

## **The ALDI Detox Commitment**

**DATE: 31 March 2015**

ALDI (1) is aware of its responsibility for people and the environment.

In line with the ALDI Unternehmensleitbild, ALDI recognizes the urgent need for eliminating industrial releases of all hazardous chemicals (3). According to its approach based on prevention (4) and the Precautionary Principle (5) ALDI is committed to zero discharges (6) of all hazardous chemicals from the whole lifecycle and all production procedures that are associated with the making and using of all apparel and footwear (7) products ALDI produces and/or sells (7) by no later than 01 January 2020.

ALDI recognizes that to achieve this goal, mechanisms for disclosure and transparency about the hazardous chemicals used in its global supply chains is important and necessary, in line with the 'Right to Know principle' (8). In line with this principle ALDI will provide full public availability and transparency of the related restricted substance list and audit process and will establish full public disclosure of discharges of hazardous chemicals in the related supply chain. All related operations and obligations will always be performed in strict accordance with compliance and antitrust requirements.

ALDI also commits to fully and publicly support systemic (i.e. wider societal and policy) change to achieve zero discharge of hazardous chemicals (associated with supply chains and the lifecycles of products) within one generation (9) or less. This commitment includes sustained investment in moving industry, government, science and technology to deliver on systemic change and to affect system change across the industry towards this goal.

ALDI agrees to publicly support efforts to eliminate all global hazardous chemical use, and to fully integrate the precautionary principle and the public's right-to-know regarding all environmental aspects across all of its apparel and footwear product-related operations.

ALDI acknowledges its individual corporate responsibility to always operate with a strong system of environmental oversight of its suppliers and its operations.

ALDI's following Detox commitment, as well as an individual action plan – with the dates indicated, and the links to the complete detailed evidence supporting the delivery for all aspects of this commitment by no later than the delivery schedule dates indicated within this commitment – will always be available to the global public via its main public webpage in each market where ALDI operates.

ALDI understands the scope of the commitment to be a long-term vision – with ongoing ambitious practices to be defined by the following individual action plan:

## Individual action plan

### 1. Supply-chain disclosure

In line with ALDI's commitment to the public's 'right to know' the chemical substances used within its global supply chain for all the apparel and footwear products it orders or sells, ALDI will be taking the following actions:

1. Publish its updated combined 'Manufacturing Restricted Substances List' (the same in detailed content and scope as per combined M-RSL) including detection limits (5) on the same date as the publication of this commitment document, and thereafter annually update this combined M-RSL to reflect its full implementation of the precautionary principle and constant application of the best current technology – i.e. the lowest reporting limits technology can achieve.

2. Adapt its supplier contract requirements as of the date of this agreement to ensure that its suppliers begin full detailed public disclosure of discharges of hazardous chemicals (beginning with, at least, the 11 priority chemical groups as per endnote (10) and detection limits (as per combined M-RSL) and always apply the best current technology as per endnote (6) in its apparel and footwear supply chain via full facility transparency (i.e. detailed location and individual data of each facility) of individual facility level disclosure of chemical-by-chemical use and discharge data, to be achieved via an incremental process, beginning with the following actions:

- i) By no later than 30 September 2015, ALDI will also commit to have full testing evidence published by at least 50 % of all its global wet process suppliers' facilities or affiliates producing all apparel and footwear (7) where hazardous chemicals are used, and their discharge data disclosed (as per full scope and content of combined M-RSL) by using an online platform via the Institute for Public and Environmental Affairs – Detox – platform and the data collection template (IPE Detox Platform).
- ii) By no later than 31 March 2016, 80 % of ALDI's wet process facilities or affiliates producing all apparel and footwear (7) where hazardous chemicals are used (as per i) above) will be publicly associated with ALDI or, ALDI will ensure that it supplies full public evidence that at least 80 % of all of its global wet process suppliers are fully disclosing or are Detox committed companies.
- iii) ALDI will publicize the link to all data as per the above timelines via the IPE Detox platform – as per the most recent Corporate Discharge Disclosure Data Form.
- iv) ALDI agrees to always ensure the discharge data disclosure is fully credible and not misleading to the public and that it will always disclose via the IPE Detox platform.

### 2. 11 priority hazardous chemical group's elimination policy

Fully aligned with its implementation of the precautionary principle across all of its global environment-related operations for all apparel and footwear (7), ALDI recognizes the intrinsic or potential intrinsic hazardousness of all 11 priority hazardous chemical groups (10), and therefore acknowledges that it is its priority to eliminate their use across its global supply chain and its operations for all apparel and footwear (7). There are multiple supply-chain pathways for potential contamination (including chemical formulations) and ALDI will enhance both training and auditing of its related supply chain and operations, as well as ensure its suppliers have the latest information on the 11 priority hazardous chemical groups, highlighting where there is a risk that any of these chemicals may enter into the undocumented contamination of chemical supplier formulations.

In addition to these actions, ALDI will work towards a ban on the 11 priority hazardous chemical groups (APEOs, PFCs, heavy metals, phthalates, brominated and chlorinated flame retardants, azo dyes, organotin compounds, chlorobenzenes, chlorinated solvents, chlorophenols, and short chain chlorinated paraffins) with the following actions:

- i. Publish the results of an investigation into the current compliance with this requirement, reporting the findings to the public and simultaneously strengthening its supplier contract language to ensure only

chemical formulations free of at least these 11 priority hazardous chemical groups are utilized and also publish the full testing evidence supporting its delivery of this commitment to the full elimination of any use of at least these 11 priority hazardous chemical groups.

- ii. Work with its supply chain and other global industry leaders to ensure the most current technological means of detection are reflected via the lowest detectable limits within its testing regimes.
- iii. Publicly document how at least 11 priority hazardous chemical groups have been substituted by safer alternatives and publish these case studies via the online Subsport.org platform by no later than 31 March 2016.

