



Explanatory Notes

To Accompany the Sustainable Leather Foundation Audit Report

© Sustainable Leather Foundation
Version 3.0, dated 12th December 2022



Contents

GENERAL FAQS	- 2 -
How long does an audit take?	- 2 -
If I have an existing audit, do I have to reaudit with SLF?	- 2 -
How much does an audit cost?.....	- 2 -
How long will an audit certification last?	- 3 -
What happens if I have more than one site?	- 3 -
What happens if I work with sub-contractors or toll manufacturers?	- 3 -
What is a Transparency Dashboard™?.....	- 4 -
ENVIRONMENTAL MODULE	- 5 -
EM1 Permits, Licences, Statutory.....	- 5 -
EM2 Environmental Management System.....	- 6 -
EM4 Environmental Footprint.....	- 6 -
SOCIAL MODULE	- 7 -
SM1 Permits, Licences, Statutory.....	- 7 -
SM2 Age of Workers	- 8 -
SM4 Discrimination.....	- 8 -
SM5 Corporate Social Responsibility.....	- 9 -
SM7 Wages and Benefits	- 10 -
GOVERNANCE MODULE	- 12 -
GM1 Permits, Licences, Statutory.....	- 12 -
GM7 Process Control and Quality Management, Efficiency and Productivity	- 13 -
GM8 Chemical Control.....	- 13 -
GM10 Occupational Health & Safety	- 14 -
APPENDIX 1: INTERNAL PRSL	15
APPENDIX 2: EXTERNAL MRSL.....	20
PMES Corrective Action Plan (CAP).....	- 41 -



GENERAL FAQs

How long does an audit take?

Audit length is determined by the amount of work required and the size of the facility

A single site audit will on average take:

One Module (i.e. environmental module only): one auditor 2 days on site and 1 day for reporting.

Two Modules (i.e. environmental and governance): one auditor 4 days on site and 1 day for reporting.

Three Modules (i.e. environmental, social and governance): two auditors 3 days on site and 2 days for reporting, or 1 auditor 5 days on site and 2 days for reporting.

Gap auditing is based on requirements but will consist of at least one auditor 1 day on site and 1 day for reporting.

If a single operation (covered by one operating permit) is located in more than one location this may require additional time for the auditor to assess.

If it is a large complex site this may require additional time (particularly for a social audit where employee interviews will be conducted).

If I have an existing audit, do I have to reaudit with SLF?

No, SLF provides an equivalency service that enables all existing certification to be mapped across the Transparency Dashboard™ first, before we evaluate any missing areas that a company may wish to consider.

Equivalency is only granted for 3rd party audits with certification from recognised providers. In order to maintain equivalency the company must ensure that it renews its audit certification with the same provider or another provider of equivalent standard before the expiry date. (Note: it is the company's responsibility to share the updated certifications and report with SLF to prevent Dashboards from switching to unassessed).

Self-assessment and internal auditing can be displayed in the Transparency Dashboard™ Summary and may be sufficient to mark a section as "Work in Progress" but will not count for successful completion of a Module section.

How much does an audit cost?

The cost of the audit is dependent upon the amount of auditing required. Gap auditing starts from £750 per day with a minimum of 2 days – 1 day on site and 1 day for reporting, right up to £8,000 for the 3 Module Audit covering Environmental, Social and Governance criteria.

Please refer to our Fee Structure document for more information.



How long will an audit certification last?

The audit result is valid for 2 years from date of audit and the validity of the audit is only for the sections expressly outlined on the company's audit certificate. SLF does not certify elements of ESG that have been audited by another organisation, although this will be recognised within the SLF Equivalency Service.

Interim audit visits may be conducted within the 2 year period for evaluation purposes or to update performance.

The audit will be undertaken on the basis of the facilities previous 12 month's operations in the areas of:

- Water use
- Energy consumption
- Effluent treatment parameters
- Air Emissions
- RSL testing
- Incoming and outgoing material traceability
-

For new build facilities where 12 months data may not be possible, the audit will result in a provisional award based on receipt of monthly data until the first 12 months is complete after which time as long as the resultant data sits within the standard expectation, the provisional assignment will be removed.

What happens if I have more than one site?

The SLF audit is a site-specific audit and for the purposes of definition a site is considered to be one geographic location, i.e. if there are 2 or more sites in 2 or more different locations, each must be assessed individually. This only exception to this is if there are multiple sites in the same proximity (i.e. same trading park or road) that all operate under a single operating permit. In this case, the multiple sites can be audited as one facility. In all other cases, each individual operating site must have its own audit.

Where two distinct organisations work from the same geographic location, these are considered separately if they are registered as two legal entities, with separate operating permits.

What happens if I work with sub-contractors or toll manufacturers?

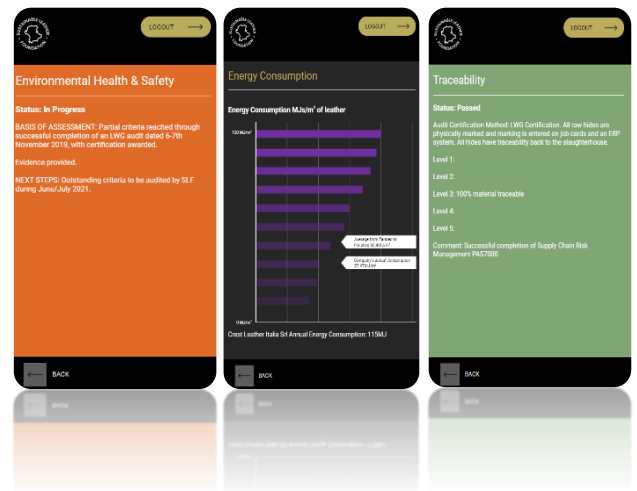
All Sub-contractors and Toll Manufacturers will be required to provide their energy and water consumption data to enable an accurate representation of the resource required to produce the leather at the principal site being audited.

In addition it is expected that the principal company ensures due diligence from their suppliers through self-declaration and assessment of their good practice. While SLF do not hold the principal auditing company accountable for the practices of other organisations, the Foundation does expect that the principal company does its own due diligence checks to ensure it does not inadvertently support bad practice or contribute to environmental or social risk.

What is a Transparency Dashboard™?

A Transparency Dashboard is a visual tool that enables a company to track progress and display it transparently, using a simple traffic light system:

	Not yet started
	Work in progress
	Meeting the standard
	Failing the standard





ENVIRONMENTAL MODULE

EM1 Permits, Licences, Statutory

EM1.1 Are there environmental related permits required by local or national authorities?

Permits and licences are the official documents, issued by a government agency or body, that detail permissions for a company to conduct particular business activities within that government body's jurisdiction. The licenses and permits that are required in order to operate your business will depend largely upon where you are located and the nature of your business.

In consideration of environmental responsibility, we would typically expect an organisation to have statutory licences and permits related to:

- Permissions to operate within an environmental framework
- Permissions to receive inputs, e.g., water, electricity, at the quantities an industrial facility would normally require, especially if the facility is taking inputs from natural sources
- Permissions to emit, discharge, or dispose of outputs
- Health and safety / major accident permits
- Personal data
- Statutory

The above list is not exhaustive.

It is the company's responsibility to know what permit and licencing requirements there are, and the auditor will require proof of all applicable licences and permits during your audit.

See note below about Legal Compliance Register

EM1.2 Are the environmental related permits listed on the company legal/compliance register (LCR)?

A Legal Compliance Register is a form of document that details all the application legislative requirements that a company needs to ensure they are compliant with, according to the business activities carried out. This important resource will enable you to fulfil EM1.1 by ensuring that all your permits and licences are logged in a central record.

The register should include:

- Title of the legal permit or licence
- The issue date of the permit or licence
- The issuing authority (i.e., local, or national government body)
- Key information (i.e., description of contents)
- Renewal date of the permit or licence
- The name of the responsible person within the organisation for ensuring adherence to the conditions of the permit or licence.

You can find an example of a Legal Compliance Register in Template 1 in the Templates section of this document.

EM2 Environmental Management System

EM2.2 Is there a master environmental programme document?

A master environmental programme document is a document that is compulsory for an environmental management system. It must contain the following environmental sections:

- Policy/Plan
- Objectives
- Procedures to meet those objectives
- Roles and responsibilities
- Training plan
- Emergencies
- Monitoring and control
- Management review
- Continuous improvement

EM4 Environmental Footprint

EM4.2 Has the scope of product life cycle analyses been defined? (As per ISO 14040: 2016)?

It is important to define the systems boundary, that is where does the facilities' processing begin and where does it end and how much of its input's footprint is calculated within the LCA or how much is taken from a LCA database.

EM4.3 Has a product-level life cycle inventory been performed? (As per ISO 14040: 2016)?

