

## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR RUBBER INDUSTRY

### What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

#### Contact Us:

PHD House (4th Floor),  
Opp. Asian Games  
Village,  
Siri Fort Institutional  
Area, New Delhi -  
110016  
E-mail:  
info@rsdcindia.in



### Contents

1. Introduction and Contacts..... 1
2. Qualifications Pack..... 2
3. OS Units..... 2

### Introduction

#### Qualifications Pack- Lab Chemist- Compound testing – Batch Release

**SECTOR:** RUBBER INDUSTRY

**SUB-SECTOR:** 1. Tyre 2. Non-Tyre

**OCCUPATION:** Lab Chemist

**REFERENCE ID:** RSC/ Q 0313

**ALIGNED TO:** NCO-2004/NIL

**Brief Job Description:** The compound testing for batch release involves carrying out of tests as per laid down methods and specifications.

**Personal Attributes:** This job requires the individual to work independently and with integrity. He must have good technical, analytical and interpersonal skills. He must be able to interpret findings and take necessary corrective actions.

## Qualification Pack for Lab Chemist- Compound Testing- Batch Release

Job Details	<b>Qualifications Pack Code</b>	<b>RSC/ Q 0313</b>		
	<b>Job Role</b>	<b>Lab Chemist- Compound testing - Batch Release</b>		
	<b>Credits(NSQF)</b>	<b>TBD</b>	<b>Version number</b>	<b>1.0</b>
	<b>Sector</b>	<b>Rubber Manufacturing</b>	<b>Drafted on</b>	<b>20/03/13</b>
	<b>Sub-sector</b>	<b>Tyre and Non- tyre</b>	<b>Last reviewed on</b>	<b>29/12/15</b>
	<b>Occupation</b>	<b>Lab Chemist</b>	<b>Next review date</b>	<b>29/12/17</b>
	<b>NSQC Clearance on</b>	<b>18/06/2015</b>		

Job Role	Lab Chemist - Compound testing - Batch Release
<b>Role Description</b>	The compound testing for batch release involves carrying out of tests as per laid down methods and specifications
<b>NSQF level</b>	5
<b>Minimum Educational Qualifications*</b>	Diploma
<b>Maximum Educational Qualifications*</b>	Masters in Science
<b>Training</b> (Suggested but not mandatory)	-
<b>Minimum Job Entry Age</b>	18 years
<b>Experience</b>	-
<b>Applicable National Occupational Standards (NOS)</b>	<b>Compulsory:</b> <ol style="list-style-type: none"> <li>RSC/ N1301 (<a href="#">To test rubber compound</a> )</li> <li>RSC/ N5001 (<a href="#">To carry out housekeeping</a>)</li> <li>RSC/ N5002 (<a href="#">To carry out reporting and documentation</a>)</li> <li>RSC/ N5003 (<a href="#">To carry out quality checks</a>)</li> <li>RSC/ N5004 (<a href="#">To carry out problem identification and escalation</a> )</li> </ol> <b>Optional:</b> <ol style="list-style-type: none"> <li>NA</li> </ol>
<b>Performance Criteria</b>	As described in the relevant OS units

Qualification Pack for Lab Chemist- Compound Testing- Batch Release

Definitions

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
OS	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard , which is denoted by an 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish
Core Skills or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS , these include communication related skills that are applicable to most job roles.

---

# National Occupational Standard

---

## Overview

This unit is about carrying out testing compound for batch release

<b>Unit Code</b>	<b>RSC / N 1301</b>
<b>Unit Title (Task)</b>	<b>To test rubber compound</b>
<b>Description</b>	This unit is about testing compound for batch release and batch validation
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Ensuring housekeeping and safety in the lab testing area</li> <li>Equipment preparation and calibration of instruments to be used in the testing process.</li> <li>Prepare test samples</li> <li>Carry out tests as per laid down method and specification</li> <li>Data Logging</li> <li>Interpret data, judgment and reporting</li> <li>Record Keeping</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Sample collection</b>	<p>PC1. Determine the minimum amount of compound required for testing to achieve the desired level of confidence in the tests.</p> <p>PC2. Sample the compound as per SOP</p> <p>PC3. Sampling should be as per process flow sheet with control points</p> <p>PC4. Ensure that sample is suitable for test/analysis</p> <p>PC5. Mould compound to appropriate standard test specimens (button/ dumbbell / slab)for testing</p> <p>PC6. Identify the defect/problem in inappropriate sample</p> <p>PC7. Follow the procedure laid down by the company while labeling/numbering samples</p>
<b>Sample integrity</b>	<p>PC8. Follow procedures to maintain conditioning of the sample (eg. Time, temperature , humidity, mechanical stress etc) as per SOP</p> <p>PC9. Follow SOP to store sample for future/further testing</p>
<b>Equipment readiness</b>	<p>PC10. Identify the most appropriate equipment such as Rheometer, Mooney Viscometer, Densometer, Dispergrader, Tensile Tester, Hardness Tester, Rebound Resilience Tester and accessories for testing</p> <p>PC11. Set up appropriate equipment or apparatus for testing correctly</p> <p>PC12. Calibrate the testing equipment periodically as per SOP.</p> <p>PC13. Identify defective equipment/apparatus and steps to be taken</p> <p>PC14. Verify the equipment accuracy by running the reference</p>
<b>Sample testing</b>	PC15. Identify appropriate tests like Specific Gravity, Dispersion, Rheometry, Mooney

