, the program relies on the evaluation of both hazard and exposure potential. Assessing hazard and exposure potential allows chemicals with the greatest risk (risk = hazard x exposure) to be prioritized for elimination by reformulation, or for control via the Nike, Inc., RSL.

FIGURE 9. NIKE, INC., GREEN CHEMISTRY PROGRAM APPROACH



SUSTAINABLE CHEMISTRY GUIDANCE

Chemical Hazard Criteria

The approach to assessing chemical hazard is based upon the Green Screen for Safer Chemicals (version 1.2) benchmarking tool, which uses the toxicology endpoints in Table 4.

TABLE 4. TOXICOLOGY ENDPOINTS FOR ASSESSING HAZARD

Human Health	Physical and Chemical Properties
Carcinogenicity	Chemical interactions/reactions (For example: explosive, flammable)
Mutagenicity/genotoxicity	
Reproductive toxicity Developmental toxicity	Environmental fate Bioaccumulation Degradability/persistence
Endocrine activity	
Neurotoxicity	
Acute mammalian toxicity	
Skin irritation	Eco-toxicity Aquatic toxicity — Acute Aquatic toxicity — Chronic
Eye irritation	
Skin sensitization Respiratory sensitization	
Systemic toxicity/organ effects	

Exposure

Exposure evaluation allows chemicals to be prioritized. Higher hazard chemicals with higher exposure potential are targets for alternatives assessment and reduction/elimination.

The assessment of exposure is based upon realistic scenarios for consumers, workers and the environment. The consumer exposure scenario is most often based on an apparel model, since it has the greatest skin coverage and is usually more conservative than a footwear or equipment model.

Exposure scenarios for employees and the environment are less standardized and are developed as needed. Exposure scenarios vary for workers and the environment due to differences in how a chemical is used in production and the chemical's physical properties (boiling point, solubility, etc.).

SUSTAINABLE CHEMISTRY GUIDANCE

BETTER CHEMISTRY RESOURCES

In support of our goal of Zero Discharge of Hazardous Chemicals by 2020, and to minimize the chemical footprint of manufacturing, Nike, Inc., strongly encourages the use of better chemistry and efficient manufacturing processes across our supply chain. Several programs, partnerships and collaborations in support of these goals are listed below.

bluesign® bluefinder Tool

In 2013, Nike, Inc., announced a strategic partnership with bluesign® technologies ag as part of our ongoing effort to drive innovation in sustainable materials and eliminate harmful chemistry in our supply chain — all while delivering the high quality and performance for which our products are known (find more at www.nikeresponsibility.com/innovations/bluesign-bluefinder). The agreement gives Nike, Inc., suppliers access to online databases developed and managed by bluesign® technologies ag that contain details of positive chemistry, as well as bluesign® approved textiles and accessories in the bluesign® blueguide for assemblers.

In the bluesign® system, every chemical product receives a rating based on its ecological and toxicological properties and risks. The criteria used to assign these ratings are derived from extensive risk assessments according to the bluesign® methodology and the best available technology (BAT) principle. Chemical products are classified into three categories:

- **blue.** These chemical products may be used for all applications and meet all the criteria of the bluesign® system. Whenever possible, blue chemical products should be selected.
- **grey.** These chemical products may only be used in production under certain required conditions. A potential environmental impact is associated with these chemical products. As a consequence, such chemical products must be applied in well-managed processes including well-managed end-of-pipe solutions. The required conditions are described in the bluesign® bluefinder.
- **black.** The chemical products do not meet the criteria of the bluesign® system and must be eliminated from the manufacturing process.

The bluesign® bluefinder is an online database containing chemical products that comply with the criteria of the bluesign® system. The database only contains the blue and grey classified chemical products. By means of this database, manufacturers can quickly select chemical products that comply with the newest environmental, occupational health and safety (EHS) requirements. The database also contains guidelines on how to incorporate the approved chemical products into the manufacturing process.

By using the online bluesign® bluefinder database, Nike, Inc., suppliers are able to access a list of pre-screened chemicals that meet the bluesign® criteria. By signing up for the tool, Nike, Inc., suppliers also achieve points under the Nike Material Sustainability Index (Nike MSI).