The first stage of a life cycle assessment is to take inventory of all the inputs that have an ecological impact. These inputs and their quantity as related to how much product (for leather in m²) is impactful, is a key characteristic in the assessment. The facility must have a comprehensive inventory, or the assessment will be low-grade.

EM4.5 Has a product-level life cycle impact assessment been performed? (As per ISO 14040: 2016)?

After the inventory has been compiled the inputs of the process can then be researched on a life cycle analysis specific database. The footprint of those materials (expressed as quantity of impact per functional unit of leather, e.g., kg CO₂-e/m²) can then be calculated. The life cycle assessment can then tally all the quantities contributed from each input and a grand total of what the ecological footprint per square meter of leather can then be generated to gauge how environmentally intensive the material is.



SOCIAL MODULE

SM1 Permits, Licences, Statutory

SM1.1 Are there employee related permits required by local or national authorities?

Permits and licences are the official documents, issued by a government agency or body, that detail permissions for a company to conduct particular business activities within that government body's jurisdiction. The licenses and permits that are required in order to operate your business will depend largely upon where you are located and the nature of your business.

In consideration of social responsibility, we would typically expect an organisation to have statutory licences and permits related to:

- Number of employees that can safely work in the space that the business operates from
- Number of hours that a business can operate each day or week (considering location and local residents). This could be in the form of "work between the hours of 5.00 am and 10.00 pm only" for example or could be "24 hour working operation".
- Health and safety / major accident permits
- Child work permit (for children aged 13 or over) – specific conditions will apply for children between 13 and 18.
- Personal data
- Statutory

The above list is not exhaustive.

This section is not concerned with individual worker permits but the organisations overall operating permits and licenses.

It is the company's responsibility to know what permit and licencing requirements there are, and the auditor will require proof of all applicable licences and permits during your audit.

See note below about Legal Compliance Register

SM1.2 Are the employee related permits listed on the company legal/compliance register (LCR*)?

A Legal Compliance Register is a form of document that details all the application legislative requirements that a company needs to ensure they are compliant with, according to the business activities carried out. This important resources will enable you to fulfil SM1.1 by ensuring that all your permits and licences are logged in a central record.

The register should include:

- Title of the legal permit or licence
- The issue date of the permit or licence
- The issuing authority (i.e. Local or national government body)



- Key information (i.e. description of contents)
- Renewal date of the permit or licence
- The name of the responsible person within the organisation for ensuring adherence to the conditions of the permit or licence

You can find an example of a Legal Compliance Register in Template 1 in the Templates section of this document

SM2 Age of Workers

SM2.1 Does the company keep a documented record (register) of the date of all workers?

It is the responsibility of the facility to ensure that no child labour (as defined in our **SLF Age of Workers Standard and Benchmark FSS2**) takes place on behalf of the company, either within the facility or through homeworking. While this can be challenging with falsification of documents being known to happen, all steps should be taken to protect against this and to conduct due diligence checks on the identification documentation presented.

Forms of identification that should be recorded to prove the age of all workers are:

- Birth Certificate
- Driving Licence
- Passport

When employing young people, in addition you should request proof of:

- School certificates
- Proof of residence

In addition, there should be some photographic evidence attached to one or more forms of the above proofs. SLF auditors will examine this documentary evidence and compare with the workers, selected at random, if they suspect any worker to be under the age of 15 for child labour and between the age of 15 and 18 for young workers.

In the event of a young worker, the auditor will want to see details of their job role, hours of work and any additional schooling that is taking place alongside work.

SM4 Discrimination

Discrimination in the workplace comes in many forms including unfair recruitment decisions, withholding of training, being overlooked for promotion, unfair or unequal pay and benefits. Causes of discrimination can be gender, age, marital status, race, religion, disability, sexual orientation, caste, politics, union membership.

Companies have a responsibility to practice fair, equal and respectful treatment for all personnel at all times, in all respects. Companies should recruit workers based solely on their ability to do the job specified, based on their skills, qualifications and attributes only. Treatment of all personnel whilst in employment should also be based solely on ability, skills and attributes (i.e. when considering pay, promotion, training).

Please refer to the **SLF Discrimination Standard and Benchmark FSS4** for more information and additional references.



SM5 Corporate Social Responsibility

SM5.1 Is there a social aspects register and is there evidence that a detailed aspect screening has been performed?

The cornerstone of effective Corporate Social Responsibility (CSR) is the Social Aspects and Impacts Evaluations (or risk assessment). A company should have a detailed understanding of the potential areas of social impact, internally in the workplace and also externally within the community that the company is situated and serves.

Historically, CSR was seen as a “extra” element that meant perhaps charitable giving or support. However, responsible organisations now recognise that social accountability and responsibility form an intrinsic part of a business model and has influence over organisational productivity and profit, alongside the responsibility to protect and provide a basis for improvement.

The management of a robust corporate social responsibility programme will assist in demonstrating transparency of risk and mitigation across key social concerns that are still prevalent in the leather industry.

Please refer to the **SLF Templates: S1 Social Aspects and Impacts Register and the SLF Corporate Social Responsibility Benchmark FSS5** for more information and additional references.

SM5.2 Is there a master social programme document (that includes system, scope, policy & plan), and is there evidence it has been implemented?

The social programme document should be used with reference to the Aspects and Impacts Register. Once a company’s risk has been evaluated, the social programme document is your system for monitoring, action, review and evaluation. It will form the basis of the improvement mechanism for the company’s CSR.

Your social programme document should be an integral part of the management process and you can adopt the PDCA strategy: Plan – Do – Check – Act

Plan: Identify the current situation through the Social Aspects and Impacts Register

Do: Develop and act on the measurements or solutions that were evaluated in the planning

Check: Review the outcomes and progress following implementation

Act: Report on the results and make recommendations for the next cycle of PDCA.

This should be a cyclical process to ensure continual improvement.

It is important that you document, through policies, systems and plans, the aspects you are working on and how you intend to evaluate success or future improvement. Policies should include everything from basic human rights to discrimination, equal opportunities, fair pay, sickness and absence, forced or compulsory labour, disciplinary measures, health & safety and representation.

More information can be found in the FSS5 Corporate Social Responsibility Standard and Benchmark.

SM7 Wages and Benefits

SM7.10 Does the company pay a sufficient rate of pay to meet the basic living wage needed for the area where the facility is located and meeting national or local legislation if applicable?

Ensuring fair and appropriate remuneration for workers is ethically and socially important for all responsible companies. When considering the definition and application of a “living wage”, SLF refer to the Anker Methodology as the most widely recognised measurement method available, and also adopted for use by the Global Living Wage Coalition (GLWC).

The definition of the living wage, as agreed by the GLWC members and also adopted by Social Accountability International’s SA8000 International Standard is:

“Remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing and other essential needs, including provision for unexpected events”.

This is therefore the definition adopted by Sustainable Leather Foundation.

The Anker Methodology consists of two main elements:

1. Estimates the cost of a basic but decent lifestyle for workers and their families
2. Determines if the estimated living wage (calculated as per 1. above) is being paid to the workers.

During the development of the methodology 9 countries had their living wage estimates calculated and since then over 30 additional countries have had their estimated living wage calculations conducted, which offers a robust starting framework for consistent and objective appraisal.

The process uses local knowledge and stakeholders (including individuals, employers, trade unions and other representatives to ensure credible estimations.

The figures below are extracted from “Living Wages Around the World, Manual for Measurement” by Richard Anker (2017) and illustrate how the living wage is calculated:

Overview of the Anker living wage methodology



Figure 2.1 Cost of a basic but decent life for a family



Figure 2.2 From cost of basic but decent life to net living wage



Figure 2.3 From net living wage to gross living wage

GOVERNANCE MODULE

GM1 Permits, Licences, Statutory

GM1.1 Are there operating permits required by local or national authorities?

Permits and licences are the official documents, issued by a government agency or body, that detail permissions for a company to conduct particular business activities within that government body's jurisdiction. The licenses and permits that are required in order to operate your business will depend largely upon where you are located and the nature of your business.

In consideration of corporate responsibility, SLF would typically expect an organisation to have statutory licences and permits (translated into English) related to:

- Operational permissions (detailing what the company is allowed or not allowed to do).
- Storage or transportation
- Fire permits
- Boiler permits
- High pressure vessel permits
- Permission to use and handle hazardous chemicals
- Health and safety / major accident permits
- Workers permits
- Personal data
- Statutory

The above list is not exhaustive.

It is the company's responsibility to know what permit and licencing requirements there are, and the auditor will require proof of all applicable licences and permits during your audit.

See note below about Legal Compliance Register

GM1.2 Are the operating related permits listed on the company legal/compliance register (LCR)?

A Legal Compliance Register is a form of document that details all the application legislative requirements that a company needs to ensure they are compliant with, according to the business activities carried out. This important resource will enable you to fulfil EM1.1 by ensuring that all your permits and licences are logged in a central record.

