



# RESTRICTED SUBSTANCES LIST (RSL) 2.0

October 2016

# Contents

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|   |    |
|---|----|
| Alkyl Phenols (APs) and Alkyl Phenyl Ethoxylates (APEOs)..... | 4  |
| Antimicrobials.....   | 4  |
| Asbestos.....   | 4  |
| Azodyes (Restricted Amines - from Azo Dyes).....              | 5  |
| Bisphenol A (BPA).....  | 5  |
| Butylated Hydroxytoluene (BHT).....                           | 6  |
| Carcinogenic & Allergic Disperse Dyes and Other Dyes.....     | 6  |
| Chlorinated Organic Carriers (COC).....                       | 7  |
| Chlorinated Paraffins .....                                   | 8  |
| Chlorinated Phenols and Other Phenols.....                    | 8  |
| Dioxins and Furans .....                                      | 9  |
| Flame Retardants .....  | 10 |
| Fluorinated Greenhouse Gases .....                            | 11 |
| Formaldehyde.....   | 11 |
| Heavy Metals.....   | 12 |
| Isocyanates .....   | 14 |
| N-Nitrosamine & Nitrosable Substances.....                    | 14 |
| Organotins .....  | 14 |
| Ozone Depleting Substances .....                              | 15 |
| Perfluorinated Chemicals (PFCs) .....                         | 17 |
| Pesticides .....  | 17 |
| Ortho-Phthalates.....   | 20 |
| Polycyclic Aromatic Hydrocarbons (PAHs) .....                 | 21 |
| Polyvinyl Chloride (PVC).....                                 | 21 |
| Volatile Organic Compounds (VOC's) / Organic Solvents.....    | 22 |



# Introduction

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## Vision

PVH is committed to using safer substances in the materials used to manufacture our products and within the manufacturing processes to protect consumers, workers, sourcing communities and the natural environment. This commitment will move us towards zero discharge of hazardous chemicals across our supply chain by 2020.

## Background

As part of PVH's commitment to the goal of zero discharge of hazardous chemicals by 2020, we have updated the PVH Restricted Substance List (RSL). This RSL applies to all products for PVH brands including but not limited to: apparel, components, footwear, packaging, trims, home goods and accessories.

The chemical substances listed within this document have been banned, restricted, or are being phased out due to either government legislation or PVH's belief that the chemicals or materials present environmental, health, or safety risks. Supply chain partners must ensure that all products, components, or materials supplied to PVH and/or any processes used to produce products, components, or materials comply with PVH's Global RSL.

## What Should Suppliers Do

Suppliers are encouraged to work with their chemical suppliers to ensure that the chemical formulations used for production of products for PVH will allow those products to meet the requirements in this RSL. Material suppliers should ensure they have received a valid Safety Data Sheet (SDS) for each chemical formulation used. In addition, it may be useful to ask whether chemical suppliers are able to provide chemical formulations that meet the requirements of the Zero Discharge of Hazardous Chemicals (ZDHC) Programme Manufacturing Restricted Substances List (MRSL), found at this link: <http://www.roadmapzero.com/programme-documents/>.

## Contact Information

More information on PVH's Corporate Responsibility program is available at [pvh.com/responsibility](http://pvh.com/responsibility). Should you have any questions or concerns about this document, please contact [cr@pvh.com](mailto:cr@pvh.com).

# PVH Global Restricted Substances List (RSL)

| Chemical Name  | CAS Number  | Restriction/ Limitation   | Test Method   |
|--|---|---|---|
| <b>1) Alkyl Phenols (APs) and Alkyl Phenyl Ethoxylates (APEOs)</b> |   |   | ZDHC Guidance <a href="#">Link 1</a> , <a href="#">Link 2</a>   |
| 1.1  | Nonylphenol (NP), mixed isomers<br>104-40-5<br>11066-49-2<br>25154-52-3<br>84852-15-3 | AP (NP&OP): 50 mg/kg (sum),<br>APEOs (NPEOs&OPEOs): 500 mg/kg (sum)   | Solvent extraction, LC-MS analysis  |
| 1.2  | Nonylphenoethoxylates (NPEOs) (C2-C18)<br>Various                                     | If total APEOs (NPEOs + OPEOs) result is between 100 mg/kg and <500 mg/kg: Follow up required to find source. | ISO 18254 (textile)<br>ISO 18218-1 (leather)  |
| 1.3  | Octylphenol (OP), mixed isomers<br>140-66-9<br>1806-26-4<br>27193-28-8                |   |   |
| 1.4  | Octylphenoethoxylates (OPEOs) (C2-C15)<br>Various                                     |   |   |
| Chemical Name  | CAS Number  | Restriction/ Limitation   | Test Method   |
| <b>2) Antimicrobials</b>   |   |   |   |
| 2.1  | Dimethyl Fumarate (DMFu)<br>624-49-7  | 0.1 mg/kg   | Solvent extraction, GC-MS analysis<br>ISO/TS 16186<br>CNS 15331 Annex C   |
| 2.2  | Triclosan<br>3380-34-5  | Not detected  | Solvent extraction GC-MS or LC-MS   |
| Chemical Name  | CAS Number  | Restriction/ Limitation   | Test Method   |
| <b>3) Asbestos</b>   |   |   |   |
| 3.1  | Actinolite<br>77536-66-4  | Should not contain  | Microscopic exam; minimum magnification 1-250, polarized light filter attached; ratio of fiber length to diameter is at 3:1 |
| 3.2  | Amosite<br>12172-73-5   |   |   |
| 3.3  | Anthophyllite<br>77536-67-5   |   |   |
| 3.4  | Chrysotile<br>12001-29-5  |   |   |
| 3.5  | Crocidolite<br>12001-28-4   |   |   |
| 3.6  | Tremolite<br>77536-68-6   |   |   |