### **3. PFCs – Perfluorocarbon/Polyfluorinated Compounds (11) elimination policy**

Consistent with the precautionary principle and the potential intrinsic hazardousness of all PFCs, ALDI aims to eliminate any PFCs used in any of the apparel and footwear products ALDI orders and/or sells. The elimination of all PFCs used for any of the relevant products ALDI orders or sells will be supported by:

- i. The elimination of all PFC use across its global supply chain by no later than 31 December 2016;
- ii. The documentation of how PFCs have been substituted by safer alternatives and publication of these case studies via the online Subsport.org platform by no later than 31 December 2016;
- iii. A rigorous system of control to ensure that no traces of PFCs find their way into its supply chain in line with the above;
- iv. Working in partnership with its supply chain and other global industry leaders to accelerate the move towards non-PFC technologies.

### **4. APEO elimination policy**

Consistent with its full implementation of the precautionary principle across all its operations related to all apparel and footwear (7) for any affect on the environment, and the potential intrinsic hazardousness of all APEOs, ALDI therefore acknowledges that it is a priority to eliminate any use of APEOs across its global supply chain and its operations for all apparel and footwear (7). There are multiple supply-chain pathways for potential APEO contamination (including chemical formulations) and ALDI will enhance both training and auditing of its supply chain and its operations for all apparel and footwear (7), as well as ensure all of its related suppliers have the latest information on APEOs, highlighting where there is a risk that APEOs may enter into the undocumented contamination of chemical supplier formulations.

In addition to these actions, ALDI will work towards a ban on APEOs in any apparel and footwear (7) products it orders and/or sells with the following actions:

- i. Initiate an investigation into the current compliance with this requirement, reporting the findings to the public by the end of 30 June 2016;
- ii. Strengthen its supplier contract language to ensure only APEO-free chemical formulations are utilized by the end of 31 December 2016; and
- iii. Work with its supply chain and other global industry leaders to ensure the most current technological means of detection are reflected via the lowest detectable limits within its testing regimes.
- iv. Publicly document how APEOs have been substituted by safer alternatives and publish these case studies via the online Subsport.org platform by no later than 31 December 2016.

## **5. Targets for other hazardous chemicals**

As an important part of its implementation of the precautionary principle across all its operations concerning apparel and footwear (7), ALDI commits to regularly review the list of chemicals used in its operations and its global supply chain. ALDI applies the latest scientific findings to periodically update its chemical policy, at least annually, to further restrict or ban chemicals as new evidence of their impact becomes available.

ALDI plans to support and reinforce a credible sectoral chemical inventory and hazardous substance list (combined M-RSL as per below), aiming to establish this inventory, based on a credible (12) intrinsically hazardous screening methodology, by no later than 30 September 2016. This public detailed hazardous chemical-by-chemical schedule is to be updated annually.

The individual actions covered above will be reassessed by ALDI at regular intervals – at least annually.

## **6. Responsible design via closed-loop operations across global supply chain and product life**

6-1. ALDI recognizes that its actions must support responsible environmental outcomes via EPR (Extended Producer Responsibility) that actively progresses responsible production and consumption (2) across all of the apparel and footwear products it orders and/or sells (7). This support will progress the achievement of two main environmentally related goals:

- 1) Design improvements of products – the EPR system should provide incentives for manufacturers to improve products and systems surrounding the lifecycle of products.
- 2) High use of product and material quality through effective collection and re-use – this goal can be divided into three sub-goals, which are a) effective collection, b) environmentally sound treatment of collected products and c) high use of products and materials in the form of re-use and recycling.

6-2. ALDI will initiate a global 'sustainable consumption' programme to encourage its customers to purchase more sustainable products and thereby reduce consumption of unnecessarily 'disposable' apparel and footwear it orders and/or sells by no later than 30 June 2016.

## **7. Self-reporting on the Detox Commitment**

The core responsibility principles for delivering on its commitment are:

7-1. ALDI is aware of its responsibility for people and the environment.

7-2. ALDI will always proactively provide the public regular updates of its performance with regard to this Detox Commitment (e.g. chemical testing via the use of the combined M-RSL disclosed on the IPE Detox Platform).

7-3. ALDI is responsible for proactively, publicly and transparently communicating all of the deliverables of this Detox Commitment, and for effectively resolving any issues as soon as possible.

By 31 March 2016, ALDI will publish:

- Case studies of past hazardous chemical substitutions, and the steps it will take to develop a further number of substitution case studies (e.g. where it is currently substituting any of the 11 groups of hazardous chemicals as per below (10) with more non-hazardous chemicals) via the online Subsport.org platform.
  - The steps outlining how it will take forward and lead the development of the intrinsic hazards screening methodology (12).
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(1) ALDI refers to 'ALDI NORD' as the ALDI NORD group of companies.

(2) The definition of the 'responsible closed-loop whole lifecycle design and production' is the comprehensive integrated operating processes that result in significant (>90%) reduction or complete elimination of all significant aspects of 'negative' environmental impacts throughout the complete lifecycle from product creation to end-of-life reuse and recycling. Responsible design includes a comprehensive holistic process identifying all aspects of capturing the most responsible design, production, product use and closed-loop whole life reuse and recycling, regardless of the application. All aspects of this whole lifecycle are optimized for responsible environmental (e.g. energy, toxicity) and socio-economic production value (e.g. the production working conditions) outcomes. This so called Extended Product Responsibility (EPR) is an emerging practice that considers the entire life of a product, from design to disposal, to identify opportunities for resource conservation and pollution prevention.

(3) All hazardous chemicals mean all those that show intrinsically hazardous properties: persistent, bioaccumulative and toxic (PBT); very persistent and very bioaccumulative (vPvB); carcinogenic, mutagenic and toxic for reproduction (CMR); endocrine disruptors (ED), or other properties of equivalent concern (not just those that have been regulated or restricted in other regions). This will require the establishment – ideally with other industry actors – of a corresponding list of the hazardous chemicals concerned that will be regularly reviewed.

(4) This means solutions are focused on the elimination of use at source, not on end-of-pipe or risk management. This requires either substitution with non-hazardous chemicals or where necessary finding non-chemical alternative solutions, such as re-evaluating product design or the functional need for chemicals.

