



## QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR PAINTS AND COATINGS 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

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### Contents

1. Introduction and Contacts.....P1
2. Qualifications Pack.....P2
3. Glossary of Key Terms .....P3
4. OS Units.....P5
5. Nomenclature for QP& OS.....P57
6. Assessment Criteria for each NOS....P59

### Introduction

#### Qualifications Pack: QC Chemist (RM and FG)

**SECTOR:** PAINTS AND COATINGS

**SUB-SECTOR:** MANUFACTURING

**OCCUPATION:** Quality Control

**REFERENCE ID:** PCS/Q0802

**ALIGNED TO:** NCO-2015/ 2113.0601

The QC Chemist (Raw Material and Finished Goods) is responsible for ensuring that the product quality meets defined standards by checking that the quality of raw materials and finished goods meet the agreed specifications.

**Brief Job Description:** The individual at work conducts specified tests and measurements on raw materials when they arrive from suppliers and vendors and also certifies that the finished goods are ready for despatch.

**Personal Attributes:** The individual should have ability to work in a factory environment where high level of mobility is required to collect samples, conduct tests and run sample checks.



Job Details

Qualifications Pack Code	PCS/Q0802		
Job Role	QC Chemist (RM and FG)		
Credits(NSQF)	TBD	Version number	1.0
Sector	Paints and Coatings	Drafted on	17/03/16
Sub-sector	Manufacturing	Last reviewed on	30/06/17
Occupation	Quality Control	Next review date	30/06/19
NSQC Clearance on	NA		

Job Role	QC Chemist (RM and FG)
Role Description	Ensuring that the product quality meets defined standards by checking that the quality of raw materials and finished goods.
NSQF level	5
Minimum Educational Qualifications	BSc Chemistry
Maximum Educational Qualifications	Paint Technologist
Training (Suggested but not mandatory)	Not Applicable
Minimum Job Entry Age	18 years
Experience	Minimum Preferable 4 years as Junior Chemist
Applicable National Occupational Standards (NOS)	<p><b>Compulsory:</b></p> <ol style="list-style-type: none"> <li>1. <a href="#">PCS/N0801 Check quality of incoming raw materials and finished goods</a></li> <li>2. <a href="#">PCS/N9901 Coordinate with colleagues and customers</a></li> <li>3. <a href="#">PCS/N9902 Maintain standards of product/ service quality</a></li> <li>4. <a href="#">PCS/N9903 Maintain OH&amp;S standards and follow environmental norms</a></li> <li>5. <a href="#">PCS/N9904 Maintain IPR of organisation and customer</a></li> </ol> <p><b>Optional:</b></p> <ol style="list-style-type: none"> <li>1. NA</li> </ol>
Performance Criteria	As described in the relevant OS units

Qualifications Pack For QC Chemist (RM and FG)

Definitions

Keywords /Terms	Description
Core Skills/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 NOS, these include communication related skills that are applicable to most job roles.
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 NOS.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
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.
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Organisational Context	Organisational 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.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
Qualifications Pack(QP)	Qualifications Pack comprises the set of NOS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Scope	Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required.
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.
Sub-functions	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.

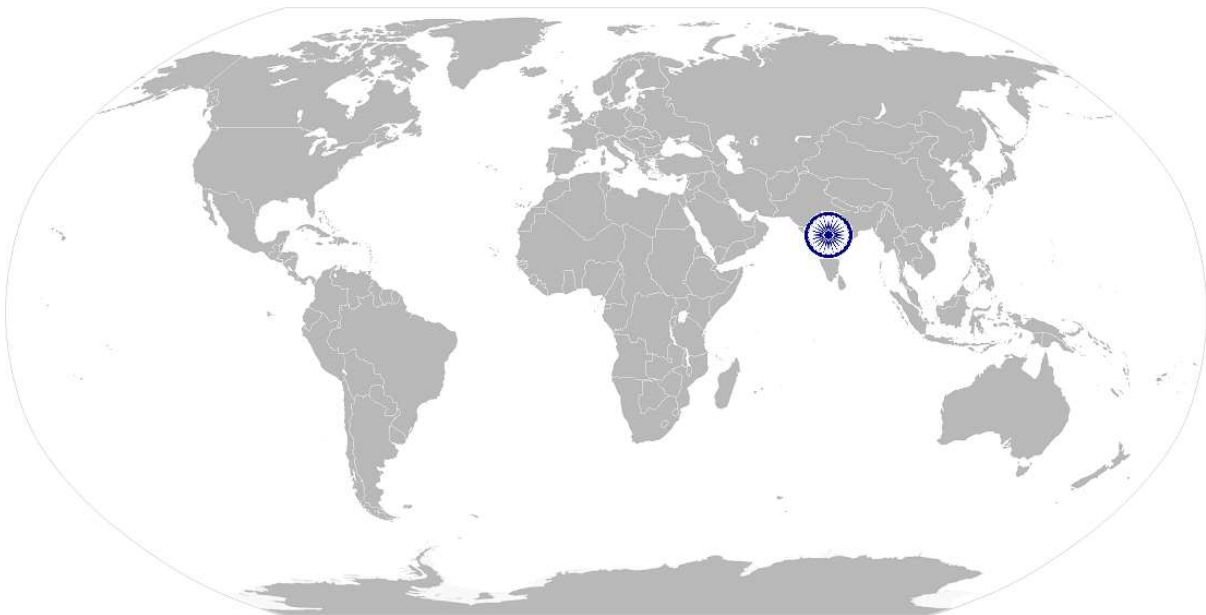
*Qualifications Pack For QC Chemist (RM and FG)*

Acronyms

Keywords /Terms	Description
NSQF	National Skills Qualifications Framework
QP	Qualification Pack
OS	Occupational Standards
OH&S	Occupational Health and Safety
PPE	Personal Protective Equipment
HR	Human Resources
TBD	To be done



# National Occupational Standard



## Overview

This unit is about checking the quality of incoming raw materials and finished goods using standard tests and measures and as per the established standards, systems and processes for paint manufacturing.