SUSTAINABLE CHEMISTRY GUIDANCE

Nike, Inc., Validation of a Greening Effort (VGE)

VGE, called out above, enables suppliers to receive points in the Nike MSI program based on selecting better chemistries in the production of materials. The VGE chemistry review process ranks the chemistry improvement, and a specific material or materials can be awarded up to seven (7) Nike MSI points depending on the nature of the improvement. The review process may include a third-party toxicology review depending on the specific process, material, or chemical change submitted. Examples of chemistry improvements which may receive points include:

- Adoption of bluesign® bluefinder chemistries or bluesign® certified materials.
- Procurement and use of formulations that meet specific Nike, Inc., goals.
- Phasing out hazardous chemistries for less hazardous alternatives.
- Development of a new material with a lower hazard profile.
- Reduction in the use of solvents.

All Nike, Inc., vendors are strongly encouraged to participate in this program and should complete and submit the VGE form on page 65 to begin the review process.

Better Chemistry Tools and Industry Collaborations

Nike, Inc., is committed to protecting workers, consumers, athletes and the environment. Although we are the largest sportswear company in the world, we also recognize that we are a single brand within a vast global supply chain. Global Footwear and Apparel brands must collaborate to drive meaningful change. Consequently, we continue to highlight the importance of collaborative efforts in reducing the discharge of hazardous chemicals across the broader supply chain. Key tools and industry collaborations relating to chemicals management are outlined in the two tables below.

BETTER CHEMISTRY TOOLS

Company or Organization	Tool	Description	Advantage	Links
bluesign technologies ag Available through a strategic partnership between Nike, Inc., and bluesign technologies ag.	bluesign® bluefinder	With bluesign® bluefinder, suppliers can access a database of sustainable textile preparations that meet bluesign® evaluation criteria. This includes dye systems, detergents and other process chemicals used in the manufacturing process.	Nike MSI awards points for enrollment. Database of trade name formulations for easy procurement of RSL- and MRSL-compliant formulations.	www.bluesign.com Nike, Inc., and bluesign partnership news http://nikeinc.com/news/nike-partners-with-bluesign-technologies-to-scale-sustainable-textiles
	bluesign® blueguide	The bluesign® blueguide database for brands and retailers contains data on bluesign® approved fabrics. In addition, bluesign® blueguide offers information about the environment, occupational health and safety as well as consumer protection.	Fabrics certified as bluesign® approved meet the highest criteria with regard to resource efficiency and environmental impact.	
	bluesign® system partner	System partners are leading global stakeholders within the textile sector. bluesign® system partners go through rigorous tests to verify compliance with the bluesign® criteria.	Nike MSI awards the highest possible scores to facilities that successfully achieve bluesign® system partner status.	
Nike, Inc.	Nike, Inc., Approved Inks List	The Nike, Inc., Approved Inks List identifies inks, paints and color systems that have passed Nike, Inc., RSL testing within one year. Inks selected from this list do not require vendor or supplier testing. Screenprint strike-off testing still applies in all cases.	Reduced RSL testing for approved input inks.	Available via Nike Connect. For chemical suppliers interested in getting their inks listed, please contact RSLSupport@nike.com.