The register should include:

- Title of the legal permit or licence
- The issue date of the permit or licence
- The issuing authority (i.e., local, or national government body)
- Key information (i.e., description of contents)



- Renewal date of the permit or licence
- The name of the responsible person within the organisation for ensuring adherence to the conditions of the permit or licence.

You can find an example of a Legal Compliance Register in Template 1 in the Templates section of this document.

GM7 Process Control and Quality Management, Efficiency and Productivity

GM7.2 Is there a master operational (or quality) programme document?

A master operational (or quality) programme document is a document that is compulsory for an operational/quality management system. It must contain the following operational/quality sections:

- Policy/Plan
- Objectives
- Procedures to meet those objectives
- Roles and responsibilities
- Training plan
- Conformance/non-conformance procedures
- Monitoring and control
- Management review
- Continuous improvement

GM8 Chemical Control

GM8.7 Are chemicals with an economic, or hazardous sensitivity controlled in accordance with SLF Standard and Benchmark?

Many of the chemicals used in the facility can be quite valuable or can be hazardous to human health. A facility should assess the economic or chemical risk to human and environmental health and the following actions could arise:

- The chemical is systematically replaced to a less risky chemistry
- The chemical could be tightly controlled with secure measures, e.g., secure storage
- The chemical could be intensely policed



GM10 Occupational Health & Safety

GM10.2 Is there a master OHS programme document?

A master OHS programme document is a document that is compulsory for an occupational health and safety management system. It must contain the following OHS sections:

- Policy/Plan
- Objectives
- Procedures to meet those objectives
- Roles and responsibilities
- Training plan
- Emergency planning
- Accidents and incidents
- Monitoring and control
- Management review
- Continuous improvement

Appendix 1: Internal PRSL for <FACILITY NAME> – <DATE>

APPENDIX 1: INTERNAL PRSL

LEATHER				
<i>Restricted substance/property</i>	<i>CAS No.</i>	<i>Limit/Requirement</i>	<i>Test method</i>	<i>Reporting limit</i>
<i>Alkylphenol (AP) and alkylphenol ethoxylates (APEOs), including all isomers</i>				
<i>Nonylphenol ethoxylates (NPE)</i>	<i>Various e.g. 9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0</i>	<i>50 mg/kg</i>	<i>Leather: ISO 18218-1</i>	<i>20 mg/kg</i>
<i>Octylphenol ethoxylates (OPE)</i>	<i>Various e.g. 9002-93-1 9036-19-5 68987-90-6</i>			
<i>Nonylphenol (NP)</i>	<i>Various e.g. 104-40-5 11066-49-2 25154-52-3 84852-15-3</i>	<i>5 mg/kg</i>	<i>Leather: Extraction according to ISO 18218-1, analysis according to ISO 18218-2</i>	<i>5 mg/kg</i>
<i>Octylphenol (OP)</i>	<i>Various e.g. 140-66-9 1806-26-4 27193-28-8</i>			
<i>Azo Dyes & Pigments</i>				
<i>4-aminoazobenzene (C.I. Solvent Yellow 1)</i>	<i>60-09-3</i>	<i>20 mg/kg per listed amine</i>	<i>Leather: EN ISO 17234-1</i>	<i>5 mg/kg</i>
<i>4-aminodiphenyl</i>	<i>92-67-1</i>		<i>(EN ISO 14362-3 determination of 4-aminoazobenzene)</i>	
<i>Benzidine</i>	<i>92-87-5</i>			
<i>4-chloro-o-toluidine</i>	<i>95-69-2</i>			

Appendix 1: Internal PRSL for <FACILITY NAME> – <DATE>

LEATHER				
<i>Restricted substance/property</i>	<i>CAS No.</i>	<i>Limit/Requirement</i>	<i>Test method</i>	<i>Reporting limit</i>
<i>2-naphthylamine</i>	<i>91-59-8</i>			
<i>o-aminoazotoluene (C.I Solvent Yellow 3)</i>	<i>97-56-3</i>			
<i>2-Amino-4-nitrotoluene</i>	<i>99-55-8</i>			
<i>2,4-Diaminoanisole</i>	<i>615-05-4</i>			
<i>4,4'-Diaminodiphenylmethane</i>	<i>101-77-9</i>			
<i>3,3'-Dichlorobenzidine</i>	<i>91-94-1</i>			
<i>3,3'-Dimethoxybenzidine (o-Dianisidine)</i>	<i>119-90-4</i>			
<i>3,3'-Dimethylbenzidine (o-Tolidine)</i>	<i>119-93-7</i>			
<i>3,3'-Dimethyl-4,4'-diaminodiphenylmethane</i>	<i>838-88-0</i>			
<i>p-Chloroaniline</i>	<i>106-47-8</i>			
<i>p-Cresidine</i>	<i>120-71-8</i>			
<i>4,4'-Methylene-bis-(2-chloroaniline)</i>	<i>101-14-4</i>			
<i>4,4'-Oxydianiline</i>	<i>101-80-4</i>			
<i>4,4'-Thiodianiline</i>	<i>139-65-1</i>			
<i>2,4-Toluenediamine</i>	<i>95-80-7</i>			
<i>o-Tolidine</i>	<i>95-53-4</i>			
<i>2,4,5-Trimethylaniline</i>	<i>137-17-7</i>			
<i>o-Anisidine</i>	<i>90-04-0</i>			
<i>2,4-Xylidine</i>	<i>95-68-1</i>			
<i>2,6-Xylidine</i>	<i>87-62-7</i>			
Chlorinated Paraffins				
<i>Short-chained (SCCP) C10-C13</i>	<i>85535-84-8</i>	<i>100 mg/kg</i>	<i>ISO 18219, n-hexane extraction with ultrasound (60°C, 60min), followed by GC-MS analysis using NCI (Negative Chemical Ionization).</i>	<i>30 mg/kg</i>
<i>Medium-chained (MCCP) C14-C17</i>	<i>85535-85-9</i>	<i>1000 mg/kg</i>		
Chlorophenols				
<i>Pentachlorophenol (PCP) and its salts and esters</i>	<i>87-86-5</i>	<i>Sum: 0.05 mg/kg</i>	<i>BVL B 82.02-08 (modified)/DIN EN ISO 17070 (modified)</i>	<i>0.05 mg/kg</i>

Appendix 1: Internal PRSL for <FACILITY NAME> – <DATE>

LEATHER				
<i>Restricted substance/property</i>	<i>CAS No.</i>	<i>Limit/Requirement</i>	<i>Test method</i>	<i>Reporting limit</i>
<i>Tetrachlorophenol (TeCP) and its salts and esters</i>		<i>Products for children aged 0-3 years, incl. bed linen (i.e. up to and including 98 cl)</i> <i>Sum: 0.5 mg/kg</i> <i>All other products</i>	<i>KOH extraction, derivatization followed by GC-MS analysis</i>	
2,3,4,6-Tetrachlorophenol (2,3,4,6 TeCP)	58-90-2			
2,3,5,6 Tetrachlorophenol (2,3,5,6 TeCP)	935-95-5			
2,3,4,5-Tetrachlorophenol (2,3,4,5 TeCP)	4901-51-3			
<i>Trichlorophenol (TrCP) and its salts and esters</i>		<i>Sum: 0.2 mg/kg</i> <i>Products for children aged 0-3 years, incl. bed linen (i.e., up to and including 98 cl)</i> <i>Sum: 0.5 mg/kg</i> <i>All other products</i>		
2,3,4-Trichlorophenol (2,3,4 TriCP)	15950-66-0			
2,3,5-Trichlorophenol (2,3,5 TriCP)	933-78-8			
2,3,6-Trichlorophenol (2,3,6 TriCP)	933-75-5			
2,4,5-Trichlorophenol (2,4,5 TriCP)	95-95-4			
2,4,6-Trichlorophenol (2,4,6 TriCP)	88-06-2			
3,4,5-Trichlorophenol (3,4,5 TriCP)	609-19-8			
<i>Formaldehyde</i>	50-00-0	<i>If an order includes products intended for babies 0-3 years (e.g., size 98 or below), the whole order must fulfil this requirement. Each part of the product (e.g., main fabric, print, fusing and binding) must comply with the restriction limit: <i>(A-A₀) < 0.05¹</i></i>	<i>JIS L 1041-2011, Method A</i> <i>Leather: ISO 17226-2 and ISO 17226-1 confirmation method in case of interferences</i>	<i>(A-A₀) < 0.02^a</i> <i>(5 mg/kg)</i>

¹ Where A is the absorbance of the sample and A₀ is the absorbance of the zero-sample, both measured according to the listed test method.