| Chemical Name   | CAS Number                                | Restriction/ Limitation | Test Method  |  |
|---|---|-------------------------|--|--|
| <b>4) Azodyes (Restricted Amines - from Azo Dyes)</b> |   |                         |  |  |
| 4.1   | 4- Aminodiphenyl                          | 92-67-1                 | EN 14362-1 (textile)<br><br>EN14362-3 / 64 \$LFGB 82.02-9 / 64 \$LFGB 82.02-15 (pAAB in textile)<br><br>EN ISO 17234-1 (leather)<br>EN ISO 17234-2 (pAAB in leather)<br><br>China:<br>GB/T 17592 (textile)<br>GB/T 19942 (leather)<br>GB/T 23344 (pAAB confirmation) |  |
| 4.2   | Benzidine                                 | 92-87-5                 |  |  |
| 4.3   | 4-Chloro-o-Toluidine                      | 95-69-2                 |  |  |
| 4.4   | 2- Naphthylamine                          | 91-59-8                 |  |  |
| 4.5   | o-Aminoazotoluene                         | 97-56-3                 |  |  |
| 4.6   | 2-Amino-4-nitrotoluene                    | 99-55-8                 |  |  |
| 4.7   | 2,4 Diaminoanisole                        | 615-05-4                |  |  |
| 4.8   | 4,4 Diaminodiphenylmethane                | 101-77-9                |  |  |
| 4.9   | 3,3-Dichlorobenzidine                     | 91-94-1                 |  |  |
| 4.10  | 3,3- Dimethoxybenzidine (o-Dianisidine)   | 119-90-4                |  |  |
| 4.11  | 3,3- Dimethylbenzidine (o-Tolidine)       | 119-93-7                |  |  |
| 4.12  | 3,3- Dimethyl-4,4'-diaminodiphenylmethane | 838-88-0                |  |  |
| 4.13  | p-Chloroaniline                           | 106-47-8                |  | Not Detected<br>(Textile: 20 mg/kg; Leather: 30 mg/kg) |
| 4.14  | p-Cresidine                               | 120-71-8                |  |  |
| 4.15  | 4,4-Methylene-bis-(2- chloroaniline)      | 101-14-4                |  |  |
| 4.16  | 4,4- Oxydianiline                         | 101-80-4                |  |  |
| 4.17  | 4,4- Thiodianiline                        | 139-65-1                |  |  |
| 4.18  | 2,4- Toluenediamine                       | 95-80-7                 |  |  |
| 4.19  | o-Toluidine                               | 95-53-4                 |  |  |
| 4.20  | 2,4,5-Trimethylaniline                    | 137-17-7                |  |  |
| 4.21  | o-Anisidine                               | 90-04-0                 |  |  |
| 4.22  | 4-Amino-azobenzene                        | 60-09-3                 |  |  |
| 4.23  | 2,4-Xylidine                              | 95-68-1                 |  |  |
| 4.24  | 2,6-Xylidine                              | 87-62-7                 |  |  |
| 4.25  | Aniline                                   | 62-53-3                 |  | Information only                                       |
| <b>5) Bisphenol A (BPA)*</b>                          |   |                         |  |  |
| 5.1   | Bisphenol A (BPA)                         | 80-05-7                 | Not detected (1 mg/kg)<br><br>Solvent extraction, LC-MS analysis<br><br>DIN EN ISO 18857-2 (mod)   |  |

\* Applicable to polycarbonate plastic items that come into food, beverage contact items and mouthable items (including infants toys and mouthable children toys).

| Chemical Name   | CAS Number                     | Restriction/ Limitation | Test Method |            |
|---|--------------------------------|-------------------------|-------------|------------|
| <b>6) Butylated Hydroxytoluene (BHT) in Packaging*</b>  |                                |                         |             |            |
| 6.1   | Butylated hydroxytoluene (BHT) | 128-37-0                | 25 mg/kg    | ASTM D4275 |
| * Applicable to plastic bags used on the selling floor. |                                |                         |             |            |

| Chemical Name  | CAS Number                    | Restriction/ Limitation                | Test Method   |                                      |
|--|-------------------------------|--|---|--------------------------------------|
| <b>7) Carcinogenic &amp; Allergic Disperse Dyes and Other Dyes</b> |                               |  |   |                                      |
| 7.1  | C.I. Disperse Blue 1          | 2475-45-8                              | DIN 54231 /§64 LFGB 82.02-10<br><br>Acid digestion, analyzed by ICP-AES (for screening of lead/chromium/molybdenum for pigment red 104 & lead/chromium for pigment yellow 34) |                                      |
| 7.2  | C.I. Disperse Blue 3          | 2475-46-9                              |   |                                      |
| 7.3  | C.I. Disperse Blue 7          | 3179-90-6                              |   |                                      |
| 7.4  | C.I. Disperse Blue 26         | 3860-63-7                              |   |                                      |
| 7.5  | C.I. Disperse Blue 35         | 12222-75-2                             |   |                                      |
| 7.6  | C.I. Disperse Blue 102        | 69766-76-6                             |   |                                      |
| 7.7  | C.I. Disperse Blue 106        | 12223-01-7                             |   |                                      |
| 7.8  | C.I. Disperse Blue 124        | 61951-51-7                             |   |                                      |
| 7.9  | C.I. Disperse Brown 1         | 23355-64-8                             |   |                                      |
| 7.10   | C.I. Disperse Orange 1        | 2581-69-3                              |   |                                      |
| 7.11   | C.I. Disperse Orange 3        | 730-40-5                               |   |                                      |
| 7.12   | C.I. Disperse Orange 11       | 82-28-0                                |   | Not Detected<br>(5 mg/L or 75 mg/kg) |
| 7.13   | C.I. Disperse Orange 37/76/59 | 12223-33-5<br>13301-61-6<br>51811-42-8 |   |                                      |
| 7.14   | C.I. Disperse Red 1           | 2872-52-8                              |   |                                      |
| 7.15   | C.I. Disperse Red 11          | 2872-48-2                              |   |                                      |
| 7.16   | C.I. Disperse Red 17          | 3179-89-3                              |   |                                      |
| 7.17   | C.I. Disperse Yellow 1        | 119-15-3                               |   |                                      |
| 7.18   | C.I. Disperse Yellow 3        | 2832-40-8                              |   |                                      |
| 7.19   | C.I. Disperse Yellow 9        | 6373-73-5                              |   |                                      |
| 7.20   | C.I. Disperse Yellow 39       | 12236-29-2                             |   |                                      |
| 7.21   | C.I. Disperse Yellow 49       | 54824-37-2                             |   |                                      |
| 7.22   | C.I. Basic Red 9              | 569-61-9                               |   |                                      |



| Chemical Name   | CAS Number   | Restriction/ Limitation              | Test Method   |
|---|--|--------------------------------------|---|
| <b>7) Carcinogenic &amp; Allergic Disperse Dyes and Other Dyes</b>                                    |  |                                      |   |
| 7.23  | C.I. Basic Green 4<br>569-64-2<br>2437-29-8<br>10309-95-2  | Not Detected<br>(5 mg/L or 75 mg/kg) | DIN 54231 /§64 LFGB 82.02-10<br><br>Acid digestion, analyzed by ICP-AES (for screening of lead/chromium/molybdenum for pigment red 104 & lead/chromium for pigment yellow 34) |
| 7.24  | C.I. Basic Violet 3<br>548-62-9  |                                      |   |
| 7.25  | C.I. Basic Violet 14<br>632-99-5   |                                      |   |
| 7.26*   | C.I. Solvent Blue 4<br>6786-83-0   |                                      |   |
| 7.27*   | 4-Dimethylaminoazobenzene (Solvent Yellow 2)<br>60-11-7  |                                      |   |
| 7.28*   | 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol<br>561-41-1  |                                      |   |
| 7.29  | C.I. Pigment Red 104<br>12656-85-8   |                                      |   |
| 7.30  | C.I. Pigment Yellow 34<br>1344-37-2  |                                      |   |
| 7.31  | C.I. Acid Red 26<br>3761-53-3  |                                      |   |
| 7.32  | C.I. Direct Black 38<br>1937-37-7  |                                      |   |
| 7.33  | C.I. Direct Blue 6<br>2602-46-2  |                                      |   |
| 7.34  | C.I. Basic Blue 26<br>2580-56-5  |                                      |   |
| 7.35  | C.I. Direct Brown 95<br>16071-86-6   |                                      |   |
| 7.36  | C.I. Direct Red 28<br>573-58-0   | 1000 mg/kg                           | Solvent extraction, LC-MS analysis<br><br>DIN 54231   |
| 7.37**  | Navy blue Colorant: Component 1: C <sub>39</sub> H <sub>23</sub> ClCrN <sub>7</sub> O <sub>12</sub> S <sub>2</sub> Na<br>118685-33-9 |                                      |   |
| 7.38**  | Navy Blue Colorant, Component 2: C <sub>46</sub> H <sub>30</sub> CrN <sub>10</sub> O <sub>20</sub> S <sub>2</sub> .3Na<br>None       |                                      |   |
| * Most common in inks, printing, plastics dyeing<br>** Most common in wool, nylon and auto upholstery |  |                                      |   |