INDUSTRY COLLABORATIONS

Company or Organization	Tool	Description	Advantage	Links
AFIRM Group	AFIRM Group Supplier Toolkit	This chemical-guidance document details technical information about restricted substances in Apparel and Footwear production processes.	The toolkit is primarily focused on eliminating restricted substances from finished products. It also includes extensive information about chemical discharge into wastewater, air emissions and solid waste.	www.afirm-group.com/toolkit
Roadmap to Zero Discharge of Hazardous Chemicals (ZDHC) Program	Manufacturing Restricted Substances List (MRSL)	As an input management tool, the MRSL addresses hazardous substances potentially used and discharged into the environment during the manufacturing process. ZDHC brands expect that material suppliers and factories will communicate with their chemical suppliers to ensure that the listed substances are not present in chemical formulations above established limits.	The ZDHC MRSL will assist brands, their supply chains and the broader industry to adopt a harmonized approach to the control of hazardous substances used to process materials in Apparel and Footwear.	www.roadmaptozero.com/df.php?file=pdf/MRSL.pdf
	Chemicals Management System (CMS) Guidance Manual	This CMS Guidance Manual focuses on the approach, structure and documentation needed to create and support a chemical management program to meet the ZDHC goals.	The CMS is an effective framework for improving overall environmental and chemical performance while achieving the goal of zero discharge.	www.roadmaptozero.com/df.php?file=pdf/CMS_EN.pdf
	Chemical Guidance Sheets	Information on specific chemistries, such as: • Chlorobenzenes • Chlorinated Phenols • Halogenated Solvents • Long-chain PFAAs • Nonylphenols & Ethoxylates • Organotins • Phthalates • Polycyclic Aromatic Hydrocarbons • Short-chain Chlorinated Paraffins	Useful information on phase outs, hazards, potential issues and other chemistry-focused items.	www.roadmaptozero.com/programme-documents.php

SUSTAINABLE CHEMISTRY GUIDANCE

Please read page 4 for information regarding changes to chemistry scoring in Nike MSI. Changes take effect in October 2016.

NIKE MATERIALS SUSTAINABILITY INDEX (NIKE MSI)

In 2003, we began developing Nike MSI to help designers make informed, real-time decisions about the potential environmental impacts of raw material choices. Nike MSI calculates relative material scores for each of the more than 80,000 materials available to Nike product creation teams. These scores help designers select materials with lower environmental impacts, as measured by Nike MSI.

Nike MSI balances scoring by using points that fall into three categories — a Base Material Score, Material Environmental Attributes and Supplier Practices — and evenly weighting four environmental impact areas across the Nike MSI scoring framework. These impact areas are chemistry, energy and greenhouse gas intensity, water and land use intensity and physical waste. This allows Nike to achieve a robust scoring framework that delivers comprehensive materials assessments.

As noted above, Nike MSI awards points to suppliers for committing to sustainability best practices within their supply chains. With regard to chemistry, this includes a supplier's ability to:

- Consistently meet our RSL standard.
- Commit to sourcing chemical formulations that meet the ZDHC MRSL standard.
- Commit to applying proper chemicals management practices.
- Successfully complete a Validation of a Greening Effort (VGE) to improve a process or material.
- Adopt tools that enable uptake of positive chemistries, such as the bluesign® bluefinder.

Fill out and submit the forms on pages 67 through 69 to document your commitments. For more information on using your commitment to the RSL and Green Chemistry to gain more recognition within the Nike MSI program, please contact the Nike team at green.chem@nike.com.

For details on Nike MSI scoring and the program as a whole, please contact your Nike Liaison Office Materials team or Catherine Newman (catherine.newman@nike.com).

CONTACT INFORMATION

Names, phone numbers and e-mail addresses for the people who can answer questions and help guide you through the RSL testing process.

