



SGS MRSL testing service

TESTING CHEMICAL FORMULATIONS FOR THE TEXTILE, SYNTHETIC LEATHER AND NATURAL LEATHER INDUSTRIES

Upstream chemical management ensures raw chemicals and chemical formulations are safe and compliant at a stage before production. The textile, leather and footwear industries rely on a wide variety of different chemical formulations. Many manufacturers are therefore adopting upstream chemical management to ensure formulations are safe and compliant. Testing original raw chemicals provides these manufacturers with a higher level of assurance in their supply chain because it reduces the risk of non-compliance at the finished product stage. This is especially true when information in the Material Safety Data Sheet (MSDS) is vague or incomplete.

Zero Discharge of Hazardous Chemicals (ZDHC) is an industry-led collaboration designed with the intent to eliminate hazardous chemicals in the supply chain. In 2014, this collaboration developed a Manufacturing Restricted Substance List (MRSL).

The ZDHC MRSL provides a single, harmonized list of chemical substances banned from intentional use during the processing of materials, leather, rubber, foam, adhesives and trim parts for textiles, apparel, and footwear.

ZDHC updated the MRSL to Version 2.0 in 2019, expanding the list to include more hazardous chemicals and restrictions on substrates.

It is broadly divided into two groups:

- Group A: Raw Materials such as textiles, leather and polymers
- Group B :Chemical Formulations such as solvents, cleaners, adhesives, paints, inks, dyes, colorants, auxiliaries, etc.

With the minor adjustment in some MRSL requirements, ZDHC updated the content of ZDHC [MRSL V2.0](#) in Dec 2020 and released the latest version of ZDHC [Conformance Guidance V1.2](#) as well to phase-out the information of Level 0 with the modification of recommended test in Smart Testing Grid.

Trusted means *Tested.*



ENSURING CHEMICAL FORMULATION COMPLIANCE

MRSRL testing by SGS is a targeted quantitative analysis based on ZDHC MRSRL Conformance Guidance Annex A. Using a risk assessment approach and advanced technology alongside analytical chemistry analysis, we achieve detection limits that are lower than the market requires. This approach uses industrial experience and takes into consideration the most relevant parameters of different materials. It provides an absolute figure to the client and gives a greater level of assurance that a product is safe and compliant. Greater data clarity also allows manufacturers to build transparent and traceable chemical inventories along the whole supply chain, as well as aiding continuous improvements by phasing out the use of hazardous substances in factory operations.

- Alkylphenol (AP) & Alkylphenol Ethoxylates (APEOs)
- Chlorobenzenes & Chlorotoluenes
- Chlorophenols
- Dyes – Azo
- Dyes – Navy Blue Colorant
- Dyes – Carcinogenic or Equivalent Concerns
- Dyes – Disperse
- Flame Retardants
- Glycols
- Halogenated Solvents
- Organotin Compounds
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Perfluorinated & Polyfluorinated Chemicals (PFCs)
- Phthalates
- Total Heavy Metals
- Volatile Organic Compounds (VOC)
- Anti-Microbials and Biocides
- Chlorinated Paraffins
- Borate, Zinc Salt
- Bisphenol A
- Thiourea
- Quinoline
- AEEA [2-(2-aminoethylamino) ethanol]
- UV Absorbers
- etc.



BUSINESS BENEFITS WITH MRSRL TESTING

TEXTILE, FOOTWEAR & LEATHER GOODS MANUFACTURERS:

- Supports manufacturers in ensuring the raw chemicals used in manufacturing are safe and compliant to market requested standards
- Assists manufacturers in building a reliable chemical inventory, enabling a traceable and transparent supply chain

CHEMICAL SUPPLIERS:

- Supports chemical suppliers by ensuring chemical formulations sold in the market are compliant with MRSRL requirements, thereby increasing market demand for their products

CHEMICAL SCREENING (SGS BRS300-2020) PROGRAM FOR CHEMICAL FORMULATION

We also offer the **Chemical Screening (SGS BRS300-2020)** program. This alternative solution is practical, applicable and achievable. Our panel of multidisciplinary textile and leather chemistry experts has researched and assessed the relevancy of the target analytes to ensure this screening solution covers all relevant substances:

- Full list of analytes in ZDHC Manufacturing Restricted Substances List Version 2.0

WHY SGS?

SGS Global Softlines has a worldwide network of committed professionals from multi-disciplinary backgrounds. Our internationally accredited state-of-the-art testing laboratories offer a comprehensive range of physical, chemical and functional testing services for components, materials and finished products.

We help you ensure your products comply with quality and performance requirements in international, industrial and regulatory standards.

CONTACT US

To learn more about this service, please contact our representatives for more information.

GLOBAL SOFTLINES DEVELOPMENT OFFICE

Email: global.sl@sgs.com