(5) This means taking preventive action before waiting for conclusive scientific proof regarding cause and effect between the substance (or activity) and the damage. It is based on the assumption that some hazardous substances cannot be rendered harmless by the receiving environment (i.e. there are no 'environmentally acceptable'/'safe' use or discharge levels) and that prevention of potentially serious or irreversible damage is required, even in the absence of full scientific certainty. The process of applying the Precautionary Principle must involve an examination of the full range of alternatives, including, where necessary, substitution through the development of sustainable alternatives where they do not already exist.

(6) Zero discharge means the elimination of all releases, via all pathways of release, i.e. discharges, emissions and losses, from ALDI's supply chain and products. 'Elimination' or 'zero' means 'not detectable to the limits of the best current technology', and only naturally occurring background levels are acceptable.

(7) This means the commitment applies to the environmental practices of ALDI companies and for all apparel and footwear 'private label/own brands' products (including all home textiles) ordered or sold by ALDI. This includes all of its contracted suppliers or facilities horizontally across all own brands as well as vertically down its supply chain.

(8) The Right to Know is defined as practices that allow members of the public access to environmental information – in this case specifically about the uses and discharges of chemicals based on the reported quantities of releases of hazardous chemicals into the environment, chemical-by-chemical, facility-by-facility, at least year-by-year.

(9) One generation is generally regarded as 20-25 years.

(10) The 11 priority hazardous chemical groups are: 1. Alkylphenols, 2. Phthalates, 3. Brominated and chlorinated flame retardants, 4. Azo dyes, 5. Organotin compounds, 6. Perfluorinated chemicals, 7. Chlorobenzenes, 8. Chlorinated solvents, 9. Chlorophenols, 10. Short chain chlorinated paraffins, 11. Heavy metals such as cadmium, lead, mercury and chromium (VI).

(11) Polyfluorinated compounds, including fluorotelomers which can serve as precursors that degrade to form perfluorinated carboxylic acids (e.g. PFOA), and mixed halogenated polyfluorinated compounds.

(12) Any screening methodology that would meet the following necessary requirements is considered to be credible:

i. The full criteria and methods applied and full data behind the results must be open to public scrutiny.

- ii. The screening methodology approach must take account of the hazards of accessory chemical and/or breakdown products which are generated through the use or release of any one particular chemical ingredient.
- iii. The screening methodology must recognize the importance of physical form, e.g. nanomaterials, polymers and whole products where applicable.
- iv. Where there are legitimate reasons for concern regarding the intrinsic hazards of a chemical, even if information is insufficient to verify those hazards, action must be taken to obtain sufficient information to enable adequate assessment of the chemical.