CONTACT AND SHIPPING INFORMATION FOR NIKE, INC.,-APPROVED LABORATORIES

Laboratory	Shipping Information	Contact Information
BV-GmbH	Bureau Veritas CPS (Germany) GmbH Wilhelm Hennemannstr. 8 19061 Schwerin Deutschland	Dr Jörg Ruhkamp, Laboratory Director joerg.ruhkamp@de.bureauveritas.com Tel: 49-40-74041-0000 Fax: 49-40-74041-1499
BV-HK	Bureau Veritas CPS (Hong Kong) Ltd 1/F, Pacific Trade Centre, 2 Kai Hing Raoad, Kowloon Bay, Kowloon, Hong Kong	Dr. Lee Siu Ming, Regional Manager siuming.lee@hk.bureauveritas.com Tel: 852-2331-0726 Fax: 852-2331-0889
BV-US	Bureau Veritas CPS 100 Northpointe Blvd. Buffalo, New York 14228-1884	Michelle Korkowicz, Customer Service Specialist michelle.korkowicz@bureaveritas.com Tel: 716-505-3583 Fax: 716-505-3301
CTI-SZ	CTI (Shenzhen) Ltd. Building C, HongWei Industrial Park BaoAn 70 District Shenzhen, Guangdong, China	Kevin Lu, Senior Management Advisor kevin.lu@cti-cert.com Tel: +86-75533682258 Fax: +86-75533683385
INTERTEK-HK	Intertek Testing Services Hong Kong Ltd. 4c Garment Centre 576 Castle Peak Road Kowloon, Hong Kong	Kaye Leung, Client Services Supervisor kaye.leung@intertek.com Tel: 852-21738215 Fax: 852-34032528
INTERTEK-SH	Intertek Testing Services Limited, Shanghai 2/F, Building No.4, Shanghai Comalong Industrial Park, 889 Yi Shan Road, Shanghai 200233, China	Jane Wu, Sr. Manager, Customer Services jane.wu@intertek.com Tel: 86-21-64954601; 86-21-60917026 Fax: 86-21-64953254
INTERTEK-TW	Intertek Testing Services Taiwan Ltd. 8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan	KY Liang, Divisional Head, Analytical Chemistry k.y.liang@intertek.com Tel: 886-2-66022236 Fax: 886-2-6602-2889

CONTACT AND SHIPPING INFORMATION FOR NIKE, INC.,-APPROVED LABORATORIES, CONTINUED

Laboratory	Shipping Information	Contact Information
SGS-BR	SGS do Brasil Ltda. Av. Andromeda, 832 Barueri- Sao Paulo SP, 06473-000 Brazil	Adriana Morelli adriana.morelli@sgs.com Tel: +55 11 3883 8808 Fax: +55 11 3883 8899
SGS-HK	SGS Hong Kong Ltd. 4/F, On Wui Centre, 25 Lok Yip Road Fanling, NT, Hong Kong	Aaron Shum aaron.shum@sgs.com Tel: +852 2774 7449, ext. 1354 Fax: +852 2330 4862
SGS-KO	SGS Korea Co., Ltd. #322, The O Valley Bldg. 555-9, Hogye-dong Dongan-gu, Anyang Gyeonggi Korea 431-080	Soowoong Jeong soowoong.jeong@sgs.com Tel: +82 31 460 8060 Fax: +82 31 460 8080
SGS-TH	SGS Thailand Ltd. 41/23 Soi Rama III 59 Rama III Road, Chongnonsee Yannawa, Bangkok 10120 Thailand	Bhuwadon Samlam bhuwadon.samlam@sgs.com Tel: +66 (0)2-683-0541, ext. 2177 Fax: +66 (0)2-294-8200
SGS-TW	FOOTWEAR AND EQUIPMENT SGS Taiwan Ltd. Multi Chemical Laboratory-Kaohsiung 61, Kai-Fa Rd, Nanzih Export Processing Zone Kaohsiung , Taiwan 81170 APPAREL SGS Taiwan Ltd. Textile Laboratory-Taipei 31, Wu Chyuan Road, New Taipei Industrial Park Wu Ku District, New Taipei City, Taiwan 24886	Janny Lin, SGS Marketing Representative janny.lin@sgs.com Tel: +886 7 3012121, ext.4102 Fax: +886 7 3010867 Kara Chen kara-tw.chen@sgs.com Tel: +886 2 2299 3279, ext. 5225 Fax: +886 2 2298 4060
SGS-VN	SGS Vietnam Ltd. Lot III/21, Road 19/5A, Group CN3 Tan Binh Industrial Park Tay Thanh Ward, Tan Phu District Ho Chi Minh City, Vietnam	Ngan Thai ngan.thai@sgs.com Tel: +848-38-160-999, ext. 128 Fax: +848-38-160-996

CONTACTS FOR RSL-RELATED QUESTIONS

Product Group or Brand	E-mail	Product Group or Brand	E-mail
Nike Apparel	RSL.NIKE.Apparel@nike.com	Converse	RSL.Converse@converse.com
Nike Footwear	RSL.NIKE.Footwear@nike.com	Hurley	RSL.Hurley@hurley.com
Nike Equipment	RSL.NIKE.Equipment@nike.com	Nike Licensees	RSL.NIKE.Licensee@nike.com

If you need additional assistance after using the contacts above for general RSL inquiries, please contact the person in the appropriate division.