Appendix 1: Internal PRSL for <FACILITY NAME> – <DATE>

LEATHER				
<i>Restricted substance/property</i>	<i>CAS No.</i>	<i>Limit/Requirement</i>	<i>Test method</i>	<i>Reporting limit</i>
		<i>Valid for all other products, each part of the product (e.g., main fabric, print, fusing and binding) must comply with the restriction limit: 75 mg/kg</i>	<i>Leather: ISO 17226-2 and ISO 17226-1 confirmation method in case of interferences</i>	<i>16 mg/kg</i>
Leather				
<i>Restricted substance</i>	<i>CAS</i>	<i>Limit</i>	<i>Test Method</i>	<i>Reporting Limit</i>
Metals, Extractable amount				
Antimony (Sb)	7440-36-0	<30 mg/kg	EN ISO 17072-1	0.1 mg/kg
Arsenic	7440-38-2	<0.2 mg/kg		
Barium (Ba)	7440-39-3	<1000 mg/kg		
Chromium VI	18540-29-9	<i>Products for above 3 years of age: <3 mg/kg</i>	<i>EN ISO17075-2 (IC) or EN ISO17075-1 Aging test: 24 hours, 80°C, <5% humidity (harmonized CADS method)</i>	3 mg/kg
Cobalt (Co)	7440-48-4	Adult: <4 mg/kg Child: <1 mg/kg	EN ISO 17072-1 <i>Analysis based ICP/MS</i>	0.1 mg/kg
Copper (Cu)	7440-50-8	Adults: <50 mg/kg		5 mg/kg
		Children/Babies: <25 mg/kg		
Lead (Pb)	7439-92-1	Adults and children: <1 mg/kg		0.1 mg/kg
		Babies: <0.2 mg/kg		
Mercury (Hg)	7439-97-6	0.02 mg/kg		0.02 mg/kg
Nickel (Ni)	7440-02-0	<1 mg/kg		0.1 mg/kg
Selenium (Se)	7782-49-2	<500 mg/kg		
Metals, Total amount				
Arsenic (As)	7440-38-2	1 mg/kg	ISO 17072-2	0.1 mg/kg

Appendix 1: Internal PRSL for <FACILITY NAME> – <DATE>

<i>LEATHER</i>				
<i>Restricted substance/property</i>	<i>CAS No.</i>	<i>Limit/Requirement</i>	<i>Test method</i>	<i>Reporting limit</i>
Cadmium (Cd)	7440-43-9	<0.1 mg/kg	<i>Analysis based ICP/MS</i>	
Lead (Pb)	7439-92-1	90 mg/kg		
Mercury (Hg)	7439-97-6	0.02 mg/kg		
Dimethylfumarate	624-49-7	<0.1 mg/kg	BS EN 17130:2019 <i>Analysis by GC-MS/MS</i>	<i>0.1 mg/kg</i>

APPENDIX 2: EXTERNAL MRSL

Alkylphenol (AP) and alkylphenol ethoxylates (APEOs): including all isomers				
Potential Uses in Leather Processing				
APEOs can be used as or found in: detergents, scouring agents, spinning oils, wetting agents, softeners, emulsifier/dispersing agents for dyes and prints, impregnating agents, de-gumming for silk production, dyes and pigment preparations, polyester padding, and down/feather fillings.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
104-40-5 11066-49-2 25154-52-3 84852-15-3	Nonylphenol (NP), mixed isomers	No intentional use	250 ppm	Liquid chromatography- mass spectrometry (LC-MS), gas chromatography-mass spectrometry (GC-MS)
9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0	Nonylphenoethoxylates (NPEO)	No intentional use	500 ppm	Liquid chromatography- mass spectrometry (LC-MS), gas chromatography-mass spectrometry (GC-MS)
9002-93-1 9036-19-5 68987-90-6	Octylphenoethoxylates (OPEO)	No intentional use	500 ppm	Liquid chromatography- mass spectrometry (LC-MS), gas chromatography-mass spectrometry (GC-MS)
140-66-9 1806-26-4 27193-28-8	Octylphenol (OP), mixed isomers	No intentional use	250 ppm	Liquid chromatography- mass spectrometry (LC-MS), gas chromatography-mass spectrometry (GC-MS)

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Anti-microbials and biocides				
Potential Uses in Leather Processing				
These substances have biocidal properties, making it useful for multiple preservation applications.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
90-43-7	o-Phenylphenol (+salts)	Use is permitted and OPP is approved for use under BPR PT6 as a preservative for formulations.		Solvent extraction LC MS, LC DAD, GC MS
Multiple	Permethrin In most situations, deliberate use is not permitted. However, it should be noted that Permethrin is approved for use on PT18 under BPR and is permitted for use on wool curtains and carpets, rugs and floor coverings. Permethrin is permitted for PPE use (EU 2016/425, EPA registered product, APVMA Registered Product, PMRA Registered Product, etc.). Also, its use is sometimes stipulated for certain end uses such as military. All efforts should be made to maximise the durability of the chemical finish and to minimise losses to the environment.	No intentional use	250 ppm except for processes mentioned.	Solvent extraction, LC MS/MS, GC MS/MS
3380-34-5	Triclosan	No intentional use	250 ppm	Solvent extraction LC MS, DAD

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Chlorinated paraffins				
Potential Uses in Leather Processing				
These are used occasionally as flame retardants in certain industries. In leather formulations, these are also used as fatliquoring agents.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
85535-84-8	Short-chain chlorinated paraffin (C10– C13)	No intentional use	250 ppm	prEN ISO 22699-2
85535-85-9	Medium-chain chlorinated paraffins (MCCPs) (C14- C17)	No intentional use	500 ppm	prEN ISO 22699-2
Chlorobenzenes and chlorotoluenes				
Potential Uses in Leather Processing				
Chlorobenzenes and chlorotoluenes (chlorinated aromatic hydrocarbons) can be used as carriers in the dyeing process of leather fibres. They can also be used as solvents.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
95-50-1	1,2-dichlorobenzene	No intentional use	250 ppm	GC-MS
Multiple	Other isomers of mono-, di-, tri-, tetra-, penta- and hexa- Chlorobenzene and mono-, di-, tri-, tetra- and penta- chlorotoluene	No intentional use	Sum = 200 ppm tetrachlorotoluene, and trichlorotoluene 10 ppm each	GC-MS

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Chlorophenols				
Potential Uses in Leather Processing				
Chlorophenols are polychlorinated compounds used as preservatives or pesticides. Pentachlorophenol (PCP) and tetrachlorophenol (TeCP) have been used in the past to prevent mould when storing/transporting raw hides and leather. They are now regulated and should not be used.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
87-86-5	Pentachlorophenol (PCP)	No intentional use	Sum of substances = 20 ppm	GC-MS EN ISO 17070
Multiple	Tetrachlorophenol(TeCP)	No intentional use	Sum of substances = 20 ppm	GC-MS EN ISO 17070
120-83-2	2,4-dichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
95-57-8	2-chlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
583-78-8	2,5-dichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
87-65-0	2,6-dichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
88-06-2	2,4,6-trichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
591-35-5	3,5-dichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
95-95-4	2,4,5-trichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
576-24-9	2,3-dichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
95-77-2	3,4-dichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
108-43-0	3-chlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
106-48-9	4-chlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
15950-66-0	2,3,4-trichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
609-19-8	3,4,5-trichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
933-78-8	2,3,5-trichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070
933-75-5	2,3,6-trichlorophenol	No intentional use	Sum of substances = 50 ppm	GC-MS EN ISO 17070