M-RSL Limits		RSL Limits Version 1 <sup>11)</sup>		RSL Limits Version 2 <sup>12)</sup>		Test Method					
Substance	CAS-no.	Output: Waste water (µg/l)	Output: Sludge (mg/kg)	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Input: Chemical Formulations	Output: Waste water	Output: Sludge	Output: Products <sup>13)</sup>
<b>1. Alkylphenols / Alkylphenolethoxylates (API/APEO)</b>											
Octylphenol OP	Various	1	0.2					According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	With Reference To DIN EN ISO 18857 And Followed by Liquid Chromatography - Mass Spectrometry (LC-MS) Analysis: NPEO(1+2); GC/MS	Solvent extraction: DIN EN ISO 18857 LC/MS mod. resp. NPEO(1+2); GC/MS	DIN EN ISO 18254-1 (Textile) DIN EN ISO 18218-1 (Leather) Solvent extraction: Methanol GC-MS (AP + APEO <sub>1,2</sub> ) & LC-MS (APEO <sub>3,10</sub> )
4-(1,1,3,3-Tetramethylbutyl)-phenol	140-66-9	1	0.2								
Octylphenol	27133-28-8	1	0.2								
4-Octylphenol	1808-28-4	1	0.2								
Nonylphenol NP	various	1	0.2								
4-Nonylphenol	104-40-5	1	0.2								
Nonylphenol	25154-62-3	1	0.2								
Nonylphenol (branched)	90481-04-2	1	0.2								
4-Nonylphenol (branched)	84852-15-3	1	0.2								
Nonylphenol Ethoxylates NPEO <sup>(1-2)</sup>	various	1	0.2	OP, NP: 10 mg/kg (sum) OP(EO), NP(EO): 100 mg/kg (sum)	OP, NP: 100 mg/kg (sum) OP(EO), NP(EO): 100 mg/kg (sum)	OP, NP: 5 mg/kg (sum) OP(EO), NP(EO): 50 mg/kg (sum)	OP, NP: 50 mg/kg (sum) OP(EO), NP(EO): 50 mg/kg (sum)				
Nonylphenol Ethoxylates NPEO <sup>(3-10)</sup>	various	1	0.2								
Nonylphenoxy-polyethylenoxid	9016-45-9	1	0.2								
4-Nonylphenol, ethoxylated	26027-38-3	1	0.2								
Poly(oxy-1,2-ethanediyl), alpha-, (nonylphenyl)-, omega-hydroxy-, branched	68412-54-4	1	0.2								
4-Nonylphenol, branched, ethoxylated	127087-87-0	1	0.2								
Unbekanntes Farbmittel 94 (SIN list isononylphenol-ethoxylate)	37205-87-1	1	0.2								
Octylphenol Ethoxylates OPEO <sup>(1-2)</sup>	various	1	0.2								
Octylphenol Ethoxylates OPEO <sup>(3-10)</sup>	various	1	0.2								
alpha-[4-(1,1,3,3-Tetramethylbutyl)phenyl]-omega-hydroxypoly(oxy-1,2-ethandiyl) (SIN List OPEs)	9002-93-1	1	0.2								
4-tert-Octylphenolethoxylate	9036-19-5	1	0.2								
4-tert-Octylphenolethoxylate (branched)	68987-90-6	1	0.2								
<b>2. Phthalates</b>											
Di-Butyl Phthalate (DBP)	84-74-2	1	0.3					According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	Toluene Extraction And Followed by Gas Chromatography - Mass Spectrometry (GC-MS) Analysis resp. LC/MS.	Extraction with toluene, GC-MS resp. LC/MS.	DIN EN ISO 14389 or CPSC-CH-C1001-03.3 Solvent extraction: THF GC-MS analysis
Di(2-Ethyl Hexyl) Phthalate (DEHP)	117-81-7	1	0.3								
Benzyl Butyl Phthalate (BBP)	85-68-7	1	0.3								
Di-iso-Nonyl Phthalate (DINP)	28553-12-0, 68515-48-4	1	0.3								
Di-N-Octyl Phthalate (DNOP)	117-84-0	1	0.3								
Di-iso-Decyl Phthalate (DIDP)	26761-40-0, 68515-49-1	1	0.3								
Di-iso-Butyl Phthalate (DIBP)	84-69-5	1	0.3	1000 mg/kg	1000 mg/kg	250 mg/kg (sum)	500 mg/kg (sum)				
Di-N-Hexyl Phthalate (DNHP)	84-75-3	1	0.3								
Di-(2-methoxyethyl) Phthalate (DMEP)	117-83-8	1	0.3								
DHNLP	68515-42-4	1	0.3								
DHP	71888-89-6	1	0.3								
DPP	131-18-0	1	0.3								
<b>3. Brominated and Chlorinated Flame Retardants<sup>14)</sup></b>											
Polybrominated biphenyls (PBBS)	59536-65-1 various	0.05	0.03					According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	By Toluene Extraction And Followed By Liquid Chromatography - Mass Spectrometry (LC-MS) And Gas Chromatography - Mass Spectrometry (GC-MS) Analysis.	Extraction with toluene, GC-MS resp. LC/MS.	DIN EN ISO 17881-1 and DIN EN ISO 17881-2 Solvent extraction: Toluol / Acetone / THF GC-MS / LC-MS analysis
Monobromo biphenyls (MonoBB)	-	0.05	0.03								
Dibromo biphenyls (DiBB)	-	0.05	0.03								
Tribramo biphenyls (TriBB)	-	0.05	0.03								
Tetrabromo biphenyls (TetraBB)	-	0.05	0.03								
Pentabromo biphenyls (PentaBB)	-	0.05	0.03								
Hexabromo biphenyls (HexaBB)	-	0.05	0.03								
Heptabromo biphenyls (HeptaBB)	-	0.05	0.03								
Octabromo biphenyls (OctaBB)	-	0.05	0.03								
Nonabromo biphenyls (NonaBB)	-	0.05	0.03								
Decabromo biphenyls (DecaBB)	13654-09-6	0.05	0.03								
Polybrominated diphenyl ethers (PBDEs)	various	0.05	0.03								
Monobromo diphenyl ethers (MonoBDE)	-	0.05	0.03								
Dibromo diphenyl ethers (DiBDE)	-	0.05	0.03								
Tribramo diphenyl ethers (TriBDE)	-	0.05	0.03								
Tetrabromo diphenyl ethers (TetraBDE)	40088-47-9	0.05	0.03	use banned (≤ 100 mg/kg (each))	use banned (≤ 100 mg/kg (each))	10 mg/kg (each)	10 mg/kg (each)				
Pentabromo diphenyl ethers (PentaBDE)	32534-81-9	0.05	0.03								
Hexabromo diphenyl ethers (HexaBDE)	36483-60-0	0.05	0.03								
Heptabromo diphenyl ethers (HeptaBDE)	68928-80-3	0.05	0.03								
Octabromo diphenyl ethers (OctaBDE)	32536-62-0	0.05	0.03								
Nonabromo diphenyl ethers (NonaBDE)	63936-56-1	0.05	0.03								
Decabromo diphenyl ether (DecaBDE)	1163-19-5	0.05	0.03								
Tri(2,3-Dibromopropyl)-Phosphate	126-72-7	0.5	0.25								
Tri(2-Chloroethyl)Phosphate (TCPEP)	115-98-8	0.05	0.25								
Hexabromocyclododecane (HBCDD)	134237-50-6, 134237-51-7, 134237-52-8, 25637-98-4, 3194-55-6	0.5	0.25								
Tetrabromo-bisphenol A (TBBPA)	75-94-7	0.5	0.25								