PCS/N0801

Check quality of incoming raw materials and finished goods

<b>Unit Code</b>	<b>PCS/N0801</b>
<b>Unit Title (Task)</b>	<b>Check quality of incoming raw materials and finished goods</b>
<b>Description</b>	This OS unit is about checking the quality of incoming raw materials and finished goods using standard tests and measures and as per the established standards, systems and processes for paint manufacturing
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Prepare samples of incoming raw materials including packaging materials</li> <li>• Maintain standards, systems and processes for QC testing</li> <li>• Conduct tests recommended for the raw materials</li> <li>• Conduct tests on finished goods</li> <li>• Document test results and prepare conformance reports</li> <li>• Maintain test and measuring instruments</li> </ul> <p><b>Range statement:</b> Testing equipments, Paint quality check equipments</p>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Preparing samples of incoming raw materials including packaging materials</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. prepare sample lots for testing of different types of raw materials including packaging materials, as per sampling procedure from a given quantity or weight</p> <p>PC2. retract and collect samples from the bags, liquid containers or tankers and packaging materials</p> <p>PC3. document the sample details and prepare bags/ modules of the sample collected</p> <p>PC4. mark and label the samples as per standard quality management procedure</p> <p>PC5. avoid contamination of samples</p> <p>PC6. seal and send samples for testing to laboratory</p> <p>PC7. follow prescribed Quality Management Systems</p>
<b>Maintaining standards, systems and processes for QC testing</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC8. identify the most appropriate equipment for QC testing as per standard quality management procedure, e.g., for solvent, or packaging material (plastic, tin, carton) or for extender powder or resin</p> <p>PC9. use recommended test and measurement process manual for testing the sample</p> <p>PC10. create paint batch and record any R&amp;D changes</p> <p>PC11. follow ISO standards as applicable</p> <p>PC12. use designated space for sample storage as per recommended standards, such as ambient temperature, moisture level, pests, theft and fire safety</p> <p>PC13. if possible, suggest remedy for materials that have failed tests</p>
<b>Conducting tests recommended for the raw materials</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC14. conduct regular and exceptional testing as per the established standards for specific product categories</p> <p>PC15. test for retention period of materials as well as specified quality for</p>

**PCS/N0801 Check quality of incoming raw materials and finished goods**

	<p>production</p> <p>PC16. conduct tests such as specific gravity, water content, evaporation ratio, etc. for solvent</p> <p>PC17. conduct tests on powders such as appearance, colour, brightness, water, purity</p> <p>PC18. conduct practical trials for recommended raw materials samples and check against prescribed standards and declared standards</p> <p>PC19. conduct checks on drying time, viscosity, solid content, etc.</p> <p>PC20. conduct tests on packaging materials, e.g., look, appearance, weight, dimension, drop test, bursting strength of carton, ply-strength, age classifying test</p> <p>PC21. use brightness meter, melting point meter, gas liquid chromatography for solvent test, moisture analyser, Karl-Fischer instrument for water content, etc.</p> <p>PC22. analyse the results and findings and suggest appropriate corrective action in consultation with manufacturing / production incharge</p>
<b>Conducting tests on finished goods</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC23. conduct regular and exceptional testing as per the established standards for specific product categories</p> <p>PC24. use dispersion guage</p> <p>PC25. measure viscosity using instrument such as rotothinner</p> <p>PC26. use glossometer for checking gloss level</p> <p>PC27. use Elcometer for film thickness test</p> <p>PC28. check performance on wall or metal or wood for the paint type</p> <p>PC29. check corrosion resistance in salt-spray chamber</p> <p>PC30. check UV resistance using weatherometer</p> <p>PC31. conduct pencil hardness test</p> <p>PC32. use stone chip resistance machine for resistance to gravel, etc.</p> <p>PC33. use barcoding machine</p> <p>PC34. use incubation chamber for logevity test</p> <p>PC35. use ambient guage to measure surface condition before applying panis and coats</p> <p>PC36. analyse the results and findings and suggest appropriate corrective action in consultation with manufacturing / production incharge</p> <p>PC37. ensure zero defect in finished product as per specified standards</p> <p>PC38. check packaging of finished goods, e.g., type of packaging, damage, etc.</p> <p>PC39. check labelling is accurate and as per agreed/ spcified standards for the batch</p> <p>PC40. ensure timely and safe dispatch of batch of finished goods to warehouse, without any logistics damage</p>
<b>Documenting test results and preparing conformance reports</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC41. record results and findings as per the established reporting and documentation templates</p> <p>PC42. document sample progression, from sampling stage to testing and production</p> <p>PC43. fill and dispatch copies for each batch of samples tested</p>

