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Restricted Substances List (RSL)

**July 2008
Release 3**

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Introduction

This Restricted Substances List (RSL) was created by a special working group of the American Apparel & Footwear Association's (AAFA) Environmental Task Force. The RSL is intended to provide apparel and footwear companies with information related to regulations and laws that restrict or ban certain chemicals and substances in finished home textile, apparel, and footwear products around the world.

It is our hope that this RSL will serve as a practical tool to help those individuals in textile, apparel and footwear companies, and their suppliers, responsible for environmental compliance throughout the supply chain, to become more aware of various national regulations governing the amount of substances that are permitted in finished home textile, apparel and footwear products.

Our effort is to create a dynamic and useful instrument. The RSL will be updated on a regular basis and will be supplemented with additional resources to help officials in these companies undertake responsible chemical management practices in the aforementioned finished products.

Note on Release 3 – July 2008:

A list of changes from *Release 2 - February 2008* to *Release 3 - July 2008* is contained at the end of this document.

Methodology:

The RSL includes only those materials, chemicals, and substances that are restricted or banned in finished home textile, apparel, and footwear products because of a regulation or law. In each case, the RSL identifies the most restrictive regulation.

The RSL does not include regulations that restrict the use of substances in production processes or in the

A. Structure

For each substance the RSL identifies the following features:

1. CAS number
2. Common chemical or color name
3. Information on the Restriction/Limit on Final Product or Tested Component
 - a. Restriction Level
 - b. Country where that Restriction/Limit is found
 - c. Test Method
 - d. Other countries that maintain equal or less restrictions
 - e. Comments (if applicable)

B. What is Included and What is Not

The RSL is not intended to address product safety regulations outside the chemical management area – such as Consumer Product Safety Commission (CPSC) regulations related to small parts. Moreover, it is not structured to cover toys, automotive textiles, or other industrial textiles. This list does not include restrictions related to use of substances in packaging or related materials.

The following legislation is not listed because there are not regulatory concentration limits but may warrant evaluation for applicability.

1. The US EPA, following the Montreal Protocols, promulgated legislation on ozone depleting compounds. Class I and Class II listed chemicals used in the process of manufacturing of product or packaging requires special labeling as detailed in the regulation. Residuals of the chemical components in the product or package are not necessary to trigger the requirement. Minor usage in textiles as a spot cleaner is acceptable.
1. California Proposition 65 requires labeling for products containing chemicals known to the state to cause cancer. Typically labeling requirements are dependent on consumer exposure to the chemical, not the concentration in the product. Exposure levels have been determined for certain chemicals under certain applications, products, or use through legal settlements in the State of California. Ingredients for which there have been legal settlements are included on the list.

1. Technical Notes

1. Chemical nomenclature can take several forms. Technical chemical names may take numerous forms. It is the responsibility of the user to verify synonyms of any regulated chemicals referenced.
2. It is possible that regulated components may be present in raw materials below the levels that require reporting on Material Safety Data Sheets (Meds). Care should be taken to verify the presence of all regulated ingredients regardless of the concentration.
3. This list represents the known and applicable standards at the time of publication; any inaccuracy or omission is not the responsibility of AAFA.

About AAFA

The American Apparel & Footwear Association (AAFA) is the national trade association representing apparel, footwear and other sewn products companies, and their suppliers, which compete in the global market. AAFA's mission is to promote and enhance its members' competitiveness, productivity and profitability in the global market by minimizing regulatory, commercial, political, and trade restraints.

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Glossary of Terms/Acronyms related to the AAFA RSL list

BS – British Standard

CAS –Chemical Abstracts Service. CAS Registry Numbers (often referred to as CAS RNs or CAS Numbers) are unique identifiers for chemical substances. CAS is a division of the American Chemical Society. See www.cas.org.

CEN – European Committee for Standardization

Detection limit - the lowest quantity of a substance that can be distinguished from the absence of that substance (a blank value) within a stated confidence limit

DIN - German Standards Institute (Deutsches Institut für Normung)

Dioxins and Furans – Chemical compounds that are an undesirable by-product in the manufacture of herbicides, disinfectants, and other agents

EEC – European Economic Community

EN – European Norm

EPA - Environmental Protection Agency (U.S.)

EU – European Union

GB - Guo Biao in Chinese which means National Standards

GC-MS - Gas Chromatography/Mass Spectrometer - instrument used to identify components of mixtures or unknown substances - liquids, gases.

ISO – International Standards Organization

JIS - Japanese Industrial Standard

KOH – Potassium Hydroxide

LFGB - Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch – German Law Book on food, consumer article and feed.

LC-MS - Liquid Chromatography/Mass Spectrometer - instrument used to identify components of mixtures or unknown substances - liquids, gases.

mg/L – milligram per liter.

mg/kg - milligram per kilogram.

MSDS Information – Material Safety Data Sheet Information – this is chemical safety & toxicological information supplied with chemicals

NaOH – Sodium Hydroxide

Percent by Mass - also called weight percent or percent by weight, this is the mass of the solute divided by the total mass of the solution and multiplied by 100% (also see ppm)

Pesticide – A chemical agent or substance used for destroying pests

ppm - Parts Per Million. A unit describing concentrations of chemical substances. 1 ppm can also be notated as 1 milligram per kilogram (mg/kg) or 1 microgram per gram (µg/g).

ppb – Parts per Billion. A unit describing concentrations of chemical substances. 1 ppb can also be notated as 1 microgram per kilogram (µg/kg).

PVC – Polyvinyl Chloride

Solvent – A substance in which another substance is dissolved, forming a solution.

UK – United Kingdom

µg/cm²/week - microgram per square centimeter per week

µg/g - microgram per gram

µg/kg - microgram per kilogram

µg/m² – microgram per square meter

Changes from Release 2 to Release 3

In Glossary

1. Added definition for CAS acronym.

2. Corrected typo in ppm

In RSL

1. Dyes: Added South Korea to list of countries that regulate azo dyes.
Modified German regulatory reference for disperse dyes.
2. Pesticides: Added South Korea to reflect Dieldrin, PCP, and TeCP regulations.
Corrected misspelling: Halogenated Naphthalenes
Corrected CAS For Lindane is 58-89-9
3. Greenhouse Gases: Corrected CAS for HFC 143 is 430-66-0
Corrected CAS for HFC 143a is 420-46-2.
Corrected CAS for HFC-236CB is 677-56-5
Corrected misspelling: Perfluorohexane
Corrected CAS for Perfluoropentane should be 678-26-2.
4. Flame Retardants: Added South Korea comments for PBB, pentaBDE, octaBDE, TRIS
5. Organotin Compounds: Added South Korea to lists of countries that regulate TBT
Added Dibutyltin (South Korea) to list of regulated substances.
6. Misc. Chemicals: Added New Zealand to list of countries that regulate formaldehyde
Added South Korea and China comments for age restrictions.
Added South Korea comment for bedclothes.
Added Canada to the list of countries that regulate PFOS.
Added Phthalates (South Korea) to the list of regulated substances.

Disclaimer

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