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Dyes – azo (forming restricted amines)				
Potential Uses in Leather Processing				
Azo dyes and pigments are colourants that incorporate one or several azo groups (-N=N-) bound with aromatic compounds. Thousands of azo dyes exist, but only those that degrade to form the listed cleavable amines are restricted. Azo dyes that release these amines are regulated and should no longer be used for the dyeing of leathers.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
101-80-4	4,4-oxydianiline	No intentional use	150 ppm	LC, GC
101-14-4	4,4-methylene-bis-(2-chloro-aniline)	No intentional use	150 ppm	LC, GC
119-90-4	3,3-dimethoxybenzidine	No intentional use	150 ppm	LC, GC
101-77-9	4,4-methylenedianiline	No intentional use	150 ppm	LC, GC
106-47-8	4-chloroaniline	No intentional use	150 ppm	LC, GC
119-93-7	3,3-dimethylbenzidine	No intentional use	150 ppm	LC, GC
120-71-8	6-methoxy-m-toluidine	No intentional use	150 ppm	LC, GC
139-65-1	4,4-thiodianiline	No intentional use	150 ppm	LC, GC
60-09-3	4-aminoazobenzene	No intentional use	150 ppm	LC, GC
137-17-7	2,4,5-trimethylaniline	No intentional use	150 ppm	LC, GC
90-04-0	o-anisidine	No intentional use	150 ppm	LC, GC
838-88-0	4,4-methylenedi-o-toluidine	No intentional use	150 ppm	LC, GC
91-94-1	3,3'-dichlorobenzidine	No intentional use	150 ppm	LC, GC
615-05-4	4-methoxy-m-phenylenediamine	No intentional use	150 ppm	LC, GC
87-62-7	2,6-xylydine	No intentional use	150 ppm	LC, GC
91-59-8	2-naphthylamine	No intentional use	150 ppm	LC, GC
95-53-4	o-toluidine	No intentional use	150 ppm	LC, GC
92-87-5	Benzidine	No intentional use	150 ppm	LC, GC
95-69-2	4-chloro-o-toluidine	No intentional use	150 ppm	LC, GC
92-67-1	4-aminodiphenyl	No intentional use	150 ppm	LC, GC
95-80-7	4-methyl-m-phenylenediamine	No intentional use	150 ppm	LC, GC
95-68-1	2,4-xylydine	No intentional use	150 ppm	LC, GC
97-56-3	o-aminoazotoluene	No intentional use	150 ppm	LC, GC
99-55-8	5-nitro-o-toluidine	No intentional use	150 ppm	LC, GC
553-00-4	2-naphthylammoniumacetate	No intentional use	150 ppm	LC, GC
3165-93-3	4-chloro-o-toluidinium chloride	No intentional use	150 ppm	LC, GC
39156-41-7	4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	No intentional use	150 ppm	LC, GC
21436-97-5	2,4,5-trimethylaniline hydrochloride	No intentional use	150 ppm	LC, GC

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Dyes – Carcinogenic or Equivalent Concern				
Potential Uses in Leather Processing				
Most of these substances are regulated and should no longer be used for the dyeing of leathers.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
632-99-5	C.I. Basic Violet 14	No intentional use	250 ppm	DIN 54231
1937-37-7	C.I. Direct Black 38	No intentional use	250 ppm	DIN 54231
2602-46-2	C.I. Direct Blue 6	No intentional use	250 ppm	DIN 54231
3761-53-3	C.I. Acid Red 26	No intentional use	250 ppm	DIN 54231
573-58-0	C.I. Direct Red 28	No intentional use	250 ppm	DIN 54231
569-61-9	C.I. Basic Red 9	No intentional use	250 ppm	DIN 54231
2475-45-8	C.I. Disperse Blue 1	No intentional use	250 ppm	DIN 54231
2580-56-5	C.I. Basic Blue 26 (with Michler’s Ketone > 0.1%)	No intentional use	250 ppm	DIN 54231
2475-46-9	C.I. Disperse Blue 3	No intentional use	250 ppm	DIN 54231
2437-29-8	C.I. Basic Green 4 (Malachite Green Oxalate)	No intentional use	250 ppm	DIN 54231
569-64-2	C.I. Basic Green 4 (Malachite Green Chloride)	No intentional use	250 ppm	DIN 54231
82-28-0	Disperse Orange 11	No intentional use	250 ppm	DIN 54231
10309-95-2	C.I. Basic Green 4 (Malachite Green)	No intentional use	250 ppm	DIN 54231
1694-09-3	C.I. Acid Violet 49	No intentional use	250 ppm	DIN 54231
548-62-9	C.I. Basic Violet 3 with >0.1% of Michler’s Ketone	No intentional use	250 ppm	DIN 54231
Dyes – Navy Blue Colourant				
Potential Uses in Leather Processing				
Navy Blue Colourant is regulated and should no longer be used for the dyeing of leathers.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
118685-33-9	Component 1: C39H23Cl-CrN7O12S 2Na Navy Blue 018112	No intentional use	250 ppm	LC
Not Allocated	Component 2: C46H-30CrN10O20S2 3Na Navy Blue 018112	No intentional use	250 ppm	LC

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Flame Retardants				
Potential Uses in Leather Processing				
Flame retardant chemicals are rarely used to meet flammability requirements in children’s clothing and adult products. They should no longer be used in apparel and footwear.				
All halogenated flame retardants are banned from intentional use that means including but not exclusive the list below:				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
32536-52-0	Octabromodiphenyl ether (OctaBDE)	No intentional use	250 ppm	GC-MS
115-96-8	Tris(2-chloroethyl) phosphate (TCEP)	No intentional use	250 ppm	GC-MS
126-72-7	Tris (2,3, -dibromopropyl)-phosphate (TRIS)	No intentional use	250 ppm	GC-MS
5412-25-9	Bis(2,3-dibromopropyl) phosphate (BIS)	No intentional use	250 ppm	GC-MS
1163-19-5	Decabromodiphenyl ether (DecaBDE)	No intentional use	250 ppm	GC-MS
32534-81-9	Pentabromodiphenyl ether (PentaBDE)	No intentional use	250 ppm	GC-MS
545-55-1	Tris(1-aziridinyl) phosphineoxide (TEPA)	No intentional use	250 ppm	GC-MS
79-94-7	Tetrabromobisphenol A(TBBPA)	No intentional use	250 ppm	GC-MS
13674-87-8	Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	No intentional use	250 ppm	GC-MS
59536-65-1	Polybromobiphenyls (PBB)	No intentional use	250 ppm	GC-MS
3296-90-0	2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	No intentional use	250 ppm	GC-MS
3194-55-6	Hexabromocyclododecane (HBCDD)	No intentional use	250 ppm	GC-MS
10043-35-3/ 11113-50-1	Boric acid	No intentional use	250 ppm	GC-MS
13654-09-6	Decabromobiphenyl (DecaBB)	No intentional use	250 ppm	GC-MS
1303-96-4/ 1330-43-4	Disodium tetraborate, anhydrous	No intentional use	250 ppm	GC-MS
12008-41-2	Disodium octaborate	No intentional use	250 ppm	GC-MS
21850-44-2	Dibromopropylether	No intentional use	250 ppm	GC-MS
1303-86-2	Diboron trioxide	No intentional use	250 ppm	GC-MS
68928-80-3	Heptabromodiphenyl ether (HeptaBDE)	No intentional use	250 ppm	GC-MS

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Multiple	Dibromobiphenyls (DiBB)	No intentional use	250 ppm	GC-MS
Flame Retardants continued				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
Multiple	Monobromodiphenylethers (MonoBDEs)	No intentional use	250 ppm	GC-MS
Multiple	Monobromobiphenyls (MonoBB)	No intentional use	250 ppm	GC-MS
36483-60-0	Hexabromodiphenyl ether (HexaBDE)	No intentional use	250 ppm	GC-MS
Multiple	Nonabromobiphenyls (NonaBB)	No intentional use	250 ppm	GC-MS
63936-56-1	Nonabromodiphenyl ether (NonaBDE)	No intentional use	250 ppm	GC-MS
Multiple	Octabromobiphenyls (OctaBB)	No intentional use	250 ppm	GC-MS
12267-73-1	Tetraboron disodium heptaoxide, hydrate	No intentional use	250 ppm	GC-MS
40088-47-9	Tetrabromodiphenyl ether (TetraBDE)	No intentional use	250 ppm	GC-MS
Multiple	Tribromodiphenylethers (TriBDEs)	No intentional use	250 ppm	GC-MS
13674-84-5	Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	No intentional use	250 ppm	GC-MS

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Glycols / Glycol Ethers				
Potential Uses in Leather Processing				
In apparel and footwear, glycols have a wide range of uses including as solvents for finishing/ cleaning, printing agents, and dissolving/ diluting fats, oils, and adhesives (e.g., in degreasing or cleaning operations).				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
110-71-4	Ethylene glycol dimethylether	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
110-49-6	2-methoxyethylacetate	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
110-80-5	2-ethoxyethanol	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
109-86-4	2-methoxyethanol	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
111-96-6	Bis(2-methoxyethyl)-ether	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
111-15-9	2-ethoxyethyl acetate	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
70657-70-4	2-methoxypropylacetate	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
112-49-2	Triethylene glycol dimethyl ether	No intentional use	50 ppm	High-performance liquid chromatography (HPLC), LC-MS
Halogenated Solvents				
Potential Uses in Leather Processing				
In apparel and footwear, halogenated solvents are used as finishing/ cleaning and printing agents, for dissolving/ diluting fats, oils and adhesives (e.g. in degreasing or cleaning operations).				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
75-09-2	Methylene chloride	No intentional use	5 ppm	GC-MS
79-01-6	Trichloroethylene	No intentional use	40 ppm	GC-MS
127-18-4	Tetrachloroethylene	No intentional use	5 ppm	GC-MS
100-44-7	Benzylchloride	No intentional use	50 ppm and 100 ppm for dyes	GC-MS with confirmatory LC-MS in the event of a positive detection
107-06-2	1,2-dichloroethane	No intentional use	5 ppm	GC-MS