	<p>Viscosity, Mooney Scorch, Hardness, Tensile, Elongation at break, Modulus, Tear strength, Rebound Resilience, as per SOP</p> <p>PC16. Carry out tests in accordance with SOP and desired individual test frequency</p>
<b>Data analysis</b>	<p>PC17. Keep tools and accessories like calculator ready before starting the analysis in accordance to the standard (IS/ISO or other international standards)</p> <p>PC18. Ensure that the accuracy and periodicity of the data captured in records is as per SOP</p> <p>PC19. Identify appropriate technique in evaluating result</p> <p>PC20. Interpret the results correctly using the identified technique(s)</p>
<b>Recording</b>	<p>PC21. Record and maintain data as per company standards</p> <p>PC22. Ensure that reports/records are accurate and clear</p>
<b>Reporting</b>	<p>PC23. Release or Hold the raw material as per finding for further processing.</p> <p>PC24. Take up the results of the findings with supplier/QC in-charge/appropriate authority.</p>
<b>Health and Safety</b>	<p>PC25. Housekeeping and safety in the lab testing area</p> <p>PC26. Handle the equipment properly</p> <p>PC27. Ensure samples and chemicals are carefully handled to avoid accidental spillage of chemicals.</p> <p>PC28. Conduct the experiments wearing the appropriate attire such as safety goggles, gloves, closed toe shoes, long pants, tied hair</p> <p>PC29. Use safety equipment such as fire extinguishers, fire blankets, and eye-wash stations.</p> <p>PC30. Escalate matters in case of any accidents, spills etc.</p> <p>PC31. Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational standards</p>
<b>Material disposal</b>	<p>PC32. Carry out disposal of waste and left over tested-material safely as per SOP</p> <p>PC33. Dispose all materials used in the experiment safely as per Health and Safety management system of the company</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Organisational Coding system of raw material and compounds</p> <p>KA2. Chemicals used in the industry and their function</p> <p>KA3. Different quality management systems (ISO-9000, TS16949, ISO-14001, OHSAS-18000)</p> <p>KA4. Principles of good laboratory practices (ISO/IEC 17025) applicable in the workplace</p> <p>KA5. Material disposal procedure, importance of appropriate disposal of material and implications of not following the material disposal procedure</p>

	<p>KA6. Importance of identifying non-conforming products and storage of the same</p> <p>KA7. Risk and impact of not following defined procedures/work instructions</p> <p>KA8. Escalation matrix for reporting identified issues</p> <p>KA9. Types of documentation in organization and importance of the same</p> <p>KA10. Records to be maintained and implications of non-maintenance of the same</p> <p>KA11. Company manual and from where to attain it</p> <p>KA12. Importance of housekeeping &amp; good shop floor practices (e.g.3S/5S)</p> <p>KA13. Health, Safety and Environment guidelines, legislation and regulations as applicable</p> <p>KA14. Personal protection (Which protective equipment to be used and how)</p> <p>KA15. Impact of poor practices on health, safety and environment</p> <p>KA16. Potential hazards and actions to minimize the same</p> <p>KA17. Escalation matrix and escalation procedure for reporting hazards.</p> <p>KA18. The usage of fire extinguisher</p> <p>KA19. Impact of various practices on cost, quality, productivity, delivery and safety</p> <p>KA20. Handover/ Takeover the equipment/ work area as per company's SOP</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Knowledge of basic chemistry and simple chemical calculation</p> <p>KB2. Knowledge on different standard reference material</p> <p>KB3. Role of different raw materials in rubber compounding, processing/ product manufacturing and performance</p> <p>KB4. Understanding of role of the Rheometry and Mooney viscometry, Densometer, Dispergrader, Tensile Tester, Hardness Tester, Rebound Resilience Tester in rubber technology &amp; product manufacturing</p> <p>KB5. Testing equipments and related test methods and purpose of tests</p> <p>KB6. Calibration procedure for test equipment</p> <p>KB7. Use of chemicals, basic sciences and mathematics</p> <p>KB8. Standard method of drawing samples and preparing them for testing</p> <p>KB9. Importance of sample conditioning for testing</p> <p>KB10. How to assess if a sample is suitable for testing</p> <p>KB11. Methods/techniques used for labeling samples</p> <p>KB12. Procedure to be followed in case the sample is unfit for testing</p> <p>KB13. National/International standard test methods for different compounds</p> <p>KB14. Understanding of Specifications of tests &amp; their importance in the release system.</p> <p>KB15. The methods that can be used for controlling test variables</p> <p>KB16. Potential problems in performing experiments</p> <p>KB17. Indicators and reasons of potential problems</p> <p>KB18. Implications (impact on internal/external customers) of defective products, materials or components.</p>

	<p>KB19. Procedures for storing samples</p> <p>KB20. Factors that adversely affect integrity of the sample</p> <p>KB21. Statistical analysis of test data</p> <p>KB22. How to obtain and interpret records, charts, specifications, equipment manuals, history/technical support reports and other documents</p> <p>KB23. Methods and techniques involved in evaluating information</p> <p>KB24. Use of Computer/application software</p> <p>KB25. Units of measurement</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Record and communicate details of work done to appropriate people using written/typed report or computer based record/electronic mail</p> <p>SA2. Maintain proper records as per given format</p>
	<b>Reading Skills</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA3. Read and understand manuals, health and safety instructions, memos, reports, job cards etc</p> <p>SA4. Read images, graphs, diagrams</p> <p>SA5. Understand the various coding systems as per company norms</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA6. Communication with upstream and downstream teams</p> <p>SA7. Communicate with job owners like sample originating section, supplier etc.</p> <p>SA8. Work in a team and other behavioral skills required to support the small group activities (Eg. Quality Circle, Cross Functional Team, Suggestion Scheme)</p> <p>SA9. Disclose information only to those who have the right and need to know it.</p> <p>SA10. Communicate confidential and sensitive information discretely to authorized person as per SOP</p> <p><b>Integrity</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA11. Practice honesty with respect to company property and time</p> <p>SA12. Communicate with people in a form and manner and using language that is open and respectful</p> <p>SA13. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust</p> <p><b>Motivation</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA14. Take responsibility for completing one's own work assignment</p> <p>SA15. Take initiative to enhance/learn skills in ones's area of work</p>



	<p>SA16. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning.</p> <p>SA17. Is open to new ways of doing things</p> <p>SA18. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them.</p> <p><b>Reliability</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA19. Avoid absenteeism</p> <p>SA20. Act objectively, rather than impulsively or emotionally when faced with difficult/stressful or emotional situations</p> <p>SA21. Be punctual</p>
<b>B. Professional Skills</b>	<p><b>Decision Making</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>Handle equipment/apparatus</p> <p>Handle rubber compound</p> <p>Handle chemicals and laboratory reagents</p> <p>Handle rubber products</p> <p>Complex sample components</p> <p>Perform computer operations</p>
	<p><b>Plan and Organize</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB2. seek clarification on problems from others</p> <p>SB3. apply problem-solving approaches in different situations</p> <p>SB4. refer anomalies to the line manager</p>
	<p><b>Customer Centricity</b></p>
	<p>Application of basic sciences (chemistry), mathematics</p> <p>Application of statistics</p> <p>Use of computer/ application software</p>
	<p><b>Problem Solving</b></p>
<p>The user/individual on the job needs to know and understand how to:</p> <p>SB 5. Interpret quality for sheet</p> <p>SB 6. Suggest improvements(if any) in process/product/materials based on results and experience</p>	