NIKE, INC., RSL CONTACTS

Contact	Division	Location	E-mail	Telephone
Mike Schaadt	All	WHQ	mike.schaadt@nike.com	+1-503-532-8516
Andy Chen	All	Taipei	andy.chen@nike.com	+886-2-81617135
Nick Farrar	All	WHQ	nick.farrar@nike.com	+1-503-532-0215
Bill Rehm	Nike – Footwear	WHQ	bill.rehm@nike.com	+1-503-671-4746
Michael Cordisco	Nike – Footwear	WHQ	michael.cordisco@nike.com	+1-503-532-0674
Kate Horspool	Nike – Apparel, Equipment, Licensees	WHQ	kate.horspool@nike.com	+1-503-532-2652
Kevin Donlon	Converse – Footwear	Converse/US	kevin.donlon@converse.com	+1-617-377-1195
Raymond Guerrero	Converse – Apparel	Converse/US	raymond.guerrero@converse.com	+1-646-563-7411
Brett Bjorkman	Hurley – All	Hurley HQ/US	brett_bjorkman@hurley.com	+1-949-548-9375 ext. 3151

OTHER GUIDELINES AND POLICIES

Extensive guidance for odor management materials, nanotechnology materials, and animal skins.

OTHER GUIDELINES AND POLICIES

DEFINITION

Nike, Inc., defines odor management materials as antimicrobials (also identified as biocides, antibacterials and biostats), odor capture technologies and scented ingredients.

NIKE, INC., ODOR MANAGEMENT, ANTIMICROBIAL AND SCENTED MATERIAL GUIDELINES

Nike, Inc., defines odor management materials as antimicrobials (also identified as biocides, antibacterials, and biostats), odor capture technologies and the use of scented ingredients. Nike, Inc., currently restricts the use of scented materials and/or odor control technologies within Apparel, Footwear and Equipment product lines. This restriction applies to any chemical or substance intentionally applied to product to control bacterial populations, capture odors, mask odors or perfume product or the consumer.

The following restrictions are designed with the consumer and environment in mind. The conditions described below must be met prior to the use of any scented materials or odor management technologies within Nike, Inc., product. Please contact the Nike, Inc., Chemistry team for further guidance on the approval process.

Scented materials or odor control technologies must:

- Not leach or release chemicals in order to be effective. [A,B,C]
- Meet global legislative standards.
- Be registered under the EU Biocidal Products Regulation.
- Pass a corporate toxicity review conducted through the Nike, Inc., Chemistry team.
- Be proven effective for our product types.
- Comply with the Nike, Inc., Restricted Substances List.
- Be listed on the bluesign® bluefinder.

Notes:

A. Restriction on leaching and intentional release of substances is due to the potential to:

- Harm helpful skin bacteria populations.
- Create conditions for resistant microbes.
- Contribute to the potential for bioaccumulation.
- Place Nike, Inc., product under restrictions proposed in legislation (REACH), the EU Cosmetics Directive, Medical Devices Directive or Pharmaceutical Products Directive.

B. Technologies known to release substances in order to be effective:

- Heavy metals (Copper, Silver, Tributyltin (TBT))
- Triclosan
- Pentachlorophenol

C. Moisture-absorbing (mold-inhibiting) sachets: Dimethyl fumarate.

OTHER GUIDELINES AND POLICIES

DEFINITION

Nanotechnology-based materials (i.e., nanomaterials) are not consistently defined. Nanotechnology generally refers to compounds or components within the range of 1 to 100 nanometers (nm) in one or more dimension. (One nanometer is one-billionth of a meter.) Colloidal materials (particularly metals) may also fall within this size range. These materials typically have enhanced or new properties attributable to their small size. Nanotechnology is highly multidisciplinary, and examples may be found in chemical applications (e.g., polymers) and mechanical/electrical engineering applications (e.g., microscopic machines).