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Organotin Compounds				
Potential Uses in Leather Processing				
Organotins are a class of chemicals combining tin and organics such as butyl and phenyl groups. Organotins are predominantly found in the environment as antifoulants in marine paints, but they can also be used as biocides (e.g., antibacterials), catalysts in plastic and glue production and heat stabilisers in plastics/rubber. In leather and apparel, organotins are associated with plastics/rubber, inks, paints, metallic glitter, polyurethane products, and heat transfer material.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
Multiple	Dibutyltin (DBT)	No intentional use	20 ppm (*EXCEPTION* 100 ppm for polyurethane-based thickeners used at <20% loading)	Solvent extraction, GC MS, ISO TS 16179
Multiple	Mono-, di- and tri-methyltin derivatives	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Mono-, di- and tri-octyltin derivatives	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Mono-, di- and tri-phenyltin derivatives	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Mono- and tri-butyltin derivatives	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Dipropyltin compounds (DPT)	No intentional use	5 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Tetraethyltin Compounds (TeET)	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Tripropyltin Compounds (TPT)	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Tetrabutyltin compounds (TeBT)	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Tetraoctyltin compounds (TeOT)	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179
Multiple	Tricyclohexyltin (TCyHT)	No intentional use	1 ppm	Solvent extraction, GC MS, ISO TS 16179

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Other/ Miscellaneous Chemicals				
Potential Uses in Leather Processing				
These are other chemicals/ substances/ process with a usage ban.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
12767-90-7	Borate, zinc salt Borate, zinc salt can be used as a flame retardant but also in paints, pigments, and adhesives.	No intentional use	1000 ppm	Acid digestion, ICP
80-05-7	Bisphenol A Bisphenol A (BPA) is a precursor chemical used along with other chemicals to create some plastics and resins. It is commonly used to harden plastics.	No intentional use	100 ppm	Solvent extraction, LC MS/MS, GC MS
62-56-6	Thiourea Thiourea is used in many formulations to increase the solubility.	No intentional use	1000 ppm	Solvent extraction, LC MS/MS
91-22-5	Quinoline Contaminant of dispersing agents in disperse dyes.	No intentional use	1000 ppm	DIN 54231
14464-46-1	Silica (particles of respirable size) Respirable particles of silica are often generated during the process of sand blasting.	No intentional use	No use of sand blasting	Process due diligence, no test method available
111-41-1	AEEA [2-(2-aminoethylamino) ethanol] AEEA is used a.o. in chelating agents, surfactants, and fabric softeners.	No intentional use	100 ppm	Solvent extraction, LC MS/MS

Perfluorinated and Polyfluorinated Chemicals (PFCs)				
Potential Uses in Leather Processing				
<p>Durable water, oil and stain repellent finishes based on long-chain PFC's are banned from intentional use. There are two methods of manufacture of PFCs referred to as electrofluorination and telomerisation. PFC's made by the electrofluorination method have by-products associated with them called perfluoroalkyl sulphonates with the most common being the C8 species Perfluorooctane sulphonate (PFOS). The deliberate use of any PFCs made by electrofluorination with a chain length of C6 or above is not permitted. The detection of any PFOS analogue as where the chain length is 6 units or longer will trigger a failure [i.e., PFHS and above]. These types of PFCs are typically used in home textiles. PFC's made by the telomerisation method have by-products associated with them called perfluorocarboxylic acids with the most common being the C8 species perfluorooctanoic acid (PFOA). The deliberate use of any PFCs made by telomerisation with a chain length of C8 or above is restricted. ZDHC plans to further restrict the use of PFCs in future revisions and details can be found in the candidate list is not permitted. The detection of any PFOA analogue as where the chain length is 8 units or longer will trigger a failure (i.e., PFOA and above). These types of PFCs are typically used in clothing and footwear.</p> <p>PFOA and PFOS may be present as unintended by-products in long-chain commercial water, oil, and stain repellent agents. PFOA also may be in used in the production for polymers like polytetrafluoroethylene (PTFE).</p>				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
Multiple	Perfluorooctane sulfonate (PFOS) and related substances	No intentional use	Sum = 2 ppm	LC-MS

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Multiple	Perfluorooctanoic acid (PFOA) and related substances	No intentional use	PFOA = 25 ppb PFOA-related substances = 1000 ppb	LC-MS
----------	--	--------------------	--	-------

Phthalates – including all other esters of ortho-phthalic acid				
Potential Uses in Leather Processing				
Esters of ortho-phthalic acid (phthalates) are a class of organic compounds commonly added to plastics to increase flexibility. They sometimes are used to facilitate moulding of plastic by decreasing its melting temperature. Phthalates can be found in:				
- Flexible plastic components (e.g., PVC)				
- Print pastes				
- Adhesives				
- Plastic buttons				
- Plastic sleeving				
- Polymeric coatings				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
117-84-0	Di-n-octyl phthalate (DNOP)	No intentional use	Sum of substances = 250 ppm	GC-MS
117-82-8	Bis(2-methoxyethyl) phthalate (DMEP)	No intentional use	Sum of substances = 250 ppm	GC-MS
26761-40-0	Di-iso-decyl phthalate (DIDP)	No intentional use	Sum of substances = 250 ppm	GC-MS
117-81-7	Di(ethylhexyl) phthalate (DEHP)	No intentional use	Sum of substances = 250 ppm	GC-MS
28553-12-0	Di-isononyl phthalate (DINP)	No intentional use	Sum of substances = 250 ppm	GC-MS
84-75-3	Di-n-hexyl phthalate (DnHP)	No intentional use	Sum of substances = 250 ppm	GC-MS
85-68-7	Butyl benzyl phthalate (BBP)	No intentional use	Sum of substances = 250 ppm	GC-MS
84-74-2	Dibutyl phthalate (DBP)	No intentional use	Sum of substances = 250 ppm	GC-MS
84-76-4	Dinonyl phthalate (DNP)	No intentional use	Sum of substances = 250 ppm	GC-MS
84-66-2	Diethyl phthalate (DEP)	No intentional use	Sum of substances = 250 ppm	GC-MS
131-16-8	Di-n-propyl phthalate (DPRP)	No intentional use	Sum of substances = 250 ppm	GC-MS
84-61-7	Di-cyclohexyl phthalate (DCHP)	No intentional use	Sum of substances = 250 ppm	GC-MS
84-69-5	Di-isobutyl phthalate (DIBP)	No intentional use	Sum of substances = 250 ppm	GC-MS
27554-26-3	Di-iso-octyl phthalate (DIOP)	No intentional use	Sum of substances = 250 ppm	GC-MS
68515-42-4/ 68515-50-4	1,2-benzenedicarboxylic acid, di-C7-11 branched and linear alkyl esters (DHNU)	No intentional use	Sum of substances = 250 ppm	GC-MS
71888-89-6/ 84777-06-0	1,2-benzenedicarboxylic acid, di-C6-8 branched and linear alkyl esters, C7-rich (DIHP)	No intentional use	Sum of substances = 250 ppm	GC-MS
605-50-5	Diisopentylphthalates	No intentional use	Sum of substances = 250 ppm	GC-MS
131-18-0	Di-n-pentylphthalates	No intentional use	Sum of substances = 250 ppm	GC-MS

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Polycyclic Aromatic Hydrocarbons (PAHs)				
Potential Uses in Leather Processing				
Oil containing PAHs are added to rubber and plastics as a softener or extender and may be found in rubber, plastics, lacquers, and coatings. Within the footwear producing industry, PAHs are often found in the outsoles of footwear and in printing pastes for screen prints. PAHs can be present as impurities in carbon black dyestuffs.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
50-32-8	Benzo[a]pyrene	No intentional use	20 ppm	GC-MS
129-00-0	Pyrene	No intentional use	Sum of substances = 200 ppm	GC-MS
191-24-2	Benzo[ghi]perylene	No intentional use	Sum of substances = 200 ppm	GC-MS
205-82-3	Benzo[j]fluoranthene	No intentional use	Sum of substances = 200 ppm	GC-MS
120-12-7	Anthracene	No intentional use	Sum of substances = 200 ppm	GC-MS
193-39-5	Indeno[1,2,3-cd] pyrene	No intentional use	Sum of substances = 200 ppm	GC-MS
192-97-2	Benzo[e]pyrene	No intentional use	Sum of substances = 200 ppm	GC-MS
205-99-2	Benzo[b]fluoranthene	No intentional use	Sum of substances = 200 ppm	GC-MS
207-08-9	Benzo[k]fluoranthene	No intentional use	Sum of substances = 200 ppm	GC-MS
206-44-0	Fluoranthene	No intentional use	Sum of substances = 200 ppm	GC-MS
208-96-8	Acenaphthylene	No intentional use	Sum of substances = 200 ppm	GC-MS
53-70-3	Dibenz[a,h]anthracene	No intentional use	Sum of substances = 200 ppm	GC-MS
218-01-9	Chrysene	No intentional use	Sum of substances = 200 ppm	GC-MS
85-01-8	Phenanthrene	No intentional use	Sum of substances = 200 ppm	GC-MS
83-32-9	Acenaphthene	No intentional use	Sum of substances = 200 ppm	GC-MS
86-73-7	Fluorene	No intentional use	Sum of substances = 200 ppm	GC-MS
91-20-3	Naphthalene	No intentional use	Sum of substances = 300 ppm	GC-MS
56-55-3	Benzo[a]anthracene3,4	No intentional use	Sum of substances = 200 ppm	GC-MS