	<b>Analytical Thinking</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB7. Proper collection of waste material</p> <p>SB8. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience</p> <p>Diagnose common problems in the machine based on visual inspection, sound , temperature etc</p> <p>Suggest improvements(if any) in process based on experience</p>
	<b>Critical Thinking</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB9. Handle equipment/rubber sheet SB6. seek clarification on problems from others</p> <p>SB10. apply problem-solving approaches in different situations</p> <p>SB11. refer anomalies to the line manager</p>

## NOS Version Control

<b>NOS Code</b>	RSC / N 1301		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Rubber Manufacturing	<b>Drafted on</b>	20/03/13
<b>Industry Sub-sector</b>	Tyre and Non- tyre	<b>Last reviewed on</b>	29/12/15
<b>Occupation</b>	Lab Chemist	<b>Next review date</b>	29/12/17

---

# National Occupational Standard

---

## Overview

This unit is about carrying out housekeeping.

<b>Unit Code</b>	<b>RSC / N 5001</b>
<b>Unit Title (Task)</b>	<b>To carry out housekeeping</b>
<b>Description</b>	This unit is about carrying out housekeeping activities
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Preparing for housekeeping activities</li> <li>• Carry out housekeeping activities</li> <li>• Post housekeeping activities</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Pre housekeeping activities</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Inspect the area while taking into account various surfaces</p> <p>PC2. Identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain</p> <p>PC3. Ensure that the cleaning equipment is in proper working condition</p> <p>PC4. Select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person</p> <p>PC5. Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces</p> <p>PC6. Inform the affected people about the cleaning activity</p> <p>PC7. Display the appropriate signage for the work being conducted</p> <p>PC8. Ensure that there is adequate ventilation for the work being carried out</p> <p>PC9. Wear the personal protective equipment required for the cleaning method and materials being used</p>
<b>Operations</b>	<p>PC10. Use the correct cleaning method for the work area, type of soiling and surface</p> <p>PC11. Carry out cleaning activity without disturbing others</p> <p>PC12. Deal with accidental damage, if any, caused while carrying out the work</p> <p>PC13. Report to the appropriate person any difficulties in carrying out your work</p> <p>PC14. Identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill</p>
<b>Post housekeeping activities</b>	<p>PC15. Ensure that there is no oily substance on the floor to avoid slippage</p> <p>PC16. Ensure that no scrap material is lying around</p> <p>PC17. Maintain and store housekeeping equipment and supplies</p> <p>PC18. Follow workplace procedures to deal with any accidental damage caused during the cleaning process</p>

	<p>PC19. Ensure that, on completion of the work, the area is left clean and dry and meets requirements</p> <p>PC20. Return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored</p> <p>PC21. Dispose the waste garnered from the activity in an appropriate manner</p> <p>PC22. Dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly</p>
<b>General</b>	<p>PC23. Maintain schedules and records for housekeeping duty</p> <p>PC24. Replenish any necessary supplies or consumables</p>
<b>Knowledge and Understanding (K)</b>	
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. The levels of hygiene required by workplace and why it is important to maintain them during your work</p> <p>KB2. How to inspect a work area to decide what cleaning it needs</p> <p>KB3. Methods and materials that used for cleaning variety of surfaces</p> <p>KB4. The types of cleansing agents that are not to be mixed together</p> <p>KB5. The correct method for cleaning equipment and/or machinery used during your work</p> <p>KB6. The importance of personal protective equipment</p> <p>KB7. Appropriate personal protective equipment for the work area, cleaning equipment, tools, materials and chemicals used</p> <p>KB8. The correct sequence for cleaning the work area</p> <p>KB9. The time taken by the treatment to work</p> <p>KB10. The importance of following manufacturer's instructions on cleaning agents</p> <p>KB11. The most appropriate place to carry out test cleans and why this should be done before applying treatments</p> <p>KB12. The importance of applying treatments evenly and the effect of not doing this</p> <p>KB13. Process of cleaning the surfaces without causing injury or damage</p> <p>KB14. The method to check the treated surface and equipment on completion of cleaning</p> <p>KB15. Procedures for reporting any unidentified soiling</p> <p>KB16. Procedures for disposing off waste</p> <p>KB17. Procedures for disposing off or storing personal protective equipment</p> <p>KB18. Escalation procedures for soils or stains that could not be removed</p>
<b>Skills (S)</b>	
<b>A. Core Skills/</b>	<b>Writing Skills</b>

<b>Generic Skills</b>	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company</p> <p>SA3. Write simple letters, mails, etc</p> <p>SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes</p>
	<b>Reading Skills</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc</p> <p>SA6. Read images, graphs, diagrams</p> <p>SA7. Understand the various coding systems as per company norms</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA8. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA9. Respond appropriately to any queries</p> <p>SA10. Communicate with supervisor</p> <p>SA11. Communicate with upstream and downstream teams</p> <p>SA12. Work in a team and other behavioral skills required to support the small group activities (Quality Circle, Cross Functional Team, Suggestion Scheme)</p> <p><b>Integrity</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA13. Practice honesty with respect to company property and time</p> <p>SA14. Communicate with people in a form and manner and using language that is open and respectful</p> <p>SA15. Resolve any difficulties in relationships with colleagues, or get help from an appropriate person, in a way that preserves goodwill and trust</p> <p><b>Motivation</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA16. Take responsibility for completing one's own work assignment</p> <p>SA17. Take initiative to enhance/learn skills in one's area of work</p> <p>SA18. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning.</p> <p>SA19. Is open to new ways of doing things</p> <p>SA20. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them.</p> <p><b>Reliability</b></p>