		M-RSL Limits		RSL Limits Version 1 <sup>1)</sup>		RSL Limits Version 2 <sup>2)</sup>		Test Method			
Substance	CAS-no.	Output: Waste water (µg/l)	Output: Sludge (mg/kg)	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Input: Chemical Formulations	Output: Waste water	Output: Sludge	Output: Products <sup>1)</sup>
<b>Subgroup: Other Flame Retardants</b>											
TEPA	545-55-1	0.5	0.25	best current technology	best current technology	best current technology	best current technology	According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)			DIN EN ISO 17881-2 Solvent extraction: Toluol / Acetone / THF GC-MS / HPLC-MS analysis  For boron and antimony (total): Microwave extraction with nitric acid/hydrochloric acid ICP-MS analysis
TRIS	126-72-7										
Sodium tetraborate	1303-96-4 1303-43-4 141279-04-3 215-540-4										
Boron trioxide	1303-86-2										
Boric acid	10043-35-3 11113-50-4										
Antimony trioxide	1309-64-4										
Tri-n-cresyl phosphate	78-30-8										
Tris(1,3-dichloro-2-propyl)phosphate (TDCPP)	13674-87-8										
<b>4. Amines (associated with Azo dyes/ colorants)</b>											
4-Aminodiphenyl	92-67-1	0.01	0.01	< 20 mg/kg	< 20 mg/kg	< 20 mg/kg (each)	< 20 mg/kg (each)	According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	With Reference To EN 14362:1&3 And Followed By Gas Chromatographic – Mass Spectrometric (GC-MS) And High Performance Liquid Chromatographic (HPLC) Analysis.	EN 14362 modified GC/MS resp. HPLC.	DIN EN ISO 14362-1 and DIN EN ISO 14362-3 (Textile) DIN EN ISO 17234-1 and DIN EN ISO 17234-2 (Leather)
Benzidine	92-87-5										
4-Chloro-o-Toluidine	95-69-2										
2-Naphthylamine	91-59-8										
p-Aminozotoluene	97-56-3										
2-Amino-4-Nitrotoluene	99-55-8										
p-Chloroaniline	106-47-8										
2,4-Diaminoanisole	615-05-4										
4,4'-Diaminodiphenylmethane	101-77-9										
3,3'-Dichlorobenzidine	91-94-1										
3,3'-Dimethoxybenzidine	119-90-4										
3,3'-Dimethylbenzidine	119-93-7										
3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0										
p-Cresidine	120-71-8										
4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4										
4,4'-Oxydianiline	101-89-4										
4,4'-Thiodianiline	139-45-1										
p-Toluidine	95-53-4										
2,4-Toluylenediamine	95-80-7										
2,4,5-Trimethylaniline	137-17-7										
o-Anisidine	90-04-0										
p-Aminozobenzene	60-09-3										
2,4-Xylylene	95-69-1										
2,6-Xylylene	87-62-7										
<b>Subgroup: Carcinogenic dyes</b>											
C.I. Acid Red 26	3761-53-3	10	10	use banned	use banned	< 20 mg/kg (each)	< 20 mg/kg (each)	According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)			DIN 54231 Solvent extraction: Methanol (Solvent extraction: Pyridine according to DIN 16373-2 for special cases) HPLC-DAD-MS
C.I. Basic Red 9	569-61-9										
C.I. Basic Violet 14	632-99-5										
C.I. Direct Blue 5	2602-46-2										
C.I. Direct Red 28	573-58-0										
C.I. Direct Black 38	1937-37-7										
C.I. Disperse Blue 1	2475-45-8										
C.I. Disperse Yellow 3	2832-40-8										
C.I. Disperse Orange 11	82-28-0										
C.I. Disperse Yellow 23	6250-23-3										
C.I. Disperse Orange 149	85136-74-9										
C.I. Solvent Yellow 1	60-09-3										
C.I. Solvent Yellow 2	60-11-7 EN71-9										
C.I. Solvent Yellow 3	97-56-3										
C.I. Solvent Yellow 14	842-07-9										
C.I. Basic Blue 26	2580-56-5										
C.I. Basic Violet 1	8004-87-3 EN71-9										
C.I. Direct Brown 95	16071-86-6										
C.I. Direct Blue 15	2429-74-5										
C.I. Direct Blue 218	28407-37-6										
C.I. Acid Red 114	6459-94-5										
C.I. Acid Violet 49	1694-09-3										
<b>Subgroup: Allergenic Disperse Dyes</b>											
C.I. Disperse Blue 1	2475-45-8	1	1	use banned	use banned	< 20 mg/kg (each)	< 20 mg/kg (each)	According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)			DIN 54231 Solvent extraction: Methanol (Solvent extraction: Pyridine according to DIN 16373-2 for special cases) HPLC-DAD-MS
C.I. Disperse Blue 3	2475-46-0										
C.I. Disperse Blue 7	3179-90-6										
C.I. Disperse Blue 26	3860-63-7										
C.I. Disperse Blue 35	12222-75-2										
C.I. Disperse Blue 102	12222-97-8										
C.I. Disperse Blue 106	12223-01-7										
C.I. Disperse Blue 124	61951-51-7										
C.I. Disperse Brown 1	23355-84-8										
C.I. Disperse Orange 1	2581-69-3										
C.I. Disperse Orange 3	730-40-5										
C.I. Disperse Orange 3776	13301-81-6										
C.I. Disperse Red 1	2872-52-8										
C.I. Disperse Red 11	2872-48-2										
C.I. Disperse Red 17	3179-89-3										
C.I. Disperse Yellow 1	119-15-3										
C.I. Disperse Yellow 3	2832-40-8										
C.I. Disperse Yellow 9	6373-73-5										
C.I. Disperse Yellow 39	12236-29-2										
C.I. Disperse Yellow 49	54824-37-2										



