Appendix J. Glossary of Terms

Article. An object that is given a special shape, surface, or design during production, which determines its function to a greater degree than it does its chemical composition (fibers, textile fabrics, buttons, zippers, etc.).

Bioaccumulative. Substances that cannot be eliminated by living organisms and tend to bioaccumulate, which means they become more concentrated throughout the food chain. Concentrations of these substances can reach levels that are harmful to human health or the environment.

Carcinogenic. A carcinogenic substance is one where a relationship has been established between exposure to the substance and human cancer.

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

Chemical substance. A chemical element and its compounds with constant composition and properties. It is defined by the CAS number.

Globally Harmonised System of Classification and Labelling of Chemicals (GHS). GHS is a technical approach developed to define the specific hazards of each chemical, to create classification criteria using available data on the chemicals and their already defined hazards, and to organize and facilitate the communication of hazard information on labels and SDSs

Limit of detection (LOD). A value 1x to 4x above the MDL, analyzed to verify the calculated MDL is within reason. This is variable across labs.

Limit of quantitation (LOQ). LOQ (also known as PQL) is the limit at which the test method is reproduceable and robust, with analyte recovery within established acceptance criteria. Samples must be analyzed and meet recovery limits (such as 70% to 130% of true value). This is variable across labs.

Limit value. The maximum amount of chemical substances permitted in articles.

Manufacturing restricted substances list (MRSL). An MRSL establishes concentration limits for substances in chemical formulations used within manufacturing facilities. MRSL limits are designed to eliminate the possibility of intentional use of restricted substances by addressing process chemicals used to produce materials, but that may not end up in the finished product.

Material safety data sheet (MSDS). A form containing data regarding the properties of a particular substance. The exact format of an MSDS can vary from source to source within a country depending on how specific the national requirement is. The MSDS has now been replaced by a standardized SDS.

Method detection limit (MDL). A mathematically derived limit based on several replicates of a sample at a specific concentration. Designed to avoid false negatives, but prone to false positives (because data is inaccurate at this level). This is variable across labs.

Preservative. A chemical substance used to preserve organic materials from decomposition or fermentation.

REACH. The European Union's regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances and 'articles'. REACH regulation must be met for all articles entering the EU. Additional information can be found at www.echa.europa.eu.

Reporting limit. The AFIRM RSL uses reporting limits—arbitrary limits set by the Laboratory Technical Advisory Committee—based on the LOQ across laboratories. Reporting limits are useful for AFIRM brands, enabling them to capture data below a regulated limit, but not collect data down to the detection limit and encounter false positives or inaccurate data.

Restricted substances list (RSL). Defines those chemicals that are restricted or banned from finished products.

Safety data sheet (SDS). An SDS is provided by the chemical manufacturer containing safety data relating to the properties of a particular substance. It is an important component of product stewardship and workplace safety, intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner, and includes information such as physical data, toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill handling procedures. The SDS is made up of sixteen sections, and each section includes specific information using a standardized classification method. This standardized method has replaced the "MSDS". See Appendix H for examples and explanation of an SDS.

Solvent. A substance that could dissolve other substances, such as oils, or in which another substance is dissolved, forming a solution.

Substances of very high concern (SVHCs). SVHCs are identified in REACH, which calls for the progressive substitution of the most potentially dangerous chemicals (referred to as "SVHCs") when suitable alternatives have been identified.

Technical data sheet (TDS). Documentation provided by chemical manufacturers containing a detailed technical description of a chemical substance, along with specific areas and scope of use.

Usage ban. For several chemical substances or substance groups a usage ban may be defined. For these substances or substance groups intentional use in manufacturing of articles is prohibited. That means that chemical products (e.g. colorants or textile auxiliaries) used for manufacturing of articles must not intentionally contain these substances or substance groups. The aim of a usage ban is to avoid release of harmful substances to the environment and to avoid occurrence in the manufactured article by applying the precautionary principle.

Volatile. A substance is considered volatile if it has a low boiling point at normal atmospheric pressure. Volatile chemicals (e.g. Formaldehyde) can cross-contaminate products because they can more easily vaporize and travel.

Zero Discharge of Hazardous Chemicals (ZDHC) Programme. ZDHC Foundation oversees the ZDHC Programme. Their aim is to advance towards zero discharge of hazardous chemicals in the textile, leather, and footwear value chain to improve the environment and peoples' well-being. The programme includes an industry-aligned MRSL, Wastewater Guidelines, and a Gateway for the distribution of chemical and wastewater quality data.