**PCS/N0801 Check quality of incoming raw materials and finished goods**

	<p>PC44. prepare test conformance reports with pass or reject outcomes</p> <p>PC45. record batch test results against prescribed tolerance level</p> <p>PC46. ensure data and process integrity</p>
<b>Maintaining test and measuring instruments</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC47. calibrate the testing equipments for QC check periodically as per the standards</p> <p>PC48. identify defective equipment and take appropriate corrective actions</p> <p>PC49. clean the lab periodically, as per prescribed standards</p> <p>PC50. clean the test apparatus as per prescribed standards</p> <p>PC51. dispose materials to plant in usable condition</p> <p>PC52. maintain lab safety standards</p> <p>PC53. stacking and labelling of samples as per prescribed standards</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	<p>The individual on the job needs to know and understand:</p> <p>KA1. quality standards of the company</p> <p>KA2. understanding of quality requirements of various product categories</p> <p>KA3. legal and regulatory frameworks relevant to the quality control</p> <p>KA4. documentation requirements of quality checks</p> <p>KA5. company's personnel management and incentives rules</p> <p>KA6. importance of the individual's role in the workflow</p> <p>KA7. reporting structure</p> <p>KA8. occupational health and safety standards</p> <p>KA9. production area layout and quality standards</p>
<b>B. Technical Knowledge</b>	<p>The individual on the job needs to know and understand:</p> <p>KB1. various kinds of raw materials involved in the process</p> <p>KB2. formulations for the particular batches</p> <p>KB3. overall powder paint manufacturing process</p> <p>KB4. overall liquid paint manufacturing process</p> <p>KB5. basic properties of various resins, additives and other chemicals used</p> <p>KB6. material handling</p> <p>KB7. significance of use of protective gear like gloves, ladles, etc.</p> <p>KB8. various tests for powder and liquid paints</p> <p>KB9. implication the tests on the end product</p> <p>KB10. customer specifications</p> <p>KB11. typical test outcomes</p> <p>KB12. typical causes for deviations in results</p> <p>KB13. using test equipment like gauges, etc</p> <p>KB14. sample disposal techniques</p> <p>KB15. sampling techniques</p> <p>KB16. quality system requirements and standards</p> <p>KB17. quality assurance methods</p> <p>KB18. handling procedures of hazardous substances</p> <p>KB19. handling of various equipments for quality checks</p> <p>KB20. procedure for disposal of sample</p>

**PCS/N0801 Check quality of incoming raw materials and finished goods**

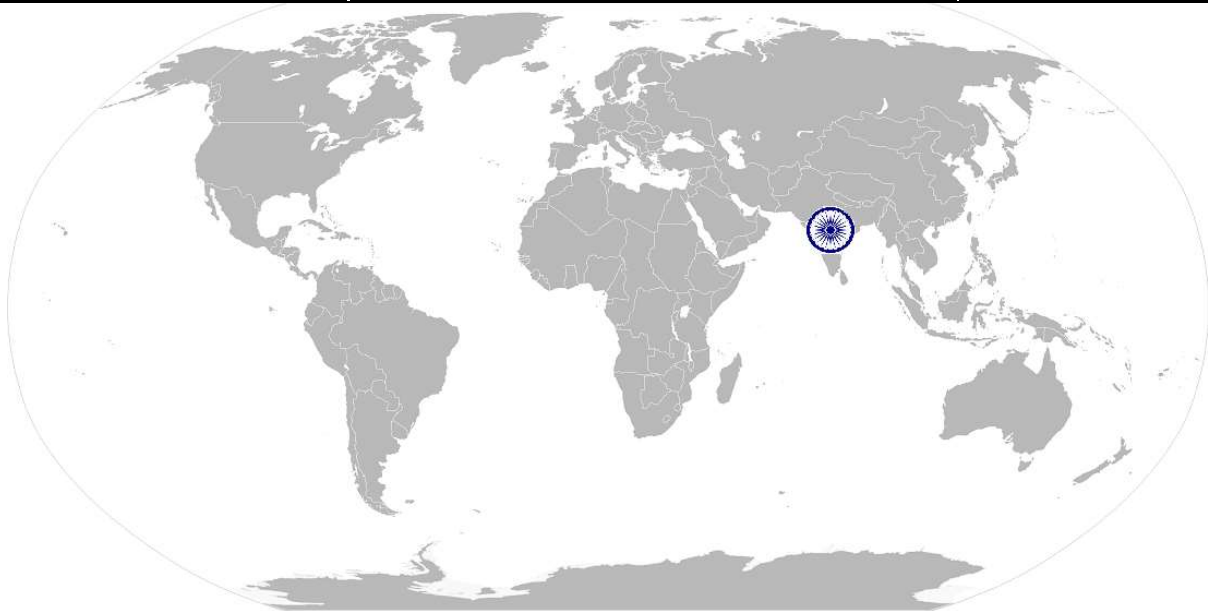
Skills (S)	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The user/individual on the job needs to know and understand how to read: SA1. company's work instructions, customer requirement and quality policy SA2. instructions on usage of various equipments for QC Check SA3. paint technology journals SA4. about benchmarks in quality practices of the industry
	<b>Writing Skills</b>
	The user/individual on the job needs to know and understand how to: SA5. document various test results SA6. pay attention to detail while recording test results SA7. write detailed reports for investigation SA8. write official e-mails for various purpose at work SA9. to maintain the record of job completed as per company's policy
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/individual on the job needs to know and understand how to: SA10. communicate with raw material suppliers SA11. interact within- line staff to report quality related issues SA12. interact with R&D and marketing staff SA13. accurately communicate the QC related problems to senior management
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to: SB1. interpret and analyse information and evaluate results to choose the best solution and solve problems as per the established protocols.
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to: SB2. schedule and prioritise the work plan to meet the set target for Quality
	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand how to: SB3. ensure the final product meets the customer requirements
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to: SB4. solve issues related to quality in consultation with line staff.
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB5. estimate the time taken for various testing procedure to align production schedules
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to: SB6. avoid recurring quality issues through systematic approach of end to end analysis