M-RSL Limits		RSL Limits Version 1 <sup>11)</sup>		RSL Limits Version 2 <sup>12)</sup>		Test Method					
Substance	CAS-no.	Output: Waste water (µg/l)	Output: Sludge (mg/kg)	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Input: Chemical Formulations	Output: Waste water	Output: Sludge	Output: Products <sup>10)</sup>
<b>5. Organotin compounds</b>											
MBT (Monobutyltin)	1118-46-3	0.01	0.01	TBT, TPHT - 0.5 / 1 mg/kg <sup>2)</sup> DBT, DOT, MBT, MOT, DPHT, TPHT, TCyT, TeBT, TeET - 1 / 2 mg/kg <sup>2)</sup> Others - 2 mg/kg	TBT, TPHT - 0.5 mg/kg DBT, DOT - 1 mg/kg MBT - 1 mg/kg Others - 2 mg/kg	0.5 mg/kg (each)	0.5 mg/kg (each)	According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	With Reference To DIN EN17353 And Followed by Gas Chromatography-Mass Spectrometry (GC-MS) Analysis.	Solvent extraction, derivatisation with tetraethylborate, GC/MS.	ISO/TS 16179 Solvent extraction / Derivatisation: Ethanol GC-MS analysis Referring to DIN 23161 Acidified ethanol Derivatisation: Tetraethylborate GC-MS
DBT (Dibutyltin)	1002-53-5										
TBT (Tributyltin)	56573-85-4										
TPHT (Triphenyltin)	892-20-6										
DOT (Dioctyltin)	94410-05-6										
MOT (Monooctyltin)	15231-44-4										
DPHT (Diphenyltin)	1011-66-6										
TeBT (Tetraethyltin)	1461-26-2										
TCyT (Tricyclohexyltin)	NA										
TPHT (Tripropyltin)	NA										
xxxTeET (Tetraethyltin)	597-64-8	0.01	0.01	Others - 2 mg/kg							
TBTO	56-35-9										
DBTC	683-18-1										
TPPT	668-34-8										
DBB	75113-37-0										
<b>6. PFCs (Perfluorocarbon / Polyfluorinated Compounds)</b>											
PFCA	335-67-1	0.01	0.001	use banned	use banned	0.05 mg/kg (each)	0.05 mg/kg (each)	According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	C EN/TS 15968:2010, LC/MS analysis - modified	Solvent extraction CEN/TS 15968:2010, LC/MS analysis - modified	CEN/TS 15968 Solvent extraction: Methanol / LC-MS analysis
PFNA	375-95-1	0.01	0.001								
PFBS	375-73-5 or 59933-66-3	0.01	0.001								
PFHxS	355-46-4	0.01	0.001								
PFHxA	307-24-4	0.01	0.001								
PFBA	375-22-4	0.01	0.001								
PFPeA	2706-90-3	0.01	0.001								
PFHpA	376-85-9	0.01	0.001								
PFDA	335-76-2	0.01	0.001								
PFUNA	2058-94-8	0.01	0.001								
PFDA	307-65-1	0.01	0.001								
PFTA	72629-94-8	0.01	0.001								
PfBa	376-06-7	0.01	0.001								
PFHpS	376-92-8	0.01	0.001								
PFDS	335-77-3	0.01	0.001								
PF-3,7-DMOA	172155-07-6	0.01	0.001								
PfPFHpA	1546-85-8	0.01	0.001								
HPFPA	34598-33-9	0.01	0.001								
1H, 1H, 2H, 2H-PFOS	27619-97-2	0.01	0.001								
PFOS	1763-23-1	0.01	0.001								
POSF	307-35-7	0.1	0.01								
PFOSA	754-91-6	0.1	0.01								
N-Me-FOSA	31506-32-8	0.1	0.01								
N-Et-FOSA	4151-50-2	0.1	0.01								
N-Me-FOSE alcohol	24448-09-7	0.1	0.01								
N-Et-FOSE alcohol	1691-09-2	0.1	0.01								
1,2-FTOH	2043-47-2	0.1	0.01								
1,2-FTOH	647-42-7	0.1	0.01								
1,2-FTOH	678-39-7	0.1	0.01								
1,2-FTOH	866-86-1	0.1	0.01								
1,2-FTA	17527-29-6	0.1	0.01								
1,2-FTA	27905-45-9	0.1	0.01								
1,2-FTA	17741-80-5	0.1	0.01								
<b>7. Chloro benzenes</b>											
Dichlorobenzenes	various	0.02	0.01	1 mg/kg	1 mg/kg	1 mg/kg (sum)	1 mg/kg (sum)	According to the latest version of the ZDHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	Liquid extraction GC-MS analysis.	Solvent extraction GC-MS analysis.	DIN 54232 Solvent extraction: Dichloromethane GC-MS analysis
1,2-Dichlorobenzene	95-50-1										
1,3-Dichlorobenzene	541-73-1										
1,4-Dichlorobenzene	106-46-7										
Trichlorobenzenes	various										
1,2,3-Trichlorobenzene	87-61-6										
1,2,4-Trichlorobenzene	120-83-1										
1,3,5-Trichlorobenzene	108-70-3										
Tetrachlorobenzene	various										
1,2,3,4-tetrachlorobenzene	634-66-2										
1,2,3,5-tetrachlorobenzene	634-90-2										
1,2,4,5-tetrachlorobenzene	95-94-3										
Pentachlorobenzene	608-93-5										
Hexachlorobenzene	118-74-1										