| Chemical Name  | CAS Number   | Restriction/ Limitation | Test Method                            |
|--|--|-------------------------|--|
| <b>8) Chlorinated Organic Carriers (COC)</b>                   |  |                         | ZDHC Guidance <a href="#">Link</a>     |
| 8.1  | Chlorobenzene                                      | 108-90-7                | 1.0 mg/kg (sum)                        |
| 8.2  | Dichlorobenzenes                                   | Various                 |  |
| 8.3  | Trichlorobenzenes                                  | Various                 |  |
| 8.4  | Tetrachlorobenzenes                                | Various                 |  |
| 8.5  | Pentachlorobenzenes                                | 608-93-5                |  |
| 8.6  | Hexachlorobenzene                                  | 118-74-1                |  |
| 8.7  | Chlorotoluenes                                     | Various                 |  |
| 8.8  | Dichlorotoluenes                                   | Various                 |  |
| 8.9  | Trichlorotoluenes                                  | Various                 |  |
| 8.10   | Tetrachlorotoluenes                                | Various                 |  |
| 8.11   | Pentachlorotoluene                                 | Various                 |  |
| <b>9) Chlorinated Paraffins</b>                                |  |                         | ZDHC Guidance <a href="#">Link</a>     |
| 9.1  | Short-Chain Chlorinated paraffins (C10-C13) (SCCP) | 85535-84-8              | 1000 mg/kg each                        |
| <b>10) Chlorinated Phenols and Other Phenols</b>               |  |                         | ZDHC Guidance <a href="#">Link</a>     |
| 10.1   | Pentachlorophenol (PCP)                            | 87-86-5                 | 1.0 mg/kg (sum)                        |
| 10.2   | Tetrachlorophenol (TeCP)                           | 25167-83-3              |  |
|  | - 2,3,5,6- Tetrachlorophenol                       | 935-95-5                |  |
|  | - 2,3,4,6- Tetrachlorophenol                       | 58-90-2                 |  |
|  | - 2,3,4,5- Tetrachlorophenol                       | 4901-51-3               |  |
| 10.3   | Trichlorophenol (TCP)                              | 25167-82-2              | Infants: 0.05 mg/kg, Adults: 0.5 mg/kg |
|  | 2,3,4-Trichlorophenol                              | 15950-66-0              |  |
|  | 2,3,5-Trichlorophenol                              | 933-78-8                |  |
|  | 2,3,6-Trichlorophenol                              | 933-75-5                |  |
|  | 2,4,5-Trichlorophenol                              | 95-95-4                 |  |
|  | 2,4,6-Trichlorophenol                              | 88-06-2                 |  |
| 10.4   | 3,4,5-Trichlorophenol                              | 609-19-8                | Infants: 0.2 mg/kg, Adults: 2 mg/kg    |
|  | 2-Phenylphenol, ortho-phenylphenol (OPP)           | 90-43-7                 |  |
|  |  |                         | 1000 mg/kg each                        |
| <b>Chemical Name</b>   |  |                         | <b>Test Method</b>                     |
| Solvent extraction, GC-MS analysis ISO 18219                   |  |                         |  |
| <b>Chemical Name</b>   |  |                         | <b>Test Method</b>                     |
| Textile:<br>§64 LFGB B 82.02-8 (mod), GC-MS analysis (textile) |  |                         |  |
| Leather:<br>Draft DIN EN ISO 17070 (leather)                   |  |                         |  |
| <b>Chemical Name</b>   |  |                         | <b>Test Method</b>                     |
| Infants: 50 mg/kg, Adults: 100 mg/kg                           |  |                         |  |



| Chemical Name                          | CAS Number                                 | Restriction/ Limitation | Test Method                        |
|--|--|-------------------------|------------------------------------|
| <b>11) Dioxins and Furans</b>          |  |                         |                                    |
| <b>Group 1</b>                         |  |                         |                                    |
| 11.1                                   | 2,3,7,8-Tetrachlorodibenzo-p-dioxin        | 1746-01-6               | Sum of group 1:<br>1 ug/kg         |
|  | 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              |                                    |
| <b>Group 2</b>                         |  |                         |                                    |
| 11.2                                   | 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin     | 39227-28-6              | Sum of group 1&2:<br>5 ug/kg       |
|  | 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              |                                    |
|  | 2,3,4,6,7,8-Hexachlorodibenzofuran         | 60851-34-5              |                                    |
| <b>Group 3</b>                         |  |                         |                                    |
| 11.3                                   | 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin  | 35822-46-9              | Sum of group 1,2 & 3:<br>100 ug/kg |
|  | 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                                 |                         |                                    |
| <b>Group 4</b>                         |  |                         |                                    |
| 11.4                                   | 2,3,7,8-Tetrabromodibenzo-p-dioxin         | 50585-41-6              | Sum of group 4:<br>1 ug/kg         |
|  | 1,2,3,7,8-Pentabromodibenzo-p-dioxin       | 109333-34-8             |                                    |
|  | 2,3,7,8-Tetrabromodibenzofuran             | 67933-57-7              |                                    |
|  | 2,3,4,7,8-Pentabromodibenzofuran           | 131166-92-2             |                                    |
| <b>Group 5</b>                         |  |                         |                                    |
| 11.5                                   | 1,2,3,4,7,8-Hexabromodibenzo-p-dioxin      | 11099944-5              | Sum of group 4&5:<br>5 ug/kg       |
|  | 1,2,3,7,8,9-Hexabromodibenzo-p-dioxin      | 110999-46-7             |                                    |
|  | 1,2,3,6,7,8-Hexabromodibenzo-p-dioxin      | 110999-45-6             |                                    |
|  | 1,2,3,7,8-Pentabromodibenzofuran           | 107555-93-1             |                                    |

| Chemical Name               | CAS Number                                     | Restriction/ Limitation | Test Method                                 |
|-----------------------------|--|-------------------------|---|
| <b>12) Flame retardants</b> |  |                         |   |
| 12.1                        | Polybrominated biphenyls (PBBs)                | 59536-65-1              | Not Detected                                |
| 12.2                        | Pentabromodiphenylether (PentaBDE)             | 32534-81-9              |   |
| 12.3                        | Octabromodiphenylether (OctaBDE)               | 32536-52-0              |   |
| 12.4                        | Decabromodiphenyl ether (DecaBDE)              | 1163-19-5               |   |
| 12.5                        | Tri-(2, 3-dibromopropyl) phosphate (TRIS)      | 126-72-7                |   |
| 12.6                        | Bis (2,3-dibromopropyl) phosphate (BDBBP/BIS)  | 5412-25-9               |   |
| 12.7                        | Tris-(aziridinyl) phosphinoxide (TEPA)         | 5455-55-1               |   |
| 12.8                        | Hexabromocyclododecane (HBCDD)                 | 25637-99-4              |   |
| 12.9                        | Tri-o-cresyl phosphate (TOCP)                  | 78-30-8                 |   |
| 12.10                       | Tris (2-chloroethyl) phosphate (TCEP)          | 115-96-8                |   |
| 12.11                       | Polychlorinated Biphenyls (PCBs)               | Various                 |   |
| 12.12                       | Polychlorinated naphthalene (PCNs)             | Various                 |   |
| 12.13                       | Polychlorinated terphenyls (PCTs)              | Various                 |   |
| 12.14                       | Tris (chloroisopropyl) phosphate (TCPP)        | 13674-84-5              |   |
| 12.15                       | Tetrabromobisphenol A (TBBPA)                  | 79-94-7                 |   |
| 12.16                       | 2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)    | 3296-90-0               |   |
| 12.17                       | Tris(1,3-dichloro-isopropyl) phosphate (TDCPP) | 13674-87-8              |   |
| 12.18                       | Trixylyl phosphate (TXP)                       | 25155-23-1              |   |
|                             |  |                         | Solvent extraction, GC-MS or LC-MS analysis |