**PCS/N0801 Check quality of incoming raw materials and finished goods**

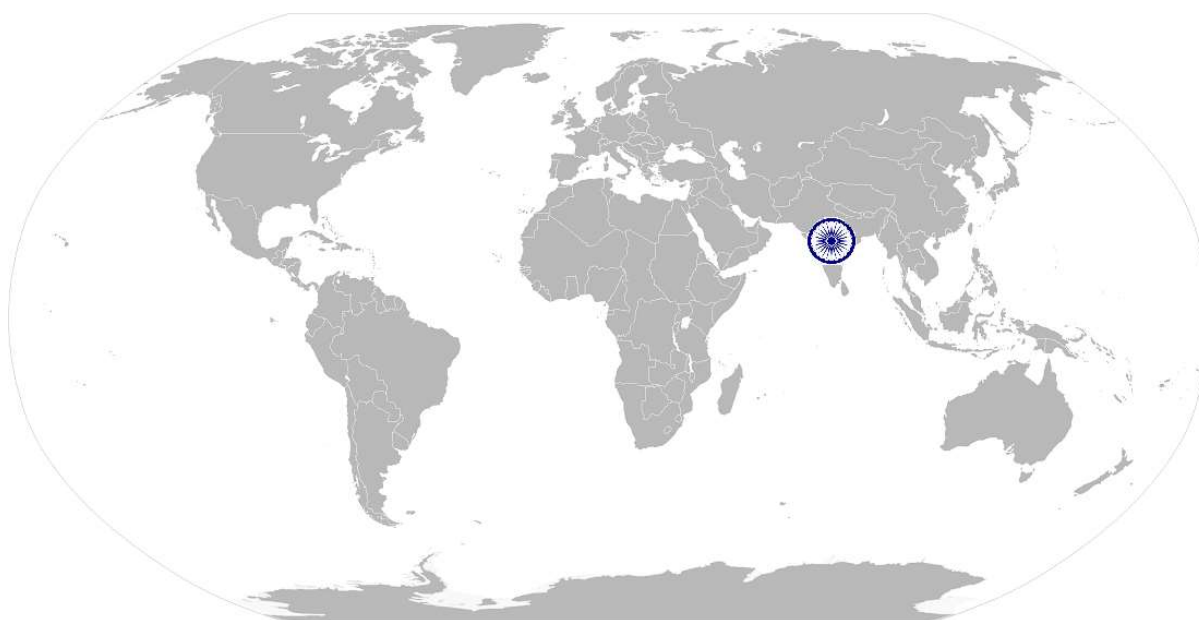
## **NOS Version Control**

NOS Code	PCS/N0801		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/03/16
Industry Sub-sector	Manufacturing	Last reviewed on	30/06/17
Occupation	Quality Control	Next review date	30/06/19





# National Occupational Standard



## Overview

This unit is about communicating effectively with superiors, colleagues and customers to achieve a smooth workflow.



PCS/N9901

Coordinate with colleagues and/ or customers

National Occupational Standard

<b>Unit Code</b>	<b>PCS/N9901</b>
<b>Unit Title (Task)</b>	<b>Coordinate with colleagues and/or customers</b>
<b>Description</b>	This OS unit is about communicating effectively with superiors, colleagues and customer to achieve a smooth workflow
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Interact with superior</li> <li>• Communicate with colleagues</li> <li>• Communicate effectively with customers, if required</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Interacting with superior</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. receive job order and instructions from reporting superior</p> <p>PC2. understand the work output requirements, targets, performance indicators and incentives</p> <p>PC3. deliver quality work on time and report any anticipated reasons for delays</p> <p>PC4. escalate unresolved problems or complaints to the relevant senior</p> <p>PC5. communicate maintenance and repair schedule proactively to the superior</p> <p>PC6. receive feedback on work standards</p> <p>PC7. document the completed work schedule and handover to the superior</p>
<b>Communicating with colleagues</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC8. exhibit trust, support and respect to all the colleagues in the workplace</p> <p>PC9. aim to achieve smooth workflow</p> <p>PC10. help and assist colleagues with information and knowledge</p> <p>PC11. seek assistance from the colleagues when required</p> <p>PC12. identify the potential and existing conflicts with the colleagues and resolve</p> <p>PC13. pass on essential information to other colleagues on timely basis</p> <p>PC14. maintain the etiquette, use polite language, demonstrate responsible and disciplined behaviors to the colleagues</p> <p>PC15. interact with colleagues from different functions clearly and effectively on all aspects to carry out the work among the team and understand the nature of their work</p> <p>PC16. put team over individual goals and multi task or share work where necessary supporting the colleagues</p> <p>PC17. highlight any errors of colleagues, help to rectify and ensure quality output</p> <p>PC18. work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance</p>
<b>Communicating effectively with customers, if required</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC19. ask more questions to the customers and identify their needs</p> <p>PC20. possess strong knowledge on the product, services and market</p> <p>PC21. brief the customers clearly on potential costs and hazards</p> <p>PC22. communicate with the customers in a polite, professional and friendly manner</p> <p>PC23. build effective but impersonal relationship with the customers</p>