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

Total Heavy Metals				
Potential Uses in Leather Processing				
<p>In the list below the formulation limit for As, Cd, Hg, Pb and Cr VI apply to all types of formulation. Where there is a specific limit for pigments that that is different to the general limit this is shown in brackets. The formulation limits for Sb, Cr, Ba, Se, Sn, Ni, Cu, Co, and Ag only apply to dye and/or pigment formulations. Any differences between limits for dyes and pigments are indicated in the formulation limit column. The limits for the heavy metals do not apply to colourants containing a listed metal as an inherent compositional part (e.g., metal-complex colorants, the double salts of certain cationic colourants or extenders like barium sulfate). When using any colourant with listed metals as an inherent compositional part, wet processors need to be aware of the need to comply with brand RSL limits with respect to extractable metals from dyed materials and they also need to be aware of the metal limits in the ZDHC wastewater guidelines. Where RSL and/or wastewater issues are observed wet processors should discuss this with supply chain partners. For the listed exceptions, laboratory tests to determine separately metal contaminants that are not bound into a colourant (free metals) are under development.</p> <p>Although typically associated with leather tanning, chromium VI also may be used in the dyeing of wool (after the chroming process).</p>				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
7440-38-2	Arsenic (As)	No intentional use	50 ppm	Inductively coupled plasma- optical emission spectrometry (ICP-OES), atomic absorption spectroscopy (AAS)
7440-43-9	Cadmium (Cd)	No intentional use	20 ppm (50 ppm for pigments)	ICP-OES, AAS
7439-97-6	Mercury (Hg)	No intentional use	4 ppm (25 ppm for pigments)	ICP-OES, AAS
7439-92-1	Lead (Pb)	No intentional use	100 ppm	ICP-OES, AAS
18540-29-9	Chromium (VI)	No intentional use	10 ppm	ICP-OES, AAS
7440-36-0	Antimony	No intentional use	Dye 50/ Pigment 250 ppm	Acid digestion, ICP
7440-47-3	Chromium	No intentional use	Dyes and Pigments 100 ppm	Acid digestion, ICP
7440-39-3	Barium	No intentional use	Dyes and Pigments 100 ppm	Acid digestion, ICP
7782-49-2	Selenium	No intentional use	Dyes 20/ pigments 100 ppm	Acid digestion, ICP
7440-31-5	Tin	No intentional use	Dyes 250 ppm	Acid digestion, ICP
7440-02-0	Nickel	No intentional use	Dyes 250 ppm	Acid digestion, ICP
7440-50-8	Copper	No intentional use	Dyes 250 ppm	Acid digestion, ICP
7440-48-4	Cobalt	No intentional use	Dyes 500 ppm	Acid digestion, ICP
7440-22-4	Silver	No intentional use	Dyes 100 ppm	Acid digestion, ICP

Appendix 2: continued External MRSL for <FACILITY NAME> – <DATE>

UV absorbers				
Potential Uses in Leather Processing				
These are frequently used in formulations to be stable to the influences of light and UV.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
36437-37-3	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	No intentional use	1000 ppm	Solvent extraction, LC MS/MS, GC MS
3846-71-7	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	No intentional use	1000 ppm	Solvent extraction, LC MS/MS, GC MS
3864-99-1	2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	No intentional use	1000 ppm	Solvent extraction, LC MS/MS, GC MS
25973-55-1	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	No intentional use	1000 ppm	Solvent extraction, LC MS/MS, GC MS
Volatile Organic Compounds (VOC)				
Potential Uses in Leather Processing				
These Volatile Organic Compounds (VOC) should not be used in textile auxiliary chemical preparations. They are associated with solvent-based processes like solvent-based polyurethane coatings and glues/ adhesives. They should not be used for any kind of facility cleaning or spot cleaning.				
CAS No.	Substance	Supplier Guidance	Formulation Limit	General Techniques for Analysing Chemicals
71-43-2	Benzene	No intentional use	50 ppm	GC-MS
95-48-7	o-cresol	No intentional use	500 ppm	GC-MS
106-44-5	p-cresol	No intentional use	500 ppm	GC-MS
1330-20-7	Xylene	No intentional use	500 ppm	GC-MS

Appendix 2: External MRSL Candidate List for <FACILITY NAME> – <DATE>

Chapter 2: External MRSL Candidate List

(Free) Aniline		
Potential Uses in Leather Processing		
Used for indigo and to manufacture AZO Dyes (especially the leather dyes).		
CAS No.	Substance	Intent
62-53-3	(Free) Aniline	High levels of free aniline can be encountered in some indigo dye formulations. In Version 3 of the ZDHC MRSL it is intended to place restrictions on the maximum permitted levels of free aniline in indigo dye formulations (it is intended that the limit for Indigo will be 2000 ppm and for other dyes 500 ppm). Studies on levels of free aniline in currently available liquid and powder formulations and determination of safe levels of aniline for workers are required to determine appropriate levels.
ADCA		
Potential Uses in Leather Processing		
ADCA is used as a foaming/ blowing agent for rubber applications.		
CAS No.	Substance	Intent
123-77-3	Diazene-1,2-dicarboxamide [C, C'-azodi (formamide), ADCA]	It is intended to restrict ADCA in Version 3 of the ZDHC MRSL. Additionally, a wider appraisal of foaming/blowing agents and vulcanisation accelerators will be conducted, and further chemicals may be included at that time.
Cyclic Siloxanes		
CAS No.	Substance	Intent
556-67-2	D4	These silicones are known contaminants in silicone formulation, the industry is currently reviewing the impact on silicone polymers. ZDHC will assess restrictions for the next update the intention is to restrict at 1000 ppm.
540-97-6	D5	These silicones are known contaminants in silicone formulation, the industry is currently reviewing the impact on silicone polymers. ZDHC will assess restrictions for the next update the intention is to restrict at 1000 ppm.
541-02-6	D6	These silicones are known contaminants in silicone formulation, the industry is currently reviewing the impact on silicone polymers. ZDHC will assess restrictions for the next update the intention is to restrict at 1000 ppm.
Dimethylfumarate		
CAS No.	Substance	Intent
624-49-7	Dimethylfumarate (DMFu)	DMFu must not be deliberately used in any formulations. It is intended to publish details of a universally agreed, robust test method and maximum allowable limit in version 3 of the MRSL. It should be noted that DMFu remains illegal in articles placed on the EU market above 0.1 ppm so testing for DMFu in formulations using methods currently recommended by laboratories is strongly advised, with any detections resulting in an investigation into deliberate use at all stages in the supply chain.

Appendix 2: External MRSL Candidate List for <FACILITY NAME> – <DATE>

Dyes – Carcinogenic or Equivalent Concern		
Potential Uses in Leather Processing		
Green dye.		
CAS No.	Substance	Intent
129-73-7	C.I. Basic Green 4 leuco base	C.I Basic Green 4 leuco base will be restricted with the intended limit of 250 ppm in the next ZDHC MRSL update. Application using techniques such as gel-dyeing are unlikely to be restricted.
Flame Retardants		
Potential Uses in Leather Processing		
Flame retardant chemicals are rarely used to meet flammability requirements in children’s clothing and adult products.		
CAS No.	Substance	Intent
25155-23-1	Trixylyl phosphate (TXP)	Certain phosphate flame retardants will be assessed for restrictions for the next ZDHC MRSL Update. Intended Limit is 50 ppm.
78-30-8	Tri-o-cresyl phosphate	Certain phosphate flame retardants will be assessed for restrictions for the next ZDHC MRSL Update. Intended Limit is 50 ppm.
512-56-1	Trimethyl phosphate	Certain phosphate flame retardants will be assessed for restrictions for the next ZDHC MRSL Update. Intended limit is under discussion.
Formaldehyde		
Potential Uses in Leather Processing		
Formaldehyde has many uses in printing, interlinings, stiffeners, etc.		
CAS No.	Substance	Intent
50-00-0	Formaldehyde	The deliberate use of formaldehyde or inclusion of formaldehyde in formulations is not permitted. In Version 3 of the ZDHC MRSL it is intended to place restrictions on the maximum permitted levels of formaldehyde in formulations. The use, presence and generation of formaldehyde is a complex subject and studies are required to determine appropriate levels.

