

SSLPR6 Leather Technologist

1. Job role

TCF sub-sector	Leather Production
Functional area	Product Design and Technical Development
Job role	SSLPR6 Leather Technologist
Job role description	Provides advanced technical expertise in leather processing, chemistry and quality performance across beamhouse, tanning, retanning and finishing operations. Responsible for process optimisation, formulation development, defect analysis and compliance with customer and export specifications. This role is more senior than a Leather Technician and includes responsibility for process design, technical decision-making and continuous improvement leadership.
Performance expectations	• Optimise chemical formulations and process parameters across wet-end and finishing stages • Analyse and resolve complex leather defects and quality non-conformances • Improve yield, shrinkage temperature, softness, colour consistency and surface performance • Support Production Manager in technical process improvements • Ensure compliance with customer specifications and international standards • Lead trials of new chemicals, finishes and sustainable technologies • Provide technical mentoring to Leather Technicians and operators
Specialisation	May specialise in wet-end chemistry, chrome-free tanning systems, advanced retanning formulations, surface finishing technologies, laboratory testing and quality systems, or sustainable leather processing innovation.
Application in other Textile, Clothing and Footwear (TCF) sectors	Transferable to textile dyeing and finishing technologist roles, footwear materials technologist positions, leather goods materials development, and industrial materials processing environments requiring advanced chemistry and quality control expertise.

2. Key tasks and critical work functions

Key tasks	• Develop and refine chemical formulations for tanning and retanning • Conduct laboratory testing including shrinkage temperature, pH and physical performance tests • Analyse production data to identify quality trends and process instability
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	- Investigate root causes of defects such as loose grain, uneven dyeing or finishing faults - Lead technical trials and scale-up of new processing technologies - Prepare technical reports and compliance documentation - Collaborate with suppliers on chemical performance improvements
Critical work functions	- Assurance of fibre stabilisation and structural integrity of leather - Control of chemical reaction parameters and formulation accuracy - Prevention and resolution of systemic quality defects - Integration of laboratory results into production adjustments - Alignment of technical performance with commercial and export requirements

3. Technical skills

Advanced leather chemistry	Deep understanding of collagen structure, tanning reactions and fatliquoring systems.
Process optimisation	Adjust chemical loads, drum parameters and finishing systems to improve performance.
Laboratory testing and analysis	Conduct physical and chemical tests to validate product quality.
Data interpretation	Analyse production and laboratory data to identify trends and root causes.
Quality systems management	Implement and maintain QA frameworks aligned with ISO and export standards.
Technical documentation	Prepare specifications, test reports and process documentation.
Supplier technical liaison	Work with chemical suppliers to evaluate and adopt new technologies.

4. Generic Skills

Analytical thinking	Interpret complex chemical and performance data.
Problem solving	Resolve systemic and technical production challenges.
Communication	Explain technical findings to production and management teams.
Leadership	Provide technical guidance to Leather Technicians and operators.
Attention to detail	Ensure precision in formulation and documentation.
Continuous improvement mindset	Drive technical innovation and process refinement.

5. Emerging skills

Emerging skills	- Development of chrome-free and metal-free tanning systems - Integration of digital laboratory information management systems (LIMS) - Use of advanced material testing and surface analysis tools - Data-driven optimisation using production analytics platforms
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	• Sustainability and lifecycle impact assessment of leather processes • Automation integration in wet-end chemical dosing systems • ESG and export compliance reporting frameworks
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6. VET Qualifications and Skill Sets

Entry-level preparation	MSL50122 Diploma of Laboratory Technology or equivalent qualification.
Advanced development	MSL60109 Advanced Diploma of Laboratory Operations or equivalent or higher education bachelor's degree in Chemistry, Materials Engineering, Leather Technology or related field.

7. Job progression

Possible job progression	Leather Technician → Leather Technologist → Senior Technologist / Technical Manager → Production or Operations Manager
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8. Classification

Australian Qualifications Framework	AQF Level 5-7
Australian Bureau of Statistics (ABS) Skill Levels	Skill Level 1
Open Source Classification of Occupations for Australia (OSCA)	Materials Technologist / Industrial Chemist - Manufacturing context.



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