PCS/N9901

Coordinate with colleagues and/ or customers

	<p>PC24. ensure the appropriate language and tone are used with customers</p> <p>PC25. listen actively and have a two way communication</p> <p>PC26. be sensitive to the gender, cultural and social differences such as modes of greeting, formality, etc.</p> <p>PC27. understand the customer expectations correctly and provide the appropriate products and services</p> <p>PC28. understand the customer dissatisfaction and address or escalate their complaints effectively</p> <p>PC29. maintain a positive, sensible and cooperative manner all time</p> <p>PC30. ensure to maintain a proper body language, dress code, gestures and etiquettes towards the customers</p> <p>PC31. avoid interrupting the customers while they talk</p> <p>PC32. ensure to avoid negative questions and statements to the customers</p> <p>PC33. inform the customers on any issues or problems before hand and also on the developments involving them</p> <p>PC34. ensure to respond back to the customer immediately for their voice messages, e-mails, apps, etc.</p> <p>PC35. develop good rapport with the customers and promote other products and services</p> <p>PC36. seek feedback from the customers on their understanding to what was discussed</p> <p>PC37. explain the terms and conditions clearly</p>
<b>Knowledge and Understanding (K)</b>	
<p><b>A. Organizational</b></p> <p><b>Context</b> (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's policies on personnel management, effective team work at workplace</p> <p>KA2. company's HR policies</p> <p>KA3. company's reporting structure</p> <p>KA4. company's documentation policy</p> <p>KA5. company's customer profile</p> <p>KA6. occupational health and safety standards</p>
<p><b>B. Technical Knowledge</b></p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. methods for effective communication with various categories of people and the different departments in the organization</p> <p>KB2. significance of team coordination and productivity targets of the organisation</p> <p>KB3. how to record the job activity as required on various types of documents?</p> <p>KB4. how to use computer or smartphone to communicate effectively and productively?</p> <p>KB5. significance of helping colleagues with specific issues and problems</p> <p>KB6. importance of meeting quality and time standards as a team</p> <p>KB7. how to practice effective listening and talking</p> <p>KB8. effective use of voice tone and pitch for communication</p> <p>KB9. how to demonstrate ethics and convey discipline to the customers?</p>

PCS/N9901

Coordinate with colleagues and/ or customers

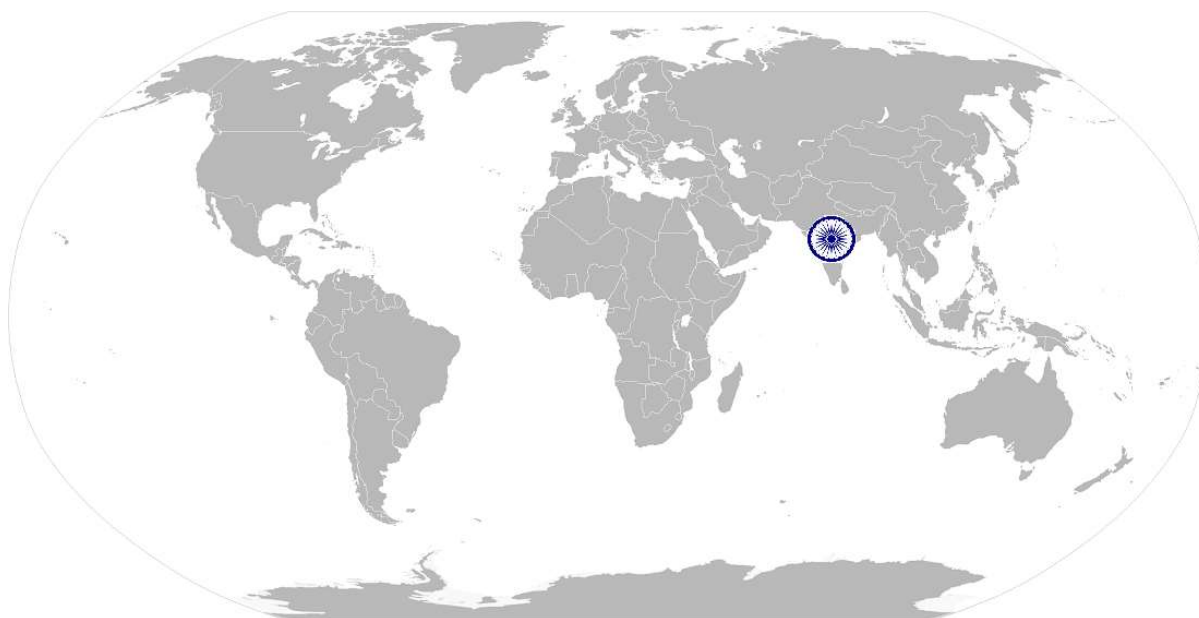
	KB10. how to build effective working relationship with mutual trust and respect within the team KB11. importance of dealing with grievances effectively and in time
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The user/ individual on the job needs to know and understand how to: SA1. read job sheets, company policy documents and information displayed at the workplace SA2. read notes/comments from the supervisor
	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand how to: SA3. fill up documentation pertaining to job requirement
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/ individual on the job needs to know and understand how to: SA4. interact with team members to work efficiently SA5. communicate effectively with superior to achieve smooth workflow SA6. communicate effectively with the customers to build a good rapport with them SA7. use language that the customer or colleague understands SA8. use the communications systems of the company, e.g., telephone, fax, public announcement systems SA9. E-mail and use Internet for communicating SA10. use of audio-visual aids to communicate complex issues
	<b>B. Professional Skills</b>
	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand how to: SB1. spot and communicate potential areas of disruptions to work process and report the same SB2. report to supervisor and deal with a colleague individually, depending on the type of concern
	<b>Plan and Organize</b>
	The user/ individual on the job needs to know and understand how to: SB3. plan communication strategy in order to avoid conflicts and work disruption
	<b>Customer Centricity</b>
	The user/ individual on the job needs to know and understand how to: SB4. practice patient listening, careful talking and paraphrasing in order to avoid misunderstanding
	<b>Problem Solving</b>
	The user/ individual on the job needs to know and understand how to: SB5. coordinate with different departments and multi-task as necessary SB6. contribute to quality of team work and achieve smooth workflow SB7. share work load as required



PCS/N9901

**Coordinate with colleagues and/ or customers**

	SB8. delegate work in consultation with superior or as necessary instead of allowing work to pile up
	<b>Analytical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB9. resolve recurring inter-personal conflicts by clear and two-way dialogue
	<b>Critical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB10. improve work processes by interacting with others and adopting best practices