	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA21. Avoid absenteeism</p> <p>SA22. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations</p> <p>SA23. Work in disciplined factory environment</p> <p>SA24. Be punctual</p>
<b>B. Professional Skills</b>	<b>Decision Making</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>Handle equipment/apparatus</p> <p>Handle rubber compound</p> <p>Handle chemicals and laboratory reagents</p> <p>Handle rubber products</p> <p>Complex sample components</p> <p>Perform computer operations</p>
	<b>Plan and Organize</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB2. seek clarification on problems from others</p> <p>SB3. apply problem-solving approaches in different situations</p> <p>SB4. refer anomalies to the line manager</p>
	<b>Customer Centricity</b>
	<p>Application of basic sciences (chemistry), mathematics</p> <p>Application of statistics</p> <p>Use of computer/ application software</p>
	<b>Problem Solving</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB 5. Interpret quality for sheet</p> <p>SB 6. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	<b>Analytical Thinking</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB7. Proper collection of waste material</p> <p>SB8. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience</p>



	Diagnose common problems in the machine based on visual inspection, sound , temperature etc Suggest improvements(if any) in process based on experience
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB9. Handle equipment/rubber sheet SB6. seek clarification on problems from others SB10. apply problem-solving approaches in different situations SB11. refer anomalies to the line manager

## NOS Version Control

<b>NOS Code</b>	RSC / N 5001		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Rubber Manufacturing	<b>Drafted on</b>	20/03/13
<b>Industry Sub-sector</b>	Tyre and Non- tyre	<b>Last reviewed on</b>	29/12/15
<b>Occupation</b>	Lab Chemist	<b>Next review date</b>	29/12/17

# National Occupational Standard



---

## Overview

**This unit is about reporting and documentation**

<b>Unit Code</b>	<b>RSC / N 5002</b>
<b>Unit Title (Task)</b>	<b>To carry out reporting and documentation</b>
<b>Description</b>	This unit is about carrying out reporting and documentation
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Reporting of data/problem/incidents etc</li> <li>• Documentation</li> <li>• Information Security</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Reporting</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Report data/problems/incidents as applicable in a timely manner</p> <p>PC2. Report to the appropriate authority as laid down by the company</p> <p>PC3. Follow reporting procedures as prescribed by the company</p>
<b>Recording and Documentation</b>	<p>PC4. Identify documentation to be completed relating to one's role</p> <p>PC5. Record details accurately in appropriate format</p> <p>PC6. Complete all documentation within stipulated time according to company procedure</p> <p>PC7. Ensure that the final document meets with the requirements of the persons who requested it or make any amendments accordingly</p> <p>PC8. Make sure documents are available to all appropriate authorities to inspect</p>
<b>Information Security</b>	<p>PC9. Respond to requests for information in an appropriate manner whilst following organizational procedures</p> <p>PC10. Inform the appropriate authority of requests for information received</p>
<b>Knowledge and Understanding (K)</b>	
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Different methods of recording information</p> <p>KB2. Various documents that need to be maintained</p> <p>KB3. Company procedure for filling/maintaining up the documents</p> <p>KB4. Procedures for reporting to the appropriate authority</p> <p>KB5. Procedures for recording damage, breakages etc</p> <p>KB6. Reporting incidents where standard operating procedures are not followed</p> <p>KB7. The importance of complete and accurate documentation</p> <p>KB8. How to maintain complete documentation accurately and within agreed timescales</p>

**To Carry Out Reporting And Documentation**

	<p>KB9. The importance of ensuring that the documents are correct</p> <p>KB10. The actions to be taken if the documents are not correct</p> <p>KB11. The importance of maintaining the security and confidentiality of recorded information</p> <p>KB12. Procedures to maintain confidentiality of information</p> <p>KB13. The appropriate method for responding to requests for information</p> <p>KB14. The reporting procedures to followed before disclosing information to any outside party</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company</p> <p>SA3. Write simple letters, mails, etc</p> <p>SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes</p>
	<b>Reading Skills</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc</p> <p>SA6. Read images, graphs, diagrams</p> <p>SA7. Understand the various coding systems as per company norms</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
<p>The user/individual on the job needs to know and understand how to:</p> <p>SA8. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA9. Respond appropriately to any queries</p> <p>SA10. Communicate with supervisor</p> <p>SA11. Communicate with upstream and downstream teams</p> <p>SA12. Work in a team and other behavioral skills required to support the small group activities (Quality Circle, Cross Functional Team, Suggestion Scheme)</p> <p><b>Integrity</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA13. Practice honesty with respect to company property and time</p> <p>SA14. Communicate with people in a form and manner and using language that is open and respectful</p> <p>SA15. Resolve any difficulties in relationships with colleagues, or get help from an appropriate person, in a way that preserves goodwill and trust</p>	

**To Carry Out Reporting And Documentation**

	<p><b>Motivation</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA16. Take responsibility for completing one's own work assignment</p> <p>SA17. Take initiative to enhance/learn skills in one's area of work</p> <p>SA18. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning.</p> <p>SA19. Is open to new ways of doing things</p> <p>SA20. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them.</p> <p><b>Reliability</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA21. Avoid absenteeism</p> <p>SA22. Act objectively, rather than impulsively or emotionally when faced with difficult/stressful or emotional situations</p> <p>SA23. Work in disciplined factory environment</p> <p>SA24. Be punctual</p>
<b>B. Professional Skills</b>	<p><b>Decision Making</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>Handle equipment/apparatus</p> <p>Handle rubber compound</p> <p>Handle chemicals and laboratory reagents</p> <p>Handle rubber products</p> <p>Complex sample components</p> <p>Perform computer operations</p>
	<p><b>Plan and Organize</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB2. seek clarification on problems from others</p> <p>SB3. apply problem-solving approaches in different situations</p> <p>SB4. refer anomalies to the line manager</p>
	<p><b>Customer Centricity</b></p>
	<p>Application of basic sciences (chemistry), mathematics</p> <p>Application of statistics</p> <p>Use of computer/ application software</p>
<p><b>Problem Solving</b></p>	

**To Carry Out Reporting And Documentation**

	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB 5. Interpret quality for sheet</p> <p>SB 6. Suggest improvements(if any) in process/product/materials based on results and experience</p>
	<p><b>Analytical Thinking</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB7. Proper collection of waste material</p> <p>SB8. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience</p> <p>Diagnose common problems in the machine based on visual inspection, sound , temperature etc</p> <p>Suggest improvements(if any) in process based on experience</p>
	<p><b>Critical Thinking</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB9. Handle equipment/rubber sheet SB6. seek clarification on problems from others</p> <p>SB10. apply problem-solving approaches in different situations</p> <p>SB11. refer anomalies to the line manager</p>