| Chemical Name                           | CAS Number                    | Restriction/ Limitation | Test Method     |
|---|-------------------------------|-------------------------|-----------------|
| <b>13) Fluorinated Greenhouse Gases</b> |                               |                         |                 |
| 13.1                                    | Sulphur hexafluoride - SF6    | 2551-62-4               |                 |
| Hydrofluorocarbons (HFC's)              |                               |                         |                 |
| 13.2                                    | HFC-23 - CHF3                 | 75-46-7                 |                 |
| 13.3                                    | HFC-32 - CH2F2                | 75-10-5                 |                 |
| 13.4                                    | HFC-41 - CH3F                 | 593-53-3                |                 |
| 13.5                                    | HFC-43-10mee - C5H2F10        | 138495-42-8             |                 |
| 13.6                                    | HFC-125 - C2HF5               | 354-33-6                |                 |
| 13.7                                    | HFC-134 - C2H2F4              | 359-35-3                |                 |
| 13.8                                    | HFC-134a - CH2FCF3            | 811-97-2                |                 |
| 13.9                                    | HFC-152a - C2H4F2             | 75-37-6                 |                 |
| 13.10                                   | HFC-143 - C2H3F3              | 430-66-0                |                 |
| 13.11                                   | HFC-143a - C2H3F3             | 420-46-2                |                 |
| 13.12                                   | HFC-227ea - C3HF7             | 431-89-0                |                 |
| 13.13                                   | HFC-236cb - CH2FCF2CF3        | 677-56-5                | Usage Ban       |
| 13.14                                   | HFC-236ea - CHF2CHF2CF3       | 431-63-0                |                 |
| 13.15                                   | HFC-236fa - C3H2F6            | 690-39-1                |                 |
| 13.16                                   | HFC-245ca - C3H3F5            | 679-86-7                |                 |
| 13.17                                   | HFC-245fa - CHF2CH2CF3        | 460-73-1                |                 |
| 13.18                                   | HFC-365mfc - CF3CH2CF2CH3     | 406-58-6                |                 |
| Perfluorocarbons (PFC's)                |                               |                         |                 |
| 13.19                                   | Perfluoromethane - CF4        | 75-73-0                 |                 |
| 13.20                                   | Perfluoroethane - C2F6        | 76-16-4                 |                 |
| 13.21                                   | Perfluoropropane - C3F8       | 76-19-7                 |                 |
| 13.22                                   | Perfluorobutane - C4F10       | 355-25-9                |                 |
| 13.23                                   | Perfluoropentane - C5F12      | 678-26-2                |                 |
| 13.24                                   | Perfluorohexane - C6F14       | 355-42-0                |                 |
| 13.25                                   | Perfluorocyclobutane - c-C4F8 | 115-25-3                |                 |
|   |                               |                         | Headspace GC-MS |

| Chemical Name   | CAS Number   | Restriction/ Limitation | Test Method   |
|---|--|-------------------------|---|
| <b>14) Formaldehyde</b>                                       |  |                         |   |
| 14.1  | Formaldehyde   | 50-00-0                 | Infants: Not detected (< 16 mg/kg)<br>Children: 75 mg/kg<br>Adults (Direct Skin Contact): 75 mg/kg<br>Adults (No Direct Skin Contact): 300 mg/kg<br><br>JIS L1041 / LAW 112 (textile)<br>ISO 14184-1 (textile)<br>ISO 17226-1 / ISO 17226-2 (leather)<br>GB/T 2912.1 (textile)<br>GB/T 19941 (leather)<br>CNS 15580-1       |
| Chemical Name   | CAS Number   | Restriction/ Limitation | Test Method   |
| <b>15) Heavy Metals</b>                                       |  |                         |   |
| 15.1*   | Total Arsenic (As)   | 7440-36-0               | 100 mg/kg<br>Microwave digestion with H <sub>2</sub> O <sub>2</sub> /HNO <sub>3</sub><br>EN ISO 17294-2   |
| * Based on regulation from China taking effect on Jan 1, 2016 |  |                         |   |
| 15.2  | Total Cadmium (Cd) content                                     | 7440-43-9               | Metal, plastics, surface coating in children product: 75 mg/kg<br>Other plastics: 100 mg/kg<br>EN1122 (plastics)<br>Acid digestion, AAS/ ICP-AES analysis (all)   |
| 15.3  | Total Lead (Pb) content  | 7439-92-1               | Accessible PVC material on Apparel: 30 mg/kg<br>Accessible Paint/ink/coating: 90 mg/kg<br>All for children: 90 mg/kg<br>All others: 100 mg/kg<br>CPSC-CH-E1001-08.3 (metal)<br>CPSC-CH-E1002-08.3 (non-metal)<br>CPSC-CH-E1003-09.1 / ASTM F2853 (paint and surface coating)<br>Acid digestion, AAS/ ICP-AES analysis (all) |
| 15.5  | Chromium VI (Cr VI) content                                    | 18540-29-9              | Leather: Not detected (3 mg/kg)<br>Pre-treatment: Aging at 80°C, <5% R.H., 24 hours<br>Testing: ISO 17075 / § 64 LFGB 82.02-11 / QB/T 22807   |
| 15.6  | Nickel (Ni) release content (for metal and coated metal items) | 7440-02-0               | 0.5 ug/cm <sup>2</sup> /week, 0.2 ug/cm <sup>2</sup> /week (post assemblies for ear and body piercing)<br>EN 1811 (non-coated item)<br>EN 12472 & EN 1811 (coated item)   |