		M-RSL Limits		RSL Limits Version 1 <sup>11)</sup>		RSL Limits Version 2 <sup>12)</sup>		Test Method							
Substance	CAS-no.	Output: Waste water (µg/l)	Output: Sludge (mg/kg)	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Input: Chemical Formulations	Output: Waste water	Output: Sludge	Output: Products <sup>13)</sup>				
<b>Chloro-Toluenes (solvents and biocides, Production dyes, Chemical intermediates, Antifetting)</b>															
2-chlorotoluene	95-49-8	0.02	0.01	1 mg/kg	1 mg/kg	1 mg/kg (sum)	1 mg/kg (sum)	According to the latest version of the ZDHHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)			DIN 54232 Solvent extraction: Dichloromethane GC-MS analysis				
3-chlorotoluene	108-41-8														
4-chlorotoluene	106-43-4														
2,3-dichlorotoluene	32768-64-0														
2,4-dichlorotoluene	95-73-8														
2,5-dichlorotoluene	19398-81-9														
2,6-dichlorotoluene	118-89-4														
3,4-dichlorotoluene	95-75-0														
2,3,6-trichlorotoluene	2077-46-5														
2,4,5-trichlorotoluene	6639-30-1														
Benzotrifluoride	98-07-7														
alpha, 2,4-trichlorotoluene	94-99-5														
alpha, 2,6-trichlorotoluene	2014-83-7														
alpha, 3,4-trichlorotoluene	102-47-6														
alpha, alpha, 2,6-tetrachlorotoluene	81-19-6														
alpha, alpha, alpha, 2-tetrachlorotoluene	2136-89-2														
alpha, alpha, alpha, 4-tetrachlorotoluene	5216-25-1														
2,3,4,5,6-pentachlorotoluene	877-11-2														
<b>8. Chlorinated solvents</b>															
Dichloromethane	75-29-2	1	0.3	1 mg/kg	1 mg/kg	1 mg/kg (each) / 5 mg/kg (sum)	1 mg/kg (each) / 5 mg/kg (sum)	According to the latest version of the ZDHHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	By Headspace Gas Chromatography Mass Spectrometric (HS-GC/MS) Analysis	GC-MS Headspace analysis	Solvent extraction GC-MS analysis Thermal desorption analysis GC-MS analysis				
Chloroform	67-66-3														
Tetrachloroethane	56-23-5														
1,1,2-Trichloroethane	79-00-5														
1,1-Dichloroethane	75-34-3														
1,2-Dichloroethane	107-06-2														
Trichloroethylene	79-01-8														
Perchloroethylene	127-18-4														
1,1,1-trichloroethane	71-55-6														
1,1,1,2-Tetrachloroethane	630-20-6														
1,1,2,2-Tetrachloroethane	79-34-5														
Pentachloroethane	76-01-7														
1,1-Dichloroethylene	75-35-4														
<b>Other VOCs<sup>14)</sup></b>															
Methyl-ethyl ketone	78-93-3	1	0.1	100 mg/kg	500 mg/kg	10 mg/kg	50 mg/kg	According to the latest version of the ZDHHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)			Solvent extraction: Acetone GC-MS analysis Thermal desorption analysis GC-MS analysis				
Chlorobenzene	100-41-4	1	0.1	50 mg/kg	500 mg/kg	10 mg/kg	50 mg/kg								
Xylene	1330-20-7	1	0.1	50 mg/kg	500 mg/kg	10 mg/kg	30 mg/kg								
Cyclohexanone	108-94-1	1	2	100 mg/kg	500 mg/kg	10 mg/kg	50 mg/kg								
2-ethoxyethylacetate	111-15-9	50	10	1000 mg/kg	500 mg/kg	10 mg/kg	50 mg/kg								
1,2,3-trichloropropane	96-18-4	1	1000 mg/kg	500 mg/kg	500 mg/kg	10 mg/kg	50 mg/kg								
Acetophenone	98-86-2	10	0.1	50 mg/kg	500 mg/kg	10 mg/kg	10 mg/kg								
Naphthalene	91-20-3	1	0.1	50 mg/kg	500 mg/kg	2 mg/kg	2 / 5 mg/kg <sup>15)</sup>								
2-phenvyl-2-propanone	617-94-7	10	0.1	50 mg/kg	500 mg/kg	10 mg/kg	10 mg/kg								
Bis-(2-methoxyethyl) ether	111-96-6	50	20	1000 mg/kg	1000 mg/kg	10 mg/kg	500 mg/kg (leather only)								
Styrene	100-42-5	1	0.1	50 mg/kg	50 mg/kg	10 mg/kg	50 mg/kg								
Benzene	71-43-2	1	0.1	1 mg/kg	1 mg/kg	1 mg/kg	1 mg/kg								
Toluene	108-88-3	1	0.1	500 mg/kg	500 mg/kg	10 mg/kg	10 mg/kg								
1-methyl-2-pyrrolidone	872-50-4	10	50	1000 mg/kg <sup>16)</sup>	1000 mg/kg	500 mg/kg <sup>17), 18)</sup>	500 mg/kg								
N,N-dimethylacetamide	127-19-5	10	20	1000 mg/kg <sup>19)</sup>	1000 mg/kg	500 mg/kg <sup>17), 18)</sup>	500 mg/kg								
<b>N, N-Dimethylformamide</b>															
N,N-dimethylformamide	68-12-2	1	0.1	1000 mg/kg <sup>19)</sup>	100 mg/kg	500 mg/kg <sup>17), 18)</sup>	100 mg/kg					According to the latest version of the ZDHHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)			DIN CEN ISO TS 16189 Solvent extraction: Methanol GC-MS analysis
<b>9. Chloro phenols</b>															
Pentachlorophenols (PCP)	87-86-5	0.5	0.025	PCP - 0.05 / 0.5 mg/kg <sup>20)</sup> TrCP - 0.05 / 0.5 mg/kg <sup>21)</sup> (sum) TrCP - 0.2 / 2 mg/kg <sup>21)</sup> (sum)	0.5 / 1 mg/kg <sup>22)</sup> (each)	PCP - 0.05 / 0.25 mg/kg <sup>21)</sup> TrCP - 0.05 / 0.25 mg/kg <sup>21)</sup> (sum) TrCP - 0.2 / 1 mg/kg <sup>21)</sup> (sum)	0.5 / 1 mg/kg <sup>22)</sup> (each)	According to the latest version of the ZDHHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	Liquid extraction, derivatisation, with acetic anhydride, GC-MS analysis.	Solvent extraction, derivatisation, with acetic anhydride, GC-MS analysis.	DIN EN ISO 17070 Solvent extraction / Derivatisation: KOH GC-MS analysis or LC-MS analysis (no derivatisation)				
Tetrachlorophenols (TeCP)	25167-83-3														
2,3,4,5-Tetrachlorophenol	4901-51-3														
2,3,4,6-Tetrachlorophenol	59-90-2														
2,3,5,6-tetrachlorophenol	935-95-5														
Trichlorophenol (TrCP)	25167-82-2														
2,4,6-trichlorophenol	88-06-2														
2,3,4-trichlorophenol	15950-66-0														
2,3,5-trichlorophenol	933-78-8														
2,3,6-trichlorophenol	933-75-6														
2,4,5-trichlorophenol	95-95-4														
3,4,5-trichlorophenol	609-19-8														
Dichlorophenols (DiCP)	25167-81-1														
2,3-dichlorophenol	576-24-9														
2,4-dichlorophenol	120-83-2														
2,5-dichlorophenol	583-78-8														
3,4-dichlorophenol	95-77-2														
3,5-dichlorophenol	591-35-5														
Mono Chlorophenol	various														
<b>10. SCCP</b>															
SCCP C 10-13	85535-84-8	0.4	0.03	100 mg/kg (in total)	100 mg/kg (in total)	50 mg/kg (sum)	100 mg/kg (sum)	According to the latest version of the ZDHHC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	Liquid extraction with toluene, GC-MS resp. LC/MS analysis.	Solvent extraction with toluene, GC-MS resp. LC/MS analysis.	DIN EN ISO 18219 Solvent Extraction: Hexan / Toluol GC-NCI-MS analysis				