Nanoparticle. Three dimensions in the 1 to 100 nm range.

Nanotubes/nanowires. Two dimensions in the 1 to 100 nm range.

Nanofilms. One dimension in the 1 to 100 nm range.

NIKE, INC., NANOTECHNOLOGY MATERIAL GUIDELINES

Nike, Inc., currently restricts the use of nanomaterials within Apparel, Footwear and Equipment product lines. This restriction applies to any chemical or substance incorporating nanomaterials that is intentionally applied to a product or used in its construction because it imparts desirable physical properties to the final product or remains in the product due its use in manufacturing a component.

The following restrictions are designed to ensure that any potentially negative impact to consumers and the environment associated with the use of nanomaterials is minimized, if not eliminated. The conditions described below must be met prior to the use of any nanotechnologies within Nike, Inc., product.

Products to which nanomaterials are applied must:

- Not leach or release chemicals (or particles) in order to be effective or as a result of wear,[A] unless safety data are available and acceptable.
- Meet global legislative standards.
- Be appropriately registered (e.g., EU Biocide Directive, if used as bacteriostatic agent).
- If registration is not required, manufacturer/supplier has made available an analysis of consumer safety.
- Pass a corporate toxicity review conducted through the Nike, Inc., Chemistry team.[B]
- Be proven effective for our product types.
- Comply with the Nike, Inc., Restricted Substances List.

Notes:

A. Restriction on leaching and intentional/unintentional release of substances is due to the potential to:

- Induce unanticipated health effects – some nanomaterials appear to have toxicity different from the same, but larger, chemical structures making extrapolation of data on larger particles to nanomaterials difficult.
- Create unanticipated exposure situations (e.g., dermal absorption may occur differently) or have unanticipated consequences (e.g., generation of resistant microbes).
- Contribute to the potential for bioaccumulation.
- Place Nike, Inc., product under restrictions proposed in legislation (REACH), the EU Cosmetics Directive, Medical Devices Directive, Pharmaceutical Products Directive or state or local prohibitions on the use of nanomaterials.

B. Need for consistent toxicity review:

- Manufacturer's claims may not reflect reality and some materials labeled "nano" are not.
- The evolution of consumer safety issues related to nanomaterials is evolving rapidly. The Nike, Inc., Chemistry team is committed to staying abreast of new developments.
- Toxicity concerns with nanomaterials are very different than those for typical chemicals in our industry and assessments of consumer safety issues require novel approaches.

OTHER GUIDELINES AND POLICIES

NIKE, INC., ANIMAL SKINS POLICY

The following policy applies to Nike brand products or Nike Affiliate brand products (collectively "Products") that contain animal skin materials ("Animal Skins").

Permitted Animal Skins

The following Animal Skins are permitted for use in Products:

- Sheep (leather + hair-on hides / shearling; includes lamb)
- Cow (leather + hair-on hides)
- Goat
- Pig
- Kangaroo (If wild caught, must be sourced from actively managed populations with government agency oversight.)

Source Country

- Permitted Animal Skins may be sourced in all countries, except for China, India, or the Amazon Biome as more specifically explained below.
- Products made with Animal Skins must be accompanied by the appropriate CITES or other required export certificate where applicable.

Additional Restrictions

- Animal Skins (specifically cow) must not be sourced in the Amazon Biome (see policy below).
- Animal Skins must not be any species considered to be exotic. Examples include, but are not limited to, alligator, crocodile, lizard, snake, ostrich, fish, marine mammals, etc. This restriction shall apply to Products manufactured after the Summer 2010 retail season.
- Animal Skins must not be any species banned by the State of California Penal Code section 653o(a), which states:

  "It is unlawful to import into this state for commercial purposes, to possess with intent to sell, or to sell within the state, the dead body, or any part or product thereof, of any alligator, crocodile, polar bear, leopard, ocelot, tiger, cheetah, jaguar, sable antelope, wolf (Canis lupus), zebra, whale, cobra, python, sea turtle, colobus monkey, kangaroo, vicuna, sea otter, free-roaming feral horse, dolphin or porpoise (Delphinidae), Spanish lynx, or elephant."