| Chemical Name  | CAS Number         | Restriction/ Limitation | Test Method                           |   |
|--|--------------------|-------------------------|---------------------------------------|---|
| <b>15) Heavy Metals</b>  |                    |                         |                                       |   |
| Extractable heavy metals in textile  |                    |                         |                                       |   |
| 15.7   | Antimony Sb        | 7440-36-0               | 30 mg/kg                              | ISO 105-E04, ICP-MS & UV analysis<br>GB/T 17593.1 / GB/T 17593.2 /GB/T 17593.3 / GB/T 17593.4 (textile) |
|  | Arsenic As         | 7440-38-2               | Infants: 0.2 mg/kg, Others: 1.0 mg/kg |   |
|  | Cadmium Cd         | 7440-43-9               | 0.1 mg/kg                             |   |
|  | Chromium Cr        | 7440-47-3               | Infants: 1.0 mg/kg, Others: 2.0 mg/kg |   |
|  | Chromium VI Cr(VI) | 18540-29-9              | Not detected (0.5 mg/kg)              |   |
|  | Cobalt Co          | 7440-48-4               | Infants: 1.0 mg/kg, Others: 4.0 mg/kg |   |
|  | Copper Cu          | 7440-50-8               | Infants: 25 mg/kg, Others: 50 mg/kg   |   |
|  | Lead Pb            | 7439-91-1               | Infants: 0.2 mg/kg, Others: 1.0 mg/kg |   |
|  | Nickel Ni          | 7440-02-0               | Infants: 1 mg/kg, Others: 4 mg/kg     |   |
| Mercury Hg   | 7439-97-6          | 0.02 mg/kg              |                                       |   |
| Metals in packaging  |                    |                         |                                       |   |
| 15.8   | Cadmium Cd         | 7440-43-9               | 100 mg/kg (sum)                       | Pb, Cd, Hg: acid digestion, ICP analysis; Cr (VI): alkaline digestion, UV-Vis analysis                  |
|  | Lead Pb            | 7439-91-1               |                                       |   |
|  | Mercury Hg         | 7439-97-6               |                                       |   |
|  | Chromium VI Cr VI  | 18540-29-9              |                                       |   |
| Soluble Heavy Metals in Toy (Definition of toy: Products designed or intended, whether or not exclusively, for use in play by children under 14 years of age.) |                    |                         |                                       |   |
| 15.9*  | Antimony Sb        |                         | 60 mg/kg                              | EN 71-3:1994<br>GB 21550 Clause 5.4<br>CNS 4797-2   |
|  | Arsenic As         |                         | 25 mg/kg                              |   |
|  | Barium Ba          |                         | 1000 mg/kg                            |   |
|  | Cadmium Cd         |                         | 75 mg/kg                              |   |
|  | Chromium Cr        |                         | 60 mg/kg                              |   |
|  | Lead Pb            |                         | 90 mg/kg                              |   |
|  | Mercury Hg         |                         | 60 mg/kg                              |   |
|  | Selenium Se        |                         | 500 mg/kg                             |   |
| * There are additional chemical requirements for toys; contact CR for the full list.   |                    |                         |                                       |   |

| Chemical Name          | CAS Number                             | Restriction/ Limitation | Test Method      |
|------------------------|--|-------------------------|------------------|
| <b>16) Isocyanates</b> |  |                         |                  |
| 16.1                   | Diphenylmethane diisocyanate (MDI)     | 101-68-8                | EN 13130-8 (mod) |
| 16.2                   | Hexamethylene diisocyanate (HDI)       | 822-06-0                |                  |
| 16.3                   | Isophorone diisocyanate (IPDI)         | 4098-71-9               |                  |
| 16.4                   | Tetramethylxylene diisocyanate (TMXDI) | 2778-42-9               |                  |
| 16.5                   | Toluene 2,4-diisocyanate (2,4-TDI)     | 584-84-9                |                  |
| 16.6                   | Toluene 2,6-diisocyanate (2,6-TDI)     | 91-08-7                 |                  |
| 16.7                   | Naphthylene-1,5,di-isocyanate(1,5-NDI) | 3173-72-6               |                  |

| Chemical Name  | CAS Number                       | Restriction/ Limitation | Test Method |
|--|----------------------------------|-------------------------|-------------|
| <b>17) N-Nitrosamine &amp; Nitrosable Substances</b> |                                  |                         |             |
| 17.1   | N-Nitrosodimethylamine (NDMA)    | 62-75-9                 | GB/T 24153  |
| 17.2   | N-Nitrosodiethylamine (NDEA)     | 55-18-5                 |             |
| 17.3   | N-Nitrosodipropylamine (NDPA)    | 621-64-7                |             |
| 17.4   | N-Nitrosodibutylamine (NDBA)     | 924-16-3                |             |
| 17.5   | N-Nitrosopiperidine (NPIP)       | 100-75-4                |             |
| 17.6   | N-Nitrosopyrrolidine (NPYR)      | 930-55-2                |             |
| 17.7   | N-Nitrosomorpholine (NMOR)       | 59-89-2                 |             |
| 17.8   | N-Nitroso-Nmethylaniline (NMPHA) | 614-00-6                |             |
| 17.9   | N-Nitroso-N-ethylaniline (NEPhA) | 612-64-6                |             |

\* Most common for heat vulcanized rubber, relevant rule in China GB 25036-2010 Safety Requirements for children's canvas rubber shoes

| Chemical Name                      | CAS Number                                | Restriction/ Limitation | Test Method  |
|------------------------------------|---|-------------------------|--|
| <b>18) Organotins</b>              |   |                         |  |
| ZDHC Guidance <a href="#">Link</a> |   |                         |  |
| 18.1                               | Tributyltin (TBT)                         | Various                 | ISO 17353 (modified)<br>ISO/TS 16179<br>NIEA T504.30B                  |
| 18.2                               | Triphenyltin (TPHT)                       | Various                 |  |
| 18.3                               | Monobutyltin (MBT)                        | Various                 |  |
| 18.4                               | Dibutyltin (DBT)                          | Various                 |  |
| 18.5                               | Diocetyl tin (DOT)                        | Various                 |  |
| 18.6                               | Other tri-substituted organotin compounds |                         | 1000 mg/kg as Tin<br>Total Tin screening: Acid digestion, ICP analysis |
|                                    | - Tripropyltin (TPT)                      | Various                 |  |
|                                    | - Trioctyltin (TOT)                       | Various                 |  |
|                                    | - Tricyclohexyltin (TcyT)                 | Various                 |  |

| Chemical Name                         | CAS Number                                | Restriction/ Limitation | Test Method |
|---------------------------------------|---|-------------------------|-------------|
| <b>19) Ozone Depleting Substances</b> |   |                         |             |
| Class I                               |   |                         |             |
| 19.1                                  | Chlorofluorocarbon-11(CFC-11)             | 75-69-4                 |             |
| 19.2                                  | Chlorofluorocarbon-12(CFC-12)             | 75-71-8                 |             |
| 19.3                                  | Chlorofluorocarbon-13(CFC-13)             | 75-72-9                 |             |
| 19.4                                  | Chlorofluorocarbon-111(CFC-111)           | 354-56-3                |             |
| 19.5                                  | Chlorofluorocarbon-112(CFC-112)           | 76-12-0                 |             |
| 19.6                                  | Chlorofluorocarbon-113(CFC-113)           | 76-13-1                 |             |
| 19.7                                  | Chlorofluorocarbon-114(CFC-114)           | 76-14-2                 |             |
| 19.8                                  | Chlorofluorocarbon-115(CFC-115)           | 76-15-3                 |             |
| 19.9                                  | Chlorofluorocarbon-211(CFC-211)           | 422-78-6                |             |
| 19.10                                 | Chlorofluorocarbon-212(CFC-212)           | 3182-26-1               |             |
| 19.11                                 | Chlorofluorocarbon-213(CFC-213)           | 6/5/2354                |             |
| 19.12                                 | Chlorofluorocarbon-214(CFC-214)           | 29255-31-0              |             |
| 19.13                                 | Chlorofluorocarbon-215(CFC-215)           | 4259-43-2               |             |
| 19.14                                 | Chlorofluorocarbon-216(CFC-216)           | 661-97-2                |             |
| 19.15                                 | Chlorofluorocarbon-217 (CFC-217)          | 422-86-6                |             |
| 19.16                                 | Carbon Tetrachloride (Tetrachloromethane) | 56-23-5                 |             |
| 19.17                                 | Halon-1211                                | 353-59-3                |             |
| 19.18                                 | Halon-1301                                | 75-63-8                 |             |
| 19.19                                 | Halon-2402                                | 124-73-2                |             |
| 19.20                                 | Methyl Bromide                            | 74-83-9                 |             |
| 19.21                                 | Methyl Chloroform (1,1,1-Trichloroethane) | 71-55-6                 |             |