PCS/N9901

Coordinate with colleagues and/ or customers

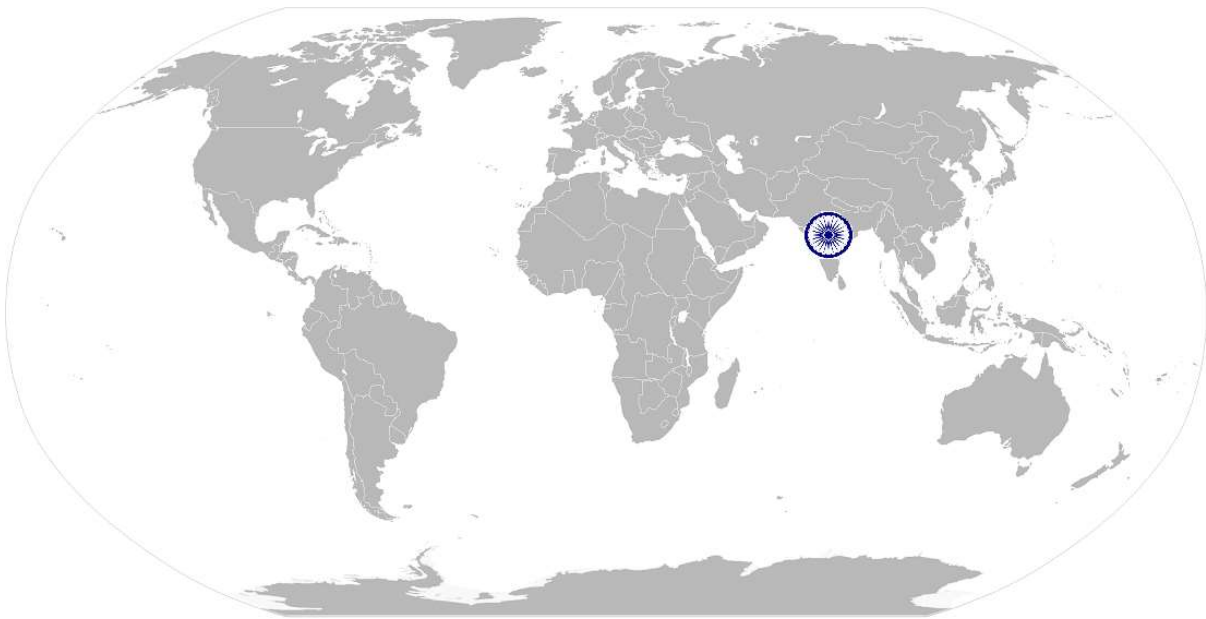
## NOS Version Control

NOS Code	PCS/N9901		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/03/16
Industry Sub-sector	Manufacturing and Application	Last reviewed on	30/06/17
Occupation	Quality Control	Next review date	30/06/19





# National Occupational Standard



## Overview

This unit is about understanding accepted levels of standards of product quality or customer service and executing the designated work in a manner that results in 100% satisfaction.



PCS/N9902

Maintain standards of product/service quality

National Occupational Standard

Unit Code	PCS/N9902
Unit Title (Task)	Maintain standards of product/ service quality
Description	This OS unit is about understanding accepted levels of standards of product quality or customer service and executing the designated work in a manner that results in 100% satisfaction.
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Engage with superior or customers to understand their product/service quality requirements</li> <li>Achieve 100% satisfaction for given quality</li> <li>Work to fulfil end-customers's expectations</li> </ul>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
<b>Engaging with superior or customers to understand product/ service quality requirements</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. keep in mind the profiles of expected customers</p> <p>PC2. understand the target customers and their product/ service quality requirements as defined by the company</p> <p>PC3. receive superior's/ customer feedback regularly</p> <p>PC4. aim to build a good connect with the customers through quality product/ service</p> <p>PC5. keep tab on frequent discussions with regular customers on general likes and dislikes in the market, latest trends, customer expectations, etc.</p> <p>PC6. receive updates on regular feedbacks from the clients on current service, complaints, and improvements to be made, etc.</p> <p>PC7. if necessary, compulsively seek customer rating of product/ service in order to help develop a set of regularly improved procedures</p> <p>PC8. demonstrate quality orientation at all level</p> <p>PC9. aim to gain their long lasting loyalty through satisfaction</p>
<b>Achieving 100% customer satisfaction for given quality</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC10. ensure 100% customer satisfaction via product/ service quality</p> <p>PC11. treat the customers fairly and with due respect</p> <p>PC12. focus on executing company's marketing strategies and product development needs</p> <p>PC13. focus on enhancing brand value of company by maintaining or enhancing quality standards</p>
<b>Fulfilling customer requirement</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC14. ensure that customer expectations are met</p> <p>PC15. learn to read customers' needs and wants</p> <p>PC16. willingly accept and implement new and innovative products and services that help improve customer satisfaction</p> <p>PC17. communicate feedback of customer to senior, especially, the negative feedback</p> <p>PC18. maintain close contact with the customers and focus groups</p>