## NOS Version Control

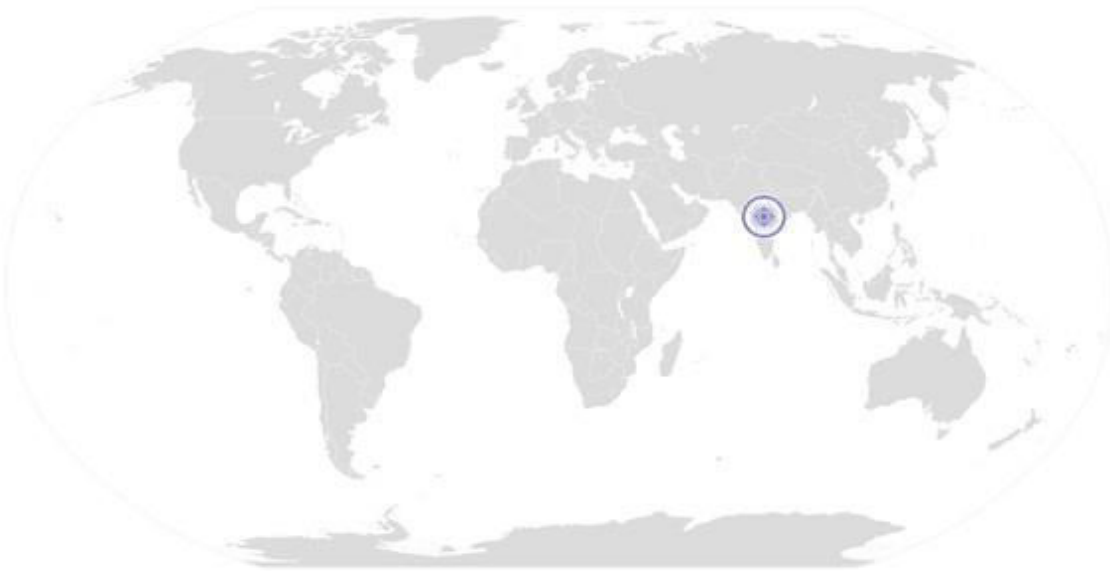
<b>NOS Code</b>	RSC / N 5002		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Rubber Manufacturing	<b>Drafted on</b>	20/03/13
<b>Industry Sub-sector</b>	Tyre and Non- tyre	<b>Last reviewed on</b>	29/12/15
<b>Occupation</b>	Lab Chemist	<b>Next review date</b>	29/12/17



[Back to QP](#)



# National Occupational Standard



---

## Overview

This unit is about carrying out quality checks

<b>Unit Code</b>	<b>RSC / N 5003</b>
<b>Unit Title (Task)</b>	<b>To carry out quality checks</b>
<b>Description</b>	This unit is about carrying out quality control activities
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Carrying out quality checks to identify problems</li> <li>Take corrective actions</li> <li>Reporting the results</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Inspection</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Ensure that total range of checks are regularly and consistently performed</p> <p>PC2. Use appropriate measuring instruments, equipment, tools, accessories etc ,as required</p>
<b>Analysis</b>	<p>PC3. Identify non-conformities to quality assurance standards</p> <p>PC4. Identify potential causes of non-conformities to quality assurance standards</p> <p>PC5. Identify impact on final product due to non-conformance to company standards</p> <p>PC6. Evaluating the need for action to ensure that problems do not recur</p> <p>PC7. Suggest corrective action to address problem</p> <p>PC8. Review effectiveness of corrective action</p>
<b>Reporting</b>	<p>PC9. Interpret the results of the quality check correctly</p> <p>PC10. Take up results of the findings with QC in charge/appropriate authority.</p> <p>PC11. Take up the results of the findings within stipulated time</p> <p>PC12. Record of results of action taken</p> <p>PC13. Record adjustments not covered by established procedures for future reference</p> <p>PC14. Review effectiveness of action taken</p> <p>PC15. Follow reporting procedures where the cause of defect cannot be identified</p>
<b>Knowledge and Understanding (K)</b>	
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. The importance of quality control procedures</p> <p>KB2. Relevance and importance of activities and how they contribute to the achievement of the quality objectives,</p>

	<p>KB3. Proper procedure for selecting the material/product and performing quality checks without affecting the material</p> <p>KB4. Availability of work instructions, as necessary,</p> <p>KB5. Characteristics of the product/material</p> <p>KB6. Use of suitable equipment</p> <p>KB7. Availability and use of monitoring and measuring devices,</p> <p>KB8. Requirements of records</p> <p>KB9. Importance of maintaining accurate up-to-date records</p> <p>KB10. The need to report within the stipulated time</p> <p>KB11. Implications of inaccurate measuring and testing instruments and equipment</p> <p>KB12. The cost of non-conformance to quality standards</p> <p>KB13. Implications (impact on internal/external customers) of defective products, materials or components</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Writing Skills</b>
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company</p> <p>SA3. Write simple letters, mails, etc</p> <p>SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes</p>
	<b>Reading Skills</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc</p> <p>SA6. Read images, graphs, diagrams</p> <p>SA7. Understand the various coding systems as per company norms</p>
<b>Oral Communication (Listening and Speaking skills)</b>	

	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA8. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA9. Respond appropriately to any queries</p> <p>SA10. Communicate with supervisor</p> <p>SA11. Communicate with upstream and downstream teams</p> <p>SA12. Work in a team and other behavioral skills required to support the small group activities (Quality Circle, Cross Functional Team, Suggestion Scheme)</p> <p><b>Integrity</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA13. Practice honesty with respect to company property and time</p> <p>SA14. Communicate with people in a form and manner and using language that is open and respectful</p> <p>SA15. Resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust</p> <p><b>Motivation</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA16. Take responsibility for completing one’s own work assignment</p> <p>SA17. Take initiative to enhance/learn skills in ones’s area of work</p> <p>SA18. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one’s learning.</p> <p>SA19. Is open to new ways of doing things</p> <p>SA20. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them.</p> <p><b>Reliability</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA21. Avoid absenteeism</p> <p>SA22. Act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations</p> <p>SA23. Work in disciplined factory environment</p> <p>SA24. Be punctual</p>
<p><b>B. Professional Skills</b></p>	<p><b>Decision Making</b></p>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>Handle equipment/apparatus</p> <p>Handle rubber compound</p> <p>Handle chemicals and laboratory reagents</p> <p>Handle rubber products</p> <p>Complex sample components</p> <p>Perform computer operations</p>

	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to: SB2. seek clarification on problems from others SB3. apply problem-solving approaches in different situations SB4. refer anomalies to the line manager
	<b>Customer Centricity</b>
	Application of basic sciences (chemistry), mathematics Application of statistics Use of computer/ application software
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB 5. Interpret quality for sheet SB 6. Suggest improvements(if any) in process/product/materials based on results and experience
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB7. Proper collection of waste material SB8. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience Diagnose common problems in the machine based on visual inspection, sound , temperature etc Suggest improvements(if any) in process based on experience
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB9. Handle equipment/rubber sheet SB6. seek clarification on problems from others SB10. apply problem-solving approaches in different situations SB11. refer anomalies to the line manager

## NOS Version Control

<b>NOS Code</b>	RSC / N 5003		
<b>Credits(NSQF)</b>	5	<b>Version number</b>	1.0
<b>Industry</b>	Rubber Manufacturing	<b>Drafted on</b>	20/03/13
<b>Industry Sub-sector</b>	Tyre and Non- tyre	<b>Last reviewed on</b>	29/12/15
<b>Occupation</b>	Lab Chemist	<b>Next review date</b>	29/12/17



[Back to QP](#)

# National Occupational Standard



---

## Overview

This unit is about problem identification and escalation

**RSC / N 5004**
**To Carry Out Problem Identification And Escalation**

National Occupational Standard

<b>Unit Code</b>	<b>RSC / N 5004</b>
<b>Unit Title (Task)</b>	<b>To carry out problem identification and escalation</b>
<b>Description</b>	This unit is about problem identification and escalation
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Identify problems across:           <ul style="list-style-type: none"> <li>- Raw materials</li> <li>- Compounds</li> <li>- Product</li> <li>- Equipment</li> <li>- Others</li> </ul> </li> <li>• Identify solutions to problems</li> <li>• Take corrective action</li> <li>• Escalation of unresolved identified problems</li> </ul>
<b>Performance Criteria (PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Problem Identification</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. Identify defects/indicators of problems</p> <p>PC2. Identify any wrong practices that may lead to problems</p> <p>PC3. Identify practices that may impact the final product quality</p> <p>PC4. Identify if the problem has occurred before</p> <p>PC5. Identify other operations that might be impacted by the problem</p> <p>PC6. Ensure that no delays are caused as a result of failure to escalate problems</p>
<b>Necessary Action</b>	<p>PC7. Take appropriate materials and sample, conduct tests and evaluate results to establish reasons to confirm suspected reasons for non-conformance (where required)</p> <p>PC8. Consider possible reasons for identification of problems</p> <p>PC9. Consider applicable corrections and formulate corrective action</p> <p>PC10. Formulate action in a timely manner</p> <p>PC11. Communicate problem/remedial action to appropriate parties</p> <p>PC12. Take corrective action in a timely manner</p> <p>PC13. Take corrective action for problems identified according to the company procedures</p> <p>PC14. Report/document problem and corrective action in an appropriate manner</p> <p>PC15. Monitor corrective action</p> <p>PC16. Evaluate implementation of corrective action taken to determine if the problem has been resolved</p>



	<p>PC17. Ensure that corrective action selected is viable and practical</p> <p>PC18. Ensure that correct solution is identified to an identified problem</p> <p>PC19. Take corrective action for problems identified according to the company procedures</p> <p>PC20. Ensure that no delays are caused as a result of failure to take necessary action</p>
<b>Problem Escalation</b>	<p>PC21. Escalate problem as per laid down escalation matrix</p> <p>PC22. Escalate the problem within stipulated time</p> <p>PC23. Escalate the problem in an appropriate manner</p> <p>PC24. Ensure that no delays are caused as a result of failure to escalate problems</p>
<b>Knowledge and Understanding (K)</b>	
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Indicators of problems</p> <p>KB2. The working of the equipment and accessories( if applicable)</p> <p>KB3. The impact of operations on the user and equipment( if applicable)</p> <p>KB4. The impact of operations on the final product ( if applicable)</p> <p>KB5. The effect of not rectifying the problems identified</p> <p>KB6. The reason for the occurrence of previous problems</p> <p>KB7. Measures and steps that have been taken to address the previous problems</p> <p>KB8. Possible solutions for various problems</p> <p>KB9. The correct method for carrying out corrective actions outlined for each problem</p> <p>KB10. The impact of not carrying out the corrective actions</p> <p>KB11. The documentation procedure for recording such problems, as per company norms</p> <p>KB12. The escalation matrix for reporting problems</p> <p>KB13. Escalation matrix for reporting unresolved problems</p> <p>KB14. The time frame within which in which each problem needs to be escalated</p> <p>KB15. Manner in which each problem needs to be escalated</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<p><b>Writing Skills</b></p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Construct simple sentences and express ideas clearly through written communication</p> <p>SA2. Fill up appropriate technical forms, process charts, activity logs in required format of the company</p> <p>SA3. Write simple letters, mails, etc</p> <p>SA4. Perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes</p>

**To Carry Out Problem Identification And Escalation**

	<b>Reading Skills</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. Read and understand manuals, health and safety instructions, memos, reports, job cards etc</p> <p>SA6. Read images, graphs, diagrams</p> <p>SA7. Understand the various coding systems as per company norms</p>
	<b>Oral Communication (Listening and Speaking skills)</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SA8. Express statements, opinions or information clearly so that others can hear and understand</p> <p>SA9. Respond appropriately to any queries</p> <p>SA10. Communicate with supervisor</p> <p>SA11. Communicate with upstream and downstream teams</p> <p>SA12. Work in a team and other behavioral skills required to support the small group activities (Quality Circle, Cross Functional Team, Suggestion Scheme)</p> <p><b>Integrity</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA13. Practice honesty with respect to company property and time</p> <p>SA14. Communicate with people in a form and manner and using language that is open and respectful</p> <p>SA15. Resolve any difficulties in relationships with colleagues, or get help from an appropriate person, in a way that preserves goodwill and trust</p> <p><b>Motivation</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA16. Take responsibility for completing one's own work assignment</p> <p>SA17. Take initiative to enhance/learn skills in one's area of work</p> <p>SA18. The capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse one's learning.</p> <p>SA19. Is open to new ways of doing things</p> <p>SA20. The capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them.</p> <p><b>Reliability</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA21. Avoid absenteeism</p> <p>SA22. Act objectively, rather than impulsively or emotionally when faced with difficult/stressful or emotional situations</p> <p>SA23. Work in disciplined factory environment</p> <p>SA24. Be punctual</p>
<b>Decision Making</b>	

**RSC / N 5004**
**To Carry Out Problem Identification And Escalation**

<b>B. Professional Skills</b>	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>Handle equipment/apparatus</li> <li>Handle rubber compound</li> <li>Handle chemicals and laboratory reagents</li> <li>Handle rubber products</li> <li>Complex sample components</li> <li>Perform computer operations</li> </ul>
	<b>Plan and Organize</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB2. seek clarification on problems from others</li> <li>SB3. apply problem-solving approaches in different situations</li> <li>SB4. refer anomalies to the line manager</li> </ul>
	<b>Customer Centricity</b>
	<ul style="list-style-type: none"> <li>Application of basic sciences (chemistry), mathematics</li> <li>Application of statistics</li> <li>Use of computer/ application software</li> </ul>
	<b>Problem Solving</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB 5. Interpret quality for sheet</li> <li>SB 6. Suggest improvements(if any) in process/product/materials based on results and experience</li> </ul>
	<b>Analytical Thinking</b>
	<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB7. Proper collection of waste material</li> <li>SB8. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience</li> <li>Diagnose common problems in the machine based on visual inspection, sound , temperature etc</li> <li>Suggest improvements(if any) in process based on experience</li> </ul>
	<b>Critical Thinking</b>
<p>The user/individual on the job needs to know and understand how to:</p> <ul style="list-style-type: none"> <li>SB9. Handle equipment/rubber sheet</li> <li>SB6. seek clarification on problems from others</li> <li>SB10. apply problem-solving approaches in different situations</li> <li>SB11. refer anomalies to the line manager</li> </ul>	

## NOS Version Control

<b>NOS Code</b>	RSC / N 5004		
<b>Credits(NSQF)</b>	TBD	<b>Version number</b>	1.0
<b>Industry</b>	Rubber Manufacturing	<b>Drafted on</b>	20/03/13
<b>Industry Sub-sector</b>	Tyre and Non- tyre	<b>Last reviewed on</b>	29/12/15
<b>Occupation</b>	Lab Chemist	<b>Next review date</b>	29/12/17



[Back to QP](#)

**CRITERIA FOR ASSESSMENT OF TRAINEES**

**Job Role:** Lab Chemist- Batch Release testing  
**Qualification Pack Code:** RSC/ Q 0313  
**Sector Skill Council:** Rubber Skill Development Council

**Guidelines for Assessment**

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

Assessment Strategy			Marks Allocation		
NOS	Elements	Performance Criteria	Total	Theory	Practical
1. RSC/N 1301 To Test Rubber Compound	Sample collection	PC1. Determine the minimum amount of compound required for testing to achieve the desired level of confidence in the tests.	2	0	2
		PC2. Sample the compound as per SOP	2	2	0
		PC3. Sampling should be as per process flow sheet with control points	2	2	0
		PC4. Ensure that sample is suitable for test/analysis	2	2	0
		PC5. Mould compound to appropriate standard test specimens (button/ dumbbell / slab)for testing	2	0	2
		PC6. Identify the defect/problem in inappropriate sample	4	2	2
		PC7. Follow the procedure laid down by the company while labeling/numbering samples	2	2	0
	Sample integrity	PC8. Follow procedures to maintain conditioning of the sample (eg. Time, temperature , humidity, mechanical stress etc) as per SOP	4	1	3
		PC9. Follow SOP to store sample for future/further testing	4	1	3
	Equipment readiness	PC10. Identify the most appropriate equipment such as Rheometer, Mooney Viscometer, Densometer, Dispergrader, Tensile Tester,	4	2	2

	Hardness Tester, Rebound Resilience Tester and accessories for testing			
	PC11. Set up appropriate equipment or apparatus for testing correctly	6	2	4
	PC12. Calibrate the testing equipment periodically as per SOP.	6	2	4
	PC13. Identify defective equipment/apparatus and steps to be taken	4	2	2
	PC14. Verify the equipment accuracy by running the reference	2	0	2
Sample testing	PC15. Identify appropriate tests like Specific Gravity, Dispersion, Rheometry, Mooney Viscosity, Mooney Scorch, Hardness, Tensile, Elongation at break, Modulus, Tear strength, Rebound Resilience, as per SOP	8	4	4
	PC16. Carry out tests in accordance with SOP and desired individual test frequency	10	2	8
Data analysis	PC17. Keep tools and accessories like calculator ready before starting the analysis in accordance to the standard (IS/ISO or other international standards)	2	0	2
	PC18. Ensure that the accuracy and periodicity of the data captured in records is as per SOP	2	2	0
	PC19. Identify appropriate technique in evaluating result	2	0	2
	PC20. Interpret the results correctly using the identified technique(s)	4	2	2
Recording	PC21. Record and maintain data as per company standards	2	0	2
	PC22. Ensure that reports/records are accurate and clear	2	0	2
Reporting	PC23. Release or Hold the raw material as per finding for further processing.	2	2	0
	PC24. Take up the results of the findings with supplier/QC in-charge/appropriate authority.	2	2	0
Health and Safety	PC25. Housekeeping and safety in the lab testing area	2	2	0
	PC26. Handle the equipment properly	4	0	4
	PC27. Ensure samples and chemicals are carefully handled to avoid accidental spillage of chemicals.	2	0	2
	PC28. Conduct the experiments wearing the appropriate attire such as safety goggles, gloves, closed toe shoes, long pants, tied hair	2	0	2
	PC29. Use safety equipment such as fire extinguishers, fire blankets, and eye-wash	2	2	0

		stations.			
		PC30. Escalate matters in case of any accidents, spills etc.	1	1	0
		PC31. Comply with health, safety, environment guidelines, regulations etc in accordance with international/national standards or organizational standards	1	1	0
	Material disposal	PC32. Carry out disposal of waste and left over tested material safely as per SOP	2	0	2
		PC33. Dispose all materials used in the experiment safely as per Health and Safety management system of the company	2	0	2
			100	40	60
2. RSC / N 5001 To Carry Out Housekeeping	Pre housekeeping activities	PC1. Inspect the area while taking into account various surfaces	3	3	0
		PC2. Identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain	3	3	0
		PC3. Ensure that the cleaning equipment is in proper working condition	3	3	0
		PC4. Select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person	3	3	0
		PC5. Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces	3	3	0
		PC6. Inform the affected people about the cleaning activity	2	2	0
		PC7. Display the appropriate signage for the work being conducted	3	3	0
		PC8. Ensure that there is adequate ventilation for the work being carried out	3	3	0
		PC9. Wear the personal protective equipment required for the cleaning method and materials being used	3	3	0
	Operations	PC10. Use the correct cleaning method for the work area, type of soiling and surface	3	3	0
		PC11. Carry out cleaning activity without disturbing others	3	3	0
		PC12. Deal with accidental damage, if any, caused while carrying out the work	3	3	0
		PC13. Report to the appropriate person any difficulties in carrying out your work	3	3	0
		PC14. Identify and report to the appropriate person any additional cleaning required that is outside one's responsibility or skill	3	3	0

	Post housekeeping activities	PC15. Ensure that there is no oily substance on the floor to avoid slippage	9	3	6
		PC16. Ensure that no scrap material is lying around	9	3	6
		PC17. Maintain and store housekeeping equipment and supplies	3	3	0
		PC18. Follow workplace procedures to deal with any accidental damage caused during the cleaning process	3	3	0
		PC19. Ensure that, on completion of the work, the area is left clean and dry and meets requirements	8	2	6
		PC20. Return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored	3	3	0
		PC21. Dispose the waste garnered from the activity in an appropriate manner	9	3	6
		PC22. Dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly	9	3	6
	General	PC23. Maintain schedules and records for housekeeping duty	3	3	0
		PC24. Replenish any necessary supplies or consumables	3	3	0
			100	70	30
3. RSC / N 5002 To Carry Out Reporting And Documentation	Reporting	PC1. Report data/problems/incidents as applicable in a timely manner	12	8	4
		PC2. Report to the appropriate authority as laid down by the company	12	8	4
		PC3. Follow reporting procedures as prescribed by the company	12	8	4
	Recording and Documentation	PC4. Identify documentation to be completed relating to one's role	10	6	4
		PC5. Record details accurately an appropriate format	16	6	10
		PC6. Complete all documentation within stipulated time according to company procedure	14	4	10
		PC7. Ensure that the final document meets with the requirements of the persons who requested it or make any amendments accordingly	6	4	2
		PC8. Make sure documents are available to all appropriate authorities to inspect	6	4	2
	Information	PC9. Respond to requests for information in an	6	6	0



	Security	appropriate manner whilst following organizational procedures			
		PC10. Inform the appropriate authority of requests for information received	6	6	0
			100	60	40
4. RSC / N 5003 To Carry Out Quality Checks	Inspection	PC1. Ensure that total range of checks are regularly and consistently performed	24	10	14
		PC2. Use appropriate measuring instruments, equipment, tools, accessories etc ,as required	24	10	14
	Analysis	PC3. Identify non-conformities to quality assurance standards	6	4	2
		PC4. Identify potential causes of non-conformities to quality assurance standards	5	3	2
		PC5. Identify impact on final product due to non-conformance to company standards	5	3	2
		PC6. Evaluating the need for action to ensure that problems do not recur	6	4	2
		PC7. Suggest corrective action to address problem	5	3	2
		PC8. Review effectiveness of corrective action	5	3	2
	Reporting	PC9. Interpret the results of the quality check correctly	4	4	0
		PC10. Take up results of the findings with QC in charge/appropriate authority.	3	3	0
		PC11. Take up the results of the findings within stipulated time	3	3	0
		PC12. Record of results of action taken	3	3	0
		PC13. Record adjustments not covered by established procedures for future reference	3	3	0
		PC14. Review effectiveness of action taken	2	2	0
		PC15. Follow reporting procedures where the cause of defect cannot be identified	2	2	0
			100	60	40
5. RSC / N 5004 To Carry Out Problem Identification And Escalation	Problem Identification	PC1. Identify defects/indicators of problems	7	4	3
		PC2. Identify any wrong practices that may lead to problems	6	3	3
		PC3. Identify practices that may impact the final product quality	6	3	3
		PC4. Identify if the problem has occurred before	5	3	2
		PC5. Identify other operations that might be impacted by the problem	6	4	2
		PC6. Ensure that no delays are caused as a result of failure to escalate problems	5	3	2
	Necessary	PC7. Take appropriate materials and sample,	8	5	3

	Action	conduct tests and evaluate results to establish reasons to confirm suspected reasons for non-conformance (where required)				
		PC8. Consider possible reasons for identification of problems	8	5	3	
		PC9. Consider applicable corrections and formulate corrective action	3	3	0	
		PC10. Formulate action in a timely manner	3	3	0	
		PC11. Communicate problem/remedial action to appropriate parties	7	5	2	
		PC12. Take corrective action in a timely manner	2	2	0	
		PC13. Take corrective action for problems identified according to the company procedures	2	2	0	
		PC14. Report/document problem and corrective action in an appropriate manner	8	5	3	
		PC15. Monitor corrective action	2	2	0	
		PC16. Evaluate implementation of corrective action taken to determine if the problem has been resolved	2	2	0	
		PC17. Ensure that corrective action selected is viable and practical	2	2	0	
		PC18. Ensure that correct solution is identified to an identified problem	2	2	0	
		PC19. Take corrective action for problems identified according to the company procedures	1	1	0	
		PC20. Ensure that no delays are caused as a result of failure to take necessary action	1	1	0	
		Problem Escalation	PC21. Escalate problem as per laid down escalation matrix	4	3	1
			PC22. Escalate the problem within stipulated time	4	3	1
			PC23. Escalate the problem in an appropriate manner	3	2	1
			PC24. Ensure that no delays are caused as a result of failure to escalate problems	3	2	1
				100	70	30