M-RSL Limits		RSL Limits Version 1 <sup>11)</sup>		RSL Limits Version 2 <sup>12)</sup>		Test Method					
Substance	CAS-no.	Output: Waste water (µg/l)	Output: Sludge (mg/kg)	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Product section / Limits - Textiles <sup>1)</sup>	Product section / Limits - Shoes <sup>1)</sup>	Input: Chemical Formulations	Output: Waste water	Output: Sludge	Output: Products <sup>10)</sup>
<b>11. Heavy metals</b>											
Cadmium(Cd)	7440-43-9	0.1	1	40 mg/kg (total)	100 mg/kg (total)	0.1 mg/kg (soluble) or; 40 mg/kg (total) for plastics and coated materials	0.1 mg/kg (soluble) or; 40 mg/kg (total) for plastics and coated materials	According to the latest version of the ZDHfC (Zero Discharge of Hazardous Chemicals Programme) MRSL (Manufacturing Restricted Substances List)	Digestion, ICP analysis	Digestion, ICP analysis	DIN EN 1122-2001 Acid Digestion ICP analysis (Total)
Lead(Pb)	7439-92-1	1	1	90 mg/kg (total)	90 mg/kg (total)	0.2 mg/kg (soluble) or; 75 mg/kg (total) for plastics and coated materials	0.2 mg/kg (soluble) or; 75 mg/kg (total) for plastics and coated materials				DIN EN 16711-1 Detection after microwave digestion (nitric acid / hydrochloric acid) ICP-MS analysis (Extractable)
Mercury(Hg)	7439-97-6	0.05	0.006	0.02 mg/kg (soluble)	0.02 mg/kg (soluble)	0.02 mg/kg (soluble)	0.02 mg/kg (soluble)				ISO 105-E04 Acid perspiration extraction ICP analysis (Extractable)
Nickel(Ni)	7440-02-0	1	1	1 / 4 mg/kg <sup>2)</sup> (soluble)	4 mg/kg (soluble)	1 mg/kg (soluble)	1 mg/kg (soluble)				DIN EN 16711-2 Acid perspiration extraction ICP analysis (Extractable)
Hexavalent Chromium(Cr-VI)	18540-29-9	1	1	not detectable (< 0.5 mg/kg) (soluble)	not detectable (< 3 mg/kg) (soluble)	not detectable (< 0.5 mg/kg) (soluble)	not detectable (< 3 mg/kg) (soluble)				DIN EN ISO 17075
Arsenic(As)	7440-38-2	1	1	0.2 / 1 mg/kg <sup>2)</sup> (soluble)	0.2 mg/kg (soluble)	0.2 mg/kg (soluble)	0.2 mg/kg (soluble)				ISO 105-E04 Acid perspiration extraction ICP analysis (Extractable)
Chromium(Cr)	7440-47-3	1	1	1 / 2 mg/kg <sup>2)</sup> (soluble)	0.2 g/kg (soluble)	1 mg/kg (soluble)	0.2 g/kg (soluble)				
Copper(Cu)	7440-50-8	1	1	25 / 50 mg/kg <sup>2)</sup> (soluble)	50 mg/kg (soluble)	25 / 50 mg/kg <sup>2)</sup> (soluble)	50 mg/kg (soluble)				
Zinc(Zn)	7440-66-6	1	4	750 mg/kg <sup>9)</sup> (soluble)	750 mg/kg <sup>9)</sup> (soluble)	750 mg/kg <sup>9)</sup> (soluble)	750 mg/kg <sup>9)</sup> (soluble)				
Manganese(Mn)	7439-96-5	1	1	90 mg/kg (soluble)	90 mg/kg (soluble)	90 mg/kg (soluble)	90 mg/kg (soluble)				
Antimony (Sb)	7440-36-0	1	1	30 mg/kg (soluble)	30 mg/kg (soluble)	30 mg/kg (soluble)	30 mg/kg (soluble)				DIN EN 16711-2 Acid perspiration extraction ICP analysis (Extractable)
Cobalt (Co) (Extractable heavy-metals by artificial acidic sweat)	7440-48-4	1	1	1 / 4 mg/kg <sup>2)</sup> (soluble)	4 mg/kg (soluble)	1 mg/kg (soluble)	4 mg/kg (soluble)				Best current testing technology using lowest detection / reporting limits always updated and applied

M-RSL/RSL (Manufacturing Restricted Substances List / Restricted Substances List)	
These detection/reporting limits and test methods will be revised - at least yearly - to ensure that always the best current technology and the lowest detection/reporting limits are applied. Substances which are mandatory to use due to legal obligations or threshold limits in order to fulfil technical standards and requirements are exempt.	
Footnote 1)	Textile products with leather as a main component are tested according to the Product section / Limits - Shoes
Footnote 2)	Limits set within the defined ranges depend on the requirement of use which apply to individual substances in certain articles (e.g. baby products); excluding metal parts
Footnote 3)	Intentional use prohibited for all main components / 'confirmation of non-use'
Footnote 4)	Small test based on SNV 195 651 to be carried out first. Further analytical testing only if significant deviations occur
Footnote 5)	2 mg/kg for products with skin contact (AIPS)
Footnote 6)	Exception for products which must be treated hot (in wet or dry stage) during further processing: maximal 3.0%
Footnote 7)	Exception for products which must be treated hot (in wet or dry stage) during further processing: maximal 1.5%
Footnote 8)	For materials made of polyacrylonitrile (PAN), elastane (EL), polyurethane (PU), and aramides: 1000 mg/kg
Footnote 9)	It is intended to reduce the threshold limit to 90 ppm by 2020
Footnote 10)	Testing institutes always need to apply the latest test methods available for the defined standards and norms
Footnote 11)	RSL Limits are valid until RSL Limits Version 2 become effective RSL Limits valid for all products for which a Global Recycled Standard (GRS) Certificate is available (testing scope will be defined individually by the international or national quality assurance department)
Footnote 12)	RSL Limits valid from Q4/2017 onwards (ALDI North, ALDI SOUTH Germany, Hofer S/E and ALDI UK) RSL Limits valid from Q1/2018 onwards (ALDI Australia and ALDI US)