Should not contain

Headspace GC-MS



| Chemical Name                         | CAS Number                            | Restriction/ Limitation | Test Method        |
|---------------------------------------|---------------------------------------|-------------------------|--------------------|
| <b>19) Ozone Depleting Substances</b> |                                       |                         |                    |
| Class II                              |                                       |                         |                    |
| 19.22                                 | Hydrochlorofluorocarbon-21(HCFC-21)   | 75-43-4                 | Should not contain |
| 12.23                                 | Hydrochlorofluorocarbon-22(HCFC-22)   | 75-45-6                 |                    |
| 12.24                                 | Hydrochlorofluorocarbon-31(HCFC-31)   | 593-70-4                |                    |
| 19.25                                 | Hydrochlorofluorocarbon-121(HCFC-121) | 354-14-3                |                    |
| 19.26                                 | Hydrochlorofluorocarbon-122(HCFC-122) | 354-21-2                |                    |
| 19.27                                 | Hydrochlorofluorocarbon-123(HCFC-123) | 306-83-2                |                    |
| 19.28                                 | Hydrochlorofluorocarbon-124(HCFC-124) | 2837-89-0               |                    |
| 19.29                                 | Hydrochlorofluorocarbon-131(HCFC-131) | 359-28-4                |                    |
| 19.30                                 | Hydrochlorofluorocarbon-132(HCFC-132) | 1649-08-7               |                    |
| 19.31                                 | Hydrochlorofluorocarbon-133(HCFC-133) | 75-88-7                 |                    |
| 19.32                                 | Hydrochlorofluorocarbon-141(HCFC-141) | 1717-00-6               |                    |
| 19.33                                 | Hydrochlorofluorocarbon-142(HCFC-142) | 75-68-3                 |                    |
| 19.34                                 | Hydrochlorofluorocarbon-221(HCFC-221) | 422-26-4                |                    |
| 19.35                                 | Hydrochlorofluorocarbon-222(HCFC-222) | 422-49-1                |                    |
| 19.36                                 | Hydrochlorofluorocarbon-223(HCFC-223) | 422-52-6                |                    |
| 19.37                                 | Hydrochlorofluorocarbon-224(HCFC-224) | 422-54-8                |                    |
| 19.38                                 | Hydrochlorofluorocarbon-225(HCFC-225) | 422-56-0,<br>507-55-1   |                    |
| 19.39                                 | Hydrochlorofluorocarbon-226(HCFC-226) | 431-87-8                |                    |
| 19.40                                 | Hydrochlorofluorocarbon-231(HCFC-231) | 421-94-3                |                    |
| 19.41                                 | Hydrochlorofluorocarbon-232(HCFC-232) | 460-89-9                |                    |
| 19.42                                 | Hydrochlorofluorocarbon-233(HCFC-233) | 7125-84-0               |                    |
| 19.43                                 | Hydrochlorofluorocarbon-234(HCFC-234) | 425-94-5                |                    |
| 19.44                                 | Hydrochlorofluorocarbon-235(HCFC-235) | 460-92-4                |                    |
| 19.45                                 | Hydrochlorofluorocarbon-241(HCFC-241) | 666-27-3                |                    |
| 19.46                                 | Hydrochlorofluorocarbon-242(HCFC-242) | 460-63-9                |                    |
| 19.47                                 | Hydrochlorofluorocarbon-243(HCFC-243) | 460-69-5                |                    |
| 19.48                                 | Hydrochlorofluorocarbon-244(HCFC-244) |                         |                    |
| 19.49                                 | Hydrochlorofluorocarbon-251(HCFC-251) | 421-41-0                |                    |
| 19.50                                 | Hydrochlorofluorocarbon-252(HCFC-252) | 819-00-1                |                    |
| 19.51                                 | Hydrochlorofluorocarbon-253(HCFC-253) | 460-35-5                |                    |
| 19.52                                 | Hydrochlorofluorocarbon-261(HCFC-261) | 420-97-3                |                    |
| 19.53                                 | Hydrochlorofluorocarbon-262(HCFC-262) | 421-02-03               |                    |
| 19.54                                 | Hydrochlorofluorocarbon-271(HCFC-271) | 430-55-7                |                    |
|                                       |                                       |                         | Headspace GC-MS    |



| Chemical Name                              | CAS Number  | Restriction/ Limitation   | Test Method  |
|--|---|---|--|
| <b>20) Perfluorinated Chemicals (PFCs)</b> |   |   | ZDHC Guidance <a href="#">Link</a>   |
| 20.1                                       | Perfluorooctane sulphonate (PFOS)                   | 335-67-1<br>2795-39-3   | 1 µg/m <sup>2</sup> (textiles or other coated materials)   |
| 20.2                                       | Perfluorooctanoic acid (PFOA), its salts and esters | 45298-90-6<br>335-67-1, 3825-26-1<br>335-95-5 2395-00-8<br>335-66-0 376-27-2<br>3108-24-5 | 1 µg/m <sup>2</sup> (textiles or other coated materials)<br><br>Solvent extraction, LC-MS analysis<br>CEN/TS 15968 |

| Chemical Name         | CAS Number   | Restriction/ Limitation | Test Method   |
|-----------------------|--|-------------------------|---|
| <b>21) Pesticides</b> |  |                         |   |
| 21.1                  | Permethrin   | 52645-53-1              | Not detected<br><br>ISO 15913/DIN 28407 F2<br>EPA 8082A/EPA 8151A<br>BVL L 00.00-34:2010-09<br>Solvent extraction, GC-MS analysis |
| 21.2                  | 2-(2,4,5-trichlorophenoxy) propionic acid, its salts and compounds   | 93-72-1                 |   |
| 21.3                  | 2,4,5-trichlorophenoxyacetic acid, its salts and compounds (2,4,5-T)   | 93-76-5                 |   |
| 21.4                  | Aldrin (Aldrine)   | 309-00-2                |   |
| 21.5                  | Chlordane  | 57-74-9                 |   |
| 21.6                  | Dichloro-diphenyl-dichloro ethane (DDD)  | 72-54-8,<br>53-19-0     |   |
| 21.7                  | Dichloro-diphenyl-dichloro ethylene (DDE)  | 72-55-9,<br>3424-82-6   |   |
| 21.8                  | Dichloro-diphenyl-trichloro ethane (DDT)   | 50-29-3,<br>789-02-6    |   |
| 21.9                  | Dieldrin (Dieldrine)   | 60-57-1                 |   |
| 21.10                 | Endrine  | 72-20-8                 |   |
| 21.11                 | Heptachlorine  | 76-44-8                 |   |
| 21.12                 | Epoxy-heptachlorine  | 1024-57-3               |   |
| 21.13                 | Hexachlorobenzene  | 118-74-1                |   |
| 21.14                 | Hexachlorocyclohexane (HCH, all isomers) except gamma-hexachlorocyclohexane (except linande [58-89-9] in medical products) | Various                 |   |
| 21.15                 | Isodrin (Isodrine)   | 465-73-6                |   |
| 21.16                 | Kelevane   | 4234-79-1               |   |
| 21.17                 | Kepone (Chlordecone)   | 143-50-0                |   |
| 21.18                 | Lindane  | 58-89-9                 |   |
| 21.19                 | Methoxychlor   | 72-43-5                 |   |

| Chemical Name         | CAS Number  | Restriction/ Limitation                | Test Method   |
|-----------------------|---|--|---|
| <b>21) Pesticides</b> |   |  |   |
| 21.20                 | Mirex   | 2385-85-5                              | ISO 15913/DIN 28407 F2<br><br>EPA 8082A/EPA 8151A<br><br>BVL L 00.00-34:2010-09<br><br>Solvent extraction, GC-MS analysis |
| 21.21                 | Perthane  | 72-56-0                                |   |
| 21.22                 | Quintozene  | 82-68-8                                |   |
| 21.23                 | Strobane  | 8001-50-1                              |   |
| 21.24                 | Telodrin (Telodrine)  | 297-78-9                               |   |
| 21.25                 | Toxaphene   | 8001-35-2                              |   |
| 21.26                 | Halogenated diarylalkanes   | Various                                |   |
| 21.27                 | Halogenated diphenyl methanes, including Monomethyl-dibromo-diphenyl methane, Monomethyl-dichloro-dephenyl methane, Monomethyl-tetrachloro-diphenyl methane | 99688-47-8<br>81161-70-8<br>76253-60-6 |   |
| 21.28                 | Endosulfan and its isomers  | 115-29-7<br>959-98-8<br>33213-65-9     |   |
| 21.29                 | Pentabromobenzene   | 608-93-5                               |   |
| 21.30                 | Hexabromobiphenyl   | 36355-01-8                             |   |
| 21.31                 | 4,6-Dichloro-7 (2,4,5-trichloro-phenoxy) 0-2-trifluoro methyl benzimidazole (DTTB)  | 57648-21-2                             |   |
| 21.32                 | 2,4-D   | 94-75-7                                |   |
| 21.33                 | Azinophosmethyl   | 86-50-0                                |   |
| 21.34                 | Azinophosethyl  | 2642-71-9                              |   |
| 21.35                 | Bromophos ethyl   | 4824-78-6                              |   |
| 21.36                 | Captafol  | 63-25-2                                |   |
| 21.37                 | Carbaryl  | 63-25-3                                |   |
| 21.38                 | Chlordimeform   | 1970-95-9                              |   |
| 21.39                 | Chlorfenvinphos   | 470-90-6                               |   |
| 21.40                 | Coumaphos   | 56-72-4                                |   |
| 21.41                 | Cyfluthrin (Baythroid)  | 68359-37-5                             |   |
| 21.42                 | Cyhalothrin   | 91465-08-6                             |   |
| 21.43                 | Cypermethrin  | 52315-07-8                             |   |
| 21.44                 | DEF   | 78-48-8                                |   |
| 21.45                 | Deltamethrin  | 52918-63-5                             |   |
| 21.46                 | Diazinon  | 333-41-5                               |   |

| Chemical Name         | CAS Number               | Restriction/ Limitation | Test Method   |
|-----------------------|--------------------------|-------------------------|---|
| <b>21) Pesticides</b> |                          |                         |   |
| 21.47                 | Dichloroprop             | 120-36-2                | Not detected<br><br>ISO 15913/DIN 28407 F2<br><br>EPA 8082A/EPA 8151A<br><br>BVL L 00.00-34:2010-09<br><br>Solvent extraction, GC-MS analysis |
| 21.48                 | Dicrotophos              | 141-66-2                |   |
| 21.49                 | Dimethoate               | 60-51-5                 |   |
| 21.50                 | Dinoseb and salts        | 88-85-7                 |   |
| 21.51                 | Endosulfan, a-           | 115-29-7                |   |
| 21.52                 | Endosulfan, b-           | 33213-65-9              |   |
| 21.53                 | Esfenvalerate (Asana)    | 66230-04-4              |   |
| 21.54                 | Fenvalerate (Sanmarton)  | 51630-58-1              |   |
| 21.55                 | Malathion                | 121-75-5                |   |
| 21.56                 | MCPA                     | 94-74-6                 |   |
| 21.57                 | MCPB                     | 94-81-5                 |   |
| 21.58                 | Mecoprop                 | 93-65-2                 |   |
| 21.59                 | Metamidophos             | 10265-92-6              |   |
| 21.60                 | Monocrotophos            | 6923-22-4               |   |
| 21.61                 | Parathion                | 56-38-2                 |   |
| 21.62                 | Parathion-methyl         | 298-00-0                |   |
| 21.63                 | Phosdrin/Mevinphos       | 7786-34-7               |   |
| 21.64                 | Propethamphos (Safrotin) | 31218-83-4              |   |
| 21.65                 | Profenophos              | 41198-08-7              |   |
| 21.65                 | Quinalphos               | 13593-03-8              |   |
| 21.65                 | Trifluralin              | 1582-09-8               |   |

| Chemical Name               | CAS Number   | Restriction/ Limitation   | Test Method  |
|-----------------------------|--|---------------------------|--|
| <b>22) Ortho-Phthalates</b> |  |                           | ZDHC Guidance <a href="#">Link</a>   |
| 22.1                        | Butylbenzylphthalate (BBP)   | 85-68-7                   | <p>Ortho-Phthalates Restrictions for All Products (Except Children's Toys and Childcare Products Sold in Denmark): 1,000 mg/kg sum</p> <p>For Products Sold In Denmark Only – ortho-Phthalates Restrictions for Children's Toys and Childcare Products: 500 mg/kg sum</p> <p>Children's Toy and Childcare Products Definition from Denmark for Phthalates: "Toys are defined as any product designed or clearly intended for play purposes for children aged 0-3 years, while childcare is defined as any product that is intended or likely to be mouthed by children aged 0 -3 years. The rules apply to products such as dolls, rattles and other toys for children under 3 years and nursing pillows, baby carriers, pacifiers, bathing equipment and jewelry."</p> <p>Solvent extraction, GC-MS &amp; LC-MS analysis</p> <p>EN15777</p> <p>CPSC-CH-C1001-09.3</p> <p>GB/T 22048</p> |
| 22.2                        | Dibutylphthalate (DBP)   | 84-74-2                   |  |
| 22.3                        | Di(2-ethylhexyl)-phthalate (DEHP)  | 117-81-7                  |  |
| 22.4                        | Di-n-octylphthalate (DNOP)   | 117-84-0                  |  |
| 22.5                        | Di-Iso-nonylphthalate (DINP)   | 28553-12-0,<br>68515-48-0 |  |
| 22.6                        | Diisodecylphthalate (DIDP)   | 26761-40-0,<br>68515-49-1 |  |
| 22.7                        | Di-isobutyl phthalate (DIBP)   | 84-69-5                   |  |
| 22.8                        | Di-n-Hexyl Phthalate (DnHP)  | 84.75-3                   |  |
| 22.9*                       | Dimethyl phthalate (DMP)   | 131-11-3                  |  |
| 22.10*                      | Diethyl phthalate (DEP)  | 84-66-2                   |  |
| 22.11                       | Bis(2-methoxyethyl) phthalate (DMEP)   | 117-82-8                  |  |
| 22.12                       | 1,2-benzenedicarboxylic acid, di-C7-11 branched alkyl ester and linear alkyl ester (DHNUP) | 68515-42-4                |  |
| 22.13                       | 1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl ester, C7-rich (DIHP)                 | 71888-89-6                |  |
| 22.14                       | Di-iso-pentylphthalate (DiPP)  | 605-50-5                  |  |
| 22.15                       | Di-n-pentylphthalate (DnPP)  | 131-18-0                  |  |
| 22.16                       | N-pentyl-isopentylphthalate (NPIPP)  | 776297-69-9               |  |
| 22.17                       | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (DAP)                     | 84777-06-0                |  |
| 22.18                       | Dipentyl phthalate (DPP)   | 131-18-0                  |  |
| 22.19*                      | Di-n-propyl phthalate (DPRP)   | 131-16-8                  |  |
| 22.20                       | Di-cyclohexyl phthalate (DCHP)   | 84-61-7                   |  |
| 22.21*                      | Dinonyl phthalate (DNP)  | 84-76-4                   |  |
| 22.22*                      | Di-iso-octyl phthalate (DIOP)  | 27554-26-3                |  |
| 22.23                       | 1,2- Benzenedicarboxylic acid, dihexyl ester. Branched and linear                          | 68515-50-4                |  |
| 22.24                       | Di-iso-hexylphthalate (DIHxP)  | 71850-09-4                |  |
| 22.25                       | All other phthalates/all esters of ortho-phthalic acid                                     | Various                   |  |

\* Restriction applies to all materials but ortho-phthalates are most common in flexible plastics, coatings (screen prints), inks, adhesives.

| Chemical Name                                      | CAS Number                     | Restriction/ Limitation | Test Method   |
|--|--------------------------------|-------------------------|---|
| <b>23) Polycyclic Aromatic Hydrocarbons (PAHs)</b> |                                |                         | ZDHC Guidance <a href="#">Link</a>  |
| 23.1   | Naphthalene                    | 91-20-3                 | <p>Infants / Toy for Children:<br/>0.5 mg/kg (items 9-16 each), 5.0 mg/kg (sum)</p> <p>Others:<br/>1 mg/kg (items 9-16 each), 10 mg/kg (sum)</p> <p>AfPS GS 2014:01 PAK method<br/>CNS 3478 Clause 6.18</p> |
| 23.2   | Acenaphthylene                 | 208-96-8                |   |
| 23.3   | Acenaphthene                   | 83-32-9                 |   |
| 23.4   | Fluorene                       | 86-73-7                 |   |
| 23.5   | Phenanthrene                   | 85-01-8                 |   |
| 23.6   | Antracene                      | 120-12-7                |   |
| 23.7   | Fluoranthene                   | 206-44-0                |   |
| 23.8   | Pyrene                         | 129-00-0                |   |
| 23.9   | Benzo (a) anthracene (BaA)     | 56-55-3                 |   |
| 23.10  | Chrysene (CHR)                 | 218-01-9                |   |
| 23.11  | Benzo (a) pyrene (BaP)         | 50-32-8                 |   |
| 23.12  | Benzo (e) pyrene (BeP)         | 192-97-2                |   |
| 23.13  | Dibenzo (a,h) anthracene (DBA) | 53-70-3                 |   |
| 23.14  | Benzo (b) fluoranthene (BbF)   | 205-99-2                |   |
| 23.15  | Benzo (j) fluoranthene (BjF)   | 205-82-3                |   |
| 23.16  | Benzo (k) fluoranthene (BkF)   | 207-08-9                |   |
| 23.17  | Indeno (1,2,3-cd) pyrene       | 193-39-5                |   |
| 23.18  | Benzo (g,h,i) perylene         | 191-24-2                |   |
| 23.19  | Dibenzo (a,e) pyrene           | 192-65-4                |   |
| 23.20  | Dibenzo (a,h) pyrene           | 189-64-0                |   |
| 23.21  | Dibenzo (a,i) pyrene           | 189-55-9                |   |
| 23.22  | Dibenzo (a,l) pyrene           | 191-30-0                |   |
| 23.23  | Cyclopenta (c,d) pyrene        | 27208-37-3              |   |
| 23.24  | 1-Methylpyrene                 | 2381-21-7               |   |

| Chemical Name                         | CAS Number               | Restriction/ Limitation | Test Method                       |
|---------------------------------------|--------------------------|-------------------------|-----------------------------------|
| <b>24) Polyvinyl Chloride (PVC) *</b> |                          |                         |                                   |
| 24.1                                  | Polyvinyl Chloride (PVC) | 9002-86-2               | Not detected                      |
|                                       |                          |                         | Belstein Method and FTIR analysis |

\*PVH prefers that products do not contain PVC, however we acknowledge certain challenges may prevent the immediate cessation of PVC use. PVH supports efforts to find acceptable alternatives to PVC use in all products, with the ultimate objective being a comprehensive prohibition on all PVC use.

| Chemical Name  | CAS Number                                       | Restriction/ Limitation | Test Method   |
|--|--|-------------------------|---|
| <b>25) Volatile Organic Compounds (VOC's) / Organic Solvents</b> |  |                         | ZDHC Guidance <a href="#">Link 1</a> , <a href="#">Link 2</a> |
| 25.1   | Vinyl Chloride Monomer (VCM)                     | 75-01-4                 | 1 mg/kg   |
| 25.2   | Benzene  | 71-43-2                 | 5 mg/kg   |
| 25.3   | Phenol   | 108-95-2                | 10 mg/kg  |
| 25.4   | Toluene  | 108-88-3                | 1000 mg/kg (each)   |
| 25.5   | Styrene  | 100-42-5                |   |
| 25.6   | Methylene Chloride, Dichloromethane (DCM)        | 75-09-2                 |   |
| 25.7   | Pentachloroethane                                | 76-01-7                 |   |
| 25.8   | Hexachloroethane                                 | 67-72-1                 |   |
| 25.9   | Tetrachloromethane (Carbon tetrachloride)        | 56-23-5                 |   |
| 25.10  | 1,1-Dichloroethane                               | 75-34-3                 |   |
| 25.11  | 1,2-Dichloroethane                               | 107-06-2                |   |
| 25.12  | cis-1,2-Dichloroethylene                         | 156-59-2                |   |
| 25.13  | trans-1,2-Dichloroethylene                       | 156-60-5                |   |
| 25.14  | 1,1,1-Trichloroethane                            | 71-55-6                 |   |
| 25.15  | 1,1,2-Trichloroethane                            | 79-00-5                 |   |
| 25.16  | 1,1,1,2-Tetrachloroethane                        | 630-20-6                |   |
| 25.17  | 1,1,2,2-Tetrachloroethane                        | 79-34-5                 |   |
| 25.18  | Trichloromethane (Chloroform)                    | 67-66-3                 |   |
| 25.19  | 1,1-Dichloroethylene                             | 75-35-4                 |   |
| 25.20  | Trichloroethylene                                | 79-01-6                 |   |
| 25.21  | Tetrachloroethylene                              | 127-18-4                |   |
| 25.22  | Dimethylsulfoxide                                | 67-68-5                 |   |
| 25.23  | Xylene (meta-, ortho-, para-)                    | Various                 |   |
| 25.24  | Cresol (meta-, ortho-, para-)                    | 1319-77-3               |   |
| 25.25  | N,N-Dimethylacetamide (DMAC)                     | 127-19-5                |   |
| 25.26  | N,N-dimethylformamide; dimethyl formamide (DMFa) | 68-12-2                 |   |
| 25.27  | 1-Methyl-2-pyrrolidone (NMP)                     | 872-50-4                |   |
| 25.28  | Formamide  | 75-12-7                 |   |

Solvent extraction, GC-MS analysis or direct HS-GCMS analysis  
 GB 21550 Clause 5.5  
 GB/T 4615

**Remark:**

|          |                      |
|----------|----------------------|
| Infants  | ≤ 36 months          |
| Children | 36 months - 14 years |
| Adults   | > 14 years           |