PCS/N9902

Maintain standards of product/ service quality

	<p>PC19. offer promotions to improve product satisfaction level to the customers periodically</p> <p>PC20. weigh the cost of fulfilling unscheduled customer requests, consult with senior and advise the customer on alternatives</p>
<b>Knowledge and Understanding (K)</b>	
<p><b>A. Organizational</b></p> <p><b>Context</b> (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. company's quality standards policy</p> <p>KA2. company's HR policies</p> <p>KA3. company's reporting structure</p> <p>KA4. company's documentation policy for quality compliance</p> <p>KA5. company's end-customer profile</p> <p>KA6.</p>
<p><b>B. Technical Knowledge</b></p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. significance of maintaining or enhancing company's quality standards</p> <p>KB2. significance of treating the customers with respect and professional way</p> <p>KB3. different types of parameters tested for quality</p> <p>KB4. test pass/ fail criteria and acceptable tolerance levels</p> <p>KB5. equipment used for quality tests</p> <p>KB6. importance of gaining customer loyalty</p> <p>KB7. methods of engaging with the customers effectively and professionally, for customer facing activities</p> <p>KB8. ways to improve company's customer satisfaction rating</p> <p>KB9. prevailing market standards of customer satisfaction</p> <p>KB10. standard operating procedure (SOP)</p> <p>KB11. the variety of common and unscheduled requests to expect in customer facing activities</p> <p>KB12. significance of being transparent and courteous under all circumstances involving customer interaction without losing composure</p>
<b>Skills (S)</b>	
<p><b>A. Core Skills/ Generic Skills</b></p>	<p><b>Reading Skills</b></p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. read job sheets, company policy documents and information displayed at the work place about quality standards</p> <p>SA2. read notes/comments from the supervisor</p>
	<p><b>Writing Skills</b></p> <p>The user/ individual on the job needs to know and understand how to:</p> <p>SA3. fill up documentation pertaining to one's role in customer satisfaction</p>

PCS/N9902

Maintain standards of product/ service quality

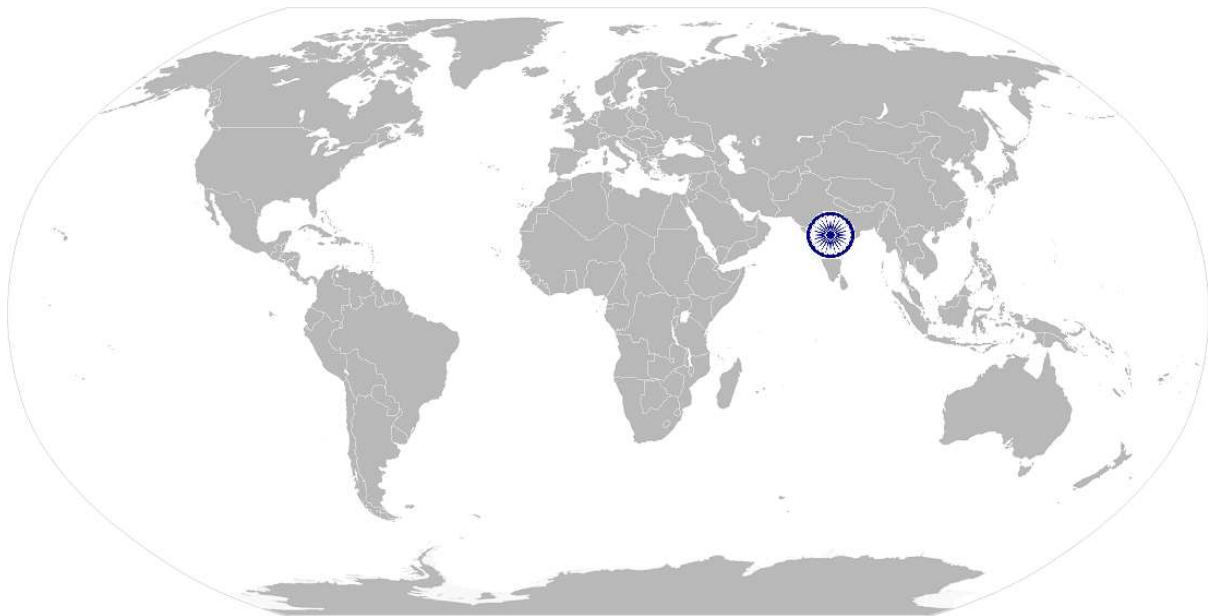
<b>B. Professional Skills</b>	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/ individual on the job needs to know and understand how to:
	SA4. interact with team members to achieve quality standards
	SA5. communicate effectively with customers in field jobs
	SA6. engage with customer to understand their expectations in field jobs
	SA7. company standards and effectiveness improvements pattern
	SA8. resolve customer's concerns satisfactorily within timeframe stipulated by the company or as agreed with customer or colleague
	SA9. use Internet for updating on current quality related practices
	SA10. use of audio-visual aids to communicate recurring quality concerns
	<b>Decision Making</b>
	The user/ individual on the job needs to know and understand:
	SB1. how to spot and when to report potential areas of recurring quality concerns
	SB2. how to address the complaints and handle the dissatisfied the customers
	<b>Plan and Organize</b>
	The user/ individual on the job needs to know and understand:
	SB3. how to plan workflow to achieve/ deliver 100% quality in the given time and with given equipment
	<b>Customer Centricity</b>
	The user/ individual on the job needs to know and understand:
	SB4. how to earn full customer loyalty
	<b>Problem Solving</b>
	The user/ individual on the job needs to know and understand how to:
	SB5. coordinate with different departments in order to service the customer better
	SB6. contribute to quality of team work and achieve smooth workflow
	SB7. share work load as required
	<b>Analytical Thinking</b>
	The user/ individual on the job needs to know and understand how to:
	SB8. communicate new product quality standards to different stakeholders in the market and train colleagues for quality, if required
	<b>Critical Thinking</b>
	The user/ individual on the job needs to know and understand how to:
	SB9. improve work processes by interacting with customers and adopting best practices
	SB10. resolve recurring inter-personal or system related conflicts with colleagues that hinder customer service
	SB11. act upon constructively on any problems as pointed by customers
	SB12. handle personality clashes effectively