- Animal Skins must not be derived from any species of domesticated or feral dog or cat.
- Animal Skins must not be "fur," except that cow "hair-on" hides or sheep shearling are permitted as provided above.
- Nike, Inc., supports the use of wool fiber that is sourced and certified from non-mulesed sheep and will consolidate its wool sourcing accordingly, as rapidly as supplies and pricing allow.

OTHER GUIDELINES AND POLICIES

Amazon Biome Leather Sourcing Policy

- Raw hides / leather used in Nike, Inc., products will not be produced from cattle raised in the Amazon Biome as defined by IBGE.
- Nike, Inc., Brazilian hide / leather suppliers are required to certify, in writing, that they are supplying hides / leather for Nike, Inc., products from cattle raised outside of the Amazon Biome.
- Suppliers of Brazilian hides / leather for Nike, Inc., products have until July 1, 2010 to create an ongoing, traceable and transparent system to provide credible assurances that hides / leather used for Nike, Inc., products is from cattle raised outside of the Amazon Biome.
- Nike, Inc., will review suppliers' progress in establishing an ongoing, traceable and transparent system on a quarterly basis.

If, after July 1, 2010, suppliers are unable to provide credible assurances that hides/leather used for Nike, Inc., products are from cattle raised outside of the Amazon Biome, Nike, Inc., will consider increasing the exclusion area to include all of the Amazon Legal (as defined by IBGE).

Definitions

- **Raised**. Refers to cattle's entire life.
- **IBGE**. Brazil's National Institute of Geography and Statistics.
- **Amazon Biome**. Amazon rainforest and its related ecosystem. The boundary of the Amazon Biome within Brazil is defined by the Brazilian Institute of Geography and Statistics (IBGE). The map is available at ftp://geoftp.ibge.gov.br/mapas_tematicos/mapas_murais/biomas.pdf.
- **Amazon Legal**. The entirety of the nine Brazilian states that contain portions of the Amazon Biome (Acre, Amazonas, Roraima, Amapá, Pará, Rondônia, Mato Grosso, Tocantins and Maranhão).

Related Guidance

- **Animal Welfare**. Suppliers must source Animal Skins from processors that use sound animal husbandry, and humane animal treatment / slaughtering practices whether farmed, domesticated, or wild (managed).
- **Leather Working Group (LWG)**. Leather suppliers must screen tanning processes against the LWG Protocol to ensure adherence to best environmental practices www.leatherworkinggroup.com.
- **Nike, Inc., RSL**. Suppliers of Animal Skins must comply with the Nike, Inc., RSL.
- **Traceability**. Suppliers must to have the ability to trace raw hides / skins back to country of origin.
- **Integrity**. Animal Skins' identification of species must be accurate (i.e. scientific/Latin and common names) as appropriate for legal import/export of materials and product.
- **Legislation**. Suppliers must meet all applicable global legislative standards that apply to Animal Skins.
- **Trade Regulations**. Suppliers must comply with country specific import/export trade regulations that apply to Animal Skins.

FORMS

Print, fill out and sign the forms for the Nike, Inc., Green Chemistry Program, and then return to the Nike, Inc., Chemistry team.

Note: The test request form (TRF) previously located in the RSL is now available for download at www.nikeincchemistry.com.

CHEMICALS MANAGEMENT & TRANSPARENCY

Chemicals management is an integral part of producing materials and products which are compliant with Nike, Inc. policy. An effective chemicals management program includes documented policies for procurement, tracking, measuring, and for reporting chemical information when required.

Resources are available to the supply chain for developing a strong, efficient and effective chemicals management program such as:

- the Roadmap to Zero Discharge of Hazardous Chemicals (ZDHC) Chemicals Management Framework and Manufacturers Restricted Substances List (MRSL) (www.roadmaptozero.com)
- the AFIRM Group Suppliers Toolkit (http://www.afirm-group.com/toolkit/)

Please complete this form and upload it to the Vendor Portal at: http://www.nikemsivp.com

Please read and signify your commitment to each of the topics below by checking each of the boxes:

- ☐ We have a documented purchasing policy for chemicals. This policy contains a listing of approved vendors, and lists all chemicals which are allowed on site, as well as a review process for purchase of chemicals that are not otherwise specified in the purchasing policy.
- ☐ We have a documented inventory of chemicals purchased, stored (including their location) and used at our facility which is updated routinely and whenever new chemicals arrive.
- ☐ We will ensure that our facility has a current MSDS or SDS for every chemical and ensure they are readily available to all staff working with these chemicals at all locations.
- ☐ We ensure that all chemicals are labelled properly, stored in suitable containers, and ensure they are traceable back to the source (bulk) chemicals.
- ☐ We have a documented process where senior management provides feedback on how to improve the system and guide the organization closer to the goal of zero discharge of hazardous chemicals.
- ☐ We ensure that every effort will be taken to ensure that our facility only utilizes chemicals that are in compliance with:
  - Regulations where your products are manufactured and sold
  - The Nike, Inc. RSL
  - The ZDHC MRSL (http://www.roadmaptozero.com/programme-documents/)

After Checking all the boxes above, complete the following fields. Incomplete forms will not be accepted.

Date (MM/DD/YYYY) _____

Supplier name _____

Name of manager _____

Full title of manager _____

Signature of Manager _____

ZDHC MRSL COMPLIANCE ACKNOWLEDGEMENT

The Zero Discharge Hazardous Chemicals Foundation is a non-profit group with the following vision and mission:

ZDHC Vision	**ZDHC Mission**
Widespread implementation of sustainable chemistry and best practices in the textile industry to protect consumers, workers and the natural environment.	Advance towards zero discharge of hazardous chemicals in our supply chain and act to improve the environment and people's well being.

Acknowledgement of ZDHC MRSL and Interim Conformance Guidance:
The signing party acknowledges receipt of the **ZDHC MRSL Version 1,1** (December 2015) and the **Interim MRSL Conformance Guidance** (December 2015). Both are available at www.roadmaptozero.com

The signing party further acknowledges that it will be responsible to:

- Implement the ZDHC MRSL at its production sites over time,
- Pass on the ZDHC MRSL to its supply chain partners, and
- Collect documents described in the Interim MRSL Conformance Guidance from its chemical suppliers.

Without limiting the scope of the ZDHC MRSL, particular focus should be given to suppliers of chemicals such as auxiliaries, dyestuffs, inks, prints, adhesives, and solvents.

Signature

Company name: _____

Company Address: _____

Name of Company Representative signing: _____

Title of Company Representative signing: _____

Date: _____

Signature: _____

Please upload a scanned copy of this declaration to the Nike Vendor Portal (www.nikemsivp.com)
For any questions related to this declaration, please contact RSLSupport@nike.com

NIKE, INC., GREEN CHEMISTRY PROGRAM

VALIDATION OF A GREENING EFFORT

By submitting this document, we (the supplier) are requesting validation for a greening effort made to a material or process. This validation provides Nike, Inc., with a technical basis for awarding the status of “environmentally preferred” to a material. Disclosure of formulations must be specific enough to allow for analysis.

Note: This commitment does not supersede supply agreements or any legal obligation of suppliers.

Common process steps:

- At supplier discretion, establish a non-disclosure agreement (NDA) with Nike, Inc.
- Request a technical review from Nike, Inc., Chemistry (green.chem@nike.com) by describing:
    - What is the chemistry change? (General description.)
    - How is the current material or process an improvement?
    - Details to any change to the material (physical) performance.
- If eligible, the supplier will be referred for further evaluation.
- Disclose detailed chemical formulation change (including chemical amounts, CAS number). Typically an MSDS does NOT contain enough information for the review process.

Supplier requests a review of material or process greening. green.chem@nike.com → Nike, Inc., Chemistry review. May request additional information and data. May establish an NDA. → Toxicology review if deemed necessary by Nike, Inc., Chemistry. → Nike, Inc., Chemistry communicates approval or denial.

Supplier name ______________________________

Signature of manager ______________________________

Name of manager (printed) ______________________________

Full title of manager ______________________________

Date ______________