Appendix 2: External MRSL Candidate List for <FACILITY NAME> – <DATE>

Perfluorinated and Polyfluorinated Chemicals (PFCs)		
Potential Uses in Leather Processing		
Used as water repellent, stain repellent and in certain cases to improve the colour fastness properties.		
CAS No.	Substance	Intent
355-46-4 / 432-50-7	Perfluorohexane sulfonic acid / Perfluorohexane sulfonate (PFHxS)	C8 and some C6 PFCs are currently restricted in Version 2.0 of the ZDHC MRSL. In Version 3 of the ZDHC MRSL it is intended to ban the deliberate use of all functional finishes based on PFC's except for anticipated derogations under EU law, such as protective articles where the highest levels of repellency are required to safeguard the user. In signalling this forthcoming restriction it is expected that wet processors plan to take no new deliveries of PFC-containing formulations after the publication of ZDHC MRSL Version 3. The following list includes PFC's that are already restricted in version 2 and those intended to be restricted in version 3.
Multiple	Perfluoroalkylsulfonates $F(CF_2)_nSO_3$	As above
1763-23-1	Perfluorooctane sulfonic acid / Perfluorooctane sulfonate (PFOS)	As above
Multiple	PFSA Chemicals	As above
Multiple	Perfluoroalkylsulfonamidoethanols $F(CF_2)_nSO_2N(R)CH_2CH_2OH_2$ -CH ₃ , - CH ₂ CH ₃]	As above
Multiple	Perfluoroalkylsulfonamides $F(CF_2)_nSO_2NH_2$	As above
Multiple	Perfluoroalkylsulfonamidoethyl (meth)acrylates $F(CF_2)_nSO_2N(R)CH_2CH_2OC(O)CH(R)=CH_2$ -CH ₃ , - CH ₂ CH ₃]	As above
Multiple	PFBS Chemicals	As above
375-73-5/ 29420-43-3	Perfluorobutane sulfonic acid / Perfluorobutanesulfonates (PFBS) $F(CF_2)_4SO_3$	As above
Multiple	Perfluorobutanesulfonamidoethyl (meth)acrylates $F(CF_2)_4SO_2N(R)CH_2CH_2OC(O)CH(R)=CH_2$ [R = H, - CH ₃ , -CH ₂ CH ₃]	As above
Multiple	Perfluorobutanesulfonamidoethanols $F(CF_2)_4SO_2N(R)CH_2CH_2OH_2$ [R = H, -CH ₃ , - CH ₂ CH ₃]	As above
Multiple	Perfluorobutanesulfonamide $F(CF_2)_4SO_2NH_2$	As above
Multiple	Fluorotelomer alcohols (FTOHs) $F(CF_2)_nCH_2CH_2OH$	As above
Multiple	Fluorotelomer Olefins (FTOs)	As above

Appendix 2: External MRSL Candidate List for <FACILITY NAME> – <DATE>

Perfluorinated and Polyfluorinated Chemicals (PFCs) Continued...		
CAS No.	Substance	Intent
647-42-7	6:2 FTOH, Perfluorohexylethanol	As above
25291-17-2	Perfluorohexylethene	As above
Multiple	Fluorotelomer (Meth)Acrylates	As above
Multiple	Perfluorohexylethyl acrylate or methacrylate; or Perfluorocarboxylic acid and salts (PFCA)	As above
3825-26-1	Ammonium pentadecafluorooctanoate (APFO)	As above
2058-94-8	Henicosafuoroundecanoic acid	As above
335-76-2	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	As above
307-55-1	Tricosafuorododecanoic acid	As above
72629-94-8	Pentacosafuorotridecanoic acid	As above
375-22-4	Perfluorobutanoic acid (PFBA)	As above
335-67-1	Perfluorooctanoic acid (PFOA)	As above
375-85-9	Perfluoroheptanoic acid (PFHpA)	As above
376-06-7	Heptacosafuorotetradecanoic acid	As above
307-24-4	Perfluorohexanoic acid (PFHxA)	As above
375-95-1	Perfluorononanoic acid (PFNA)	As above
678-39-7	8:2 FTOH, Perfluorooctylethanol	As above
507-63-1	Heptadecafluoro-1-iodooctane	As above
Multiple	PFOA-related substances	As above
2043-53-0	1H,1H,2H,2H-Perfluorodecyl iodide	As above
21652-58-4	Perfluorooctylethene	As above

Appendix 2: External MRSL Candidate List for <FACILITY NAME> – <DATE>

Multiple	Perfluorooctylethyl acrylate or methacrylate**	As above
Phenol		
Potential Uses in Leather Processing		
Phenol is not deliberately used in textiles or footwear, but trace amounts of phenol can be found in many chemical formulations.		
CAS No.	Substance	Intent
108-95-2	Phenol	ZDHC is looking for safe limits for phenol as a contaminant in textile chemical formulations.
Solvents		
Potential Uses in Leather Processing		
There are many uses for solvents from adhesives, coated textiles, prints, etc.		
CAS No.	Substance	Intent
1589-47-5	2-methoxypropanol	In Version 3 of the ZDHC MRSL it is intended to place restrictions on certain solvents with certain specific hazardous properties (e.g., CMR's). The restrictions are likely to apply to the inclusion of such solvents in formulations for use by wet processors and product assembly factories - and deliberate use of neat solvents in those facilities. Studies on usage patterns, exposure controls, safer alternatives and the potential effects of restrictions are necessary before restrictions can be proposed. Any potential ZDHC MRSL limits will need to be established collaboratively with groups who are working in parallel to study solvents in relation to workplace safety, air emissions, RSL compliance and downstream concerns.
108-88-3	Toluene	As above
67-56-1	Methanol	As above
100-41-4	Ethylbenzene	As above
111-77-3	2-(2-methoxyethoxy)-ethanol	As above
872-50-4	N-Methyl-2-Pyrrolidone; 1-methyl-2-pyrrolidone (NMP)	With the exception of textile and leather coating processes, where no viable alternative solvent is currently available, the deliberate use of NMP, DMAC and DMFa should be avoided and their presence in all formulations carefully monitored to ensure compliance with product RSLs and the EU regulation for CMR chemicals, 2018/1513. It is intended to publish limits for maximum allowable limits in Version 3 of the ZDHC MRSL.
68-12-2	Dimethyl formamide; N, N-dimethylformamide (DMFa)	As above
127-19-5	N, N-dimethylacetamide (DMAC)	
Total Heavy Metals		
Potential Uses in Leather Processing		
Besides in dyes and pigments, metals are used as raw material for trims and other components.		
CAS No.	Substance	Intent

Appendix 2: External MRSL Candidate List for <FACILITY NAME> – <DATE>

Multiple	Metals (Non -dye /pigment)	In Version 3 of the ZDHC MRSL it is intended to place restrictions on the maximum permitted levels of certain metals in (non-dye/pigment) formulations. Studies on usage patterns of metal containing chemicals and formulations and the potential effect of restrictions are required to determine appropriate levels and any possible derogations.
----------	----------------------------	--

Chapter 3: External MRSL Archived Substances List

Dyes – Carcinogenic or Equivalent Concern		
Potential Uses in Leather Processing		
Most of these substances are regulated and should no longer be used for the dyeing of textiles.		
CAS No.	Substance	General Techniques for Analysing Chemicals
60-11-7	C I Solvent yellow 2	For appropriate test methods please consult your third-party service provider.
81-88-9	D&C Red No. 19	As above
842-07-9	C.I. Solvent yellow 14	As above

Other/Miscellaneous Chemicals		
Potential Uses in Leather Processing		
Dye		
CAS No.	Substance	General Techniques for Analysing Chemicals
2465-27-2	Auramine hydrochloride	For appropriate test methods please consult your third-party service provider.

Solvents		
Potential Uses in Leather Processing		
In the past, it was used to make several types of polymers, resins, and textiles, but its use is now highly restricted.		
CAS No.	Substance	General Techniques for Analysing Chemicals
542-88-1	Bis(chloromethyl) ether	For appropriate test methods please consult your third-party service provider.

Appendix 3: PMES Corrective Action Plan (CAP) for [Facility Name] – [Date]

PMES Corrective Action Plan (CAP)

Product info			
Leather style number:		Brand:	
Style name:		Season:	
Col code:		Purchase order number:	
Product:		Supplier name:	
Merchandiser's name and email:		Supplier contact's name and email:	
Lab info			
Testing lab:			
Lab contact's name and email:			
Test report number:			
Description of the failed components and found substance:			
CAP			
Identification and mapping of the source in the process where the failure occur:			
Provide an action plan for correcting the specific case:			
Provide an action plan for supplier to prevent the same to repeat in future production:			
Action taken to prevent the same to repeat:		Verification of action taken and implemented:	
List of relevant documentation to be attached:			
Signature Date:			