PCS/N9902

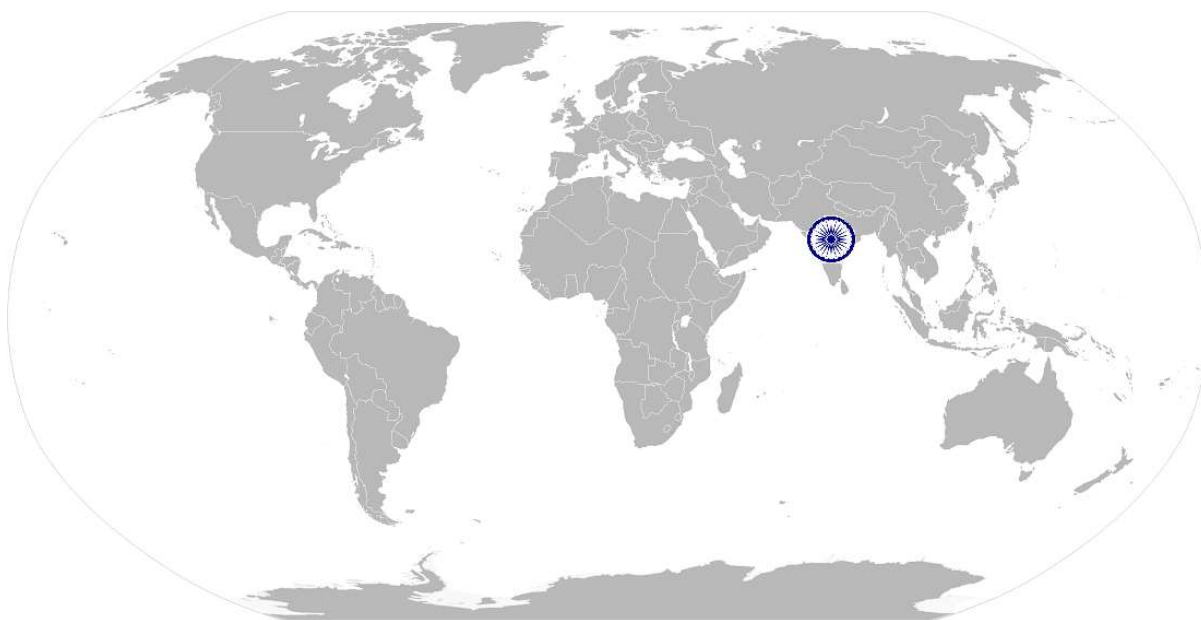
Maintain standards of product/ service quality

## NOS Version Control

NOS Code	PCS/N9902		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/03/16
Industry Sub-sector	Manufacturing and Application	Last reviewed on	30/06/17
Occupation	Quality Control	Next review date	30/06/19



# National Occupational Standard



## Overview

This unit is about complying with workplace health, hygiene, safety and environmental standards to have a hazard-free environment and avoid downtime. It is also about following government laid norms for waste treatment and disposal.

**PCS/N9903 Maintain OH&S standards and follow environmental norms**

National Occupational Standard

<b>Unit Code</b>	<b>PCS/N9903</b>
<b>Unit Title (Task)</b>	<b>Maintain OH&amp;S standards and follow environmental norms</b>
<b>Description</b>	This OS unit is about complying with workplace health, hygiene, safety and environmental standards to have a hazard-free environment and avoid downtime. It is also about following government laid norms for waste treatment and disposal
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>• Take precautionary measures to avoid work hazards and environmental damage</li> <li>• Follow standard health, safety and environmental policies and procedures</li> <li>• Use safety tools and/ or personal protective equipment</li> <li>• Achieve health, safety and environmental standards</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Taking precautionary measures to avoid health, safety and environmental hazards</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. assess the various health, safety and environmental hazards in the work areas</p> <p>PC2. take necessary steps to eliminate or minimize the hazards</p> <p>PC3. analyze the causes of accidents at the workplace</p> <p>PC4. suggest measures to prevent such accidents from taking place</p> <p>PC5. take preventive measures to avoid risk of burns and other injury due to contact with hot surfaces, gas, fire, hot fluids/ liquids, etc.</p> <p>PC6. suggest methods to improve the existing safety procedures at the workplace</p> <p>PC7. dispose waste in the designated areas safely as per company's policies and rules</p> <p>PC8. maintain appropriate ventilation in the rooms while there is more exposure to paint vapours</p> <p>PC9. avoid dumping unused cans to safeguard the environment</p>
<b>Following standard health, safety and environmental policies and procedure</b>	<p>To be competent, the user/individual must be able to:</p> <p>PC10. be aware of the locations of fire extinguishers, emergency exits, etc.</p> <p>PC11. practice correct emergency procedures</p> <p>PC12. check and review the storage areas frequently</p> <p>PC13. stack items in an organized way and use safe lifting techniques to reduce risk of injuries from handling procedures at the storage areas</p> <p>PC14. ensure to be safe while handling materials, tools, acids, chemicals, equipment, etc.</p> <p>PC15. store the chemicals and acids in a well-ventilated and locked areas with warning signs displayed</p> <p>PC16. ensure safe techniques while moving furniture and fixtures</p> <p>PC17. ensure to reduce risk of injury from use of electrical tools</p> <p>PC18. read the manufacturer's manual carefully before use of any equipment</p> <p>PC19. unplug the electrical equipment before performing maintenance</p> <p>PC20. keep the floors free from oil, water and grease to avoid slippery surface</p> <p>PC21. use rubber mats in the places where floors are constantly wet</p> <p>PC22. ensure safety from injuries of cuts to loss of fingers, while handling sharp</p>

**PCS/N9903 Maintain OH&S standards and follow environmental norms**

	<p>hazardous tools and equipment</p> <p>PC23. use flat surfaces, secure holding and protective wear while using such sharp tools</p> <p>PC24. use health, safety and environmental protection practices for storing, cleaning, and maintaining tools, equipment, and supplies</p> <p>PC25. practice ergonomic lifting, bending, or moving equipment and supplies</p> <p>PC26. identify the requirement for maintaining environmental norms</p> <p>PC27. comply with the environmental safety norms while on work to prevent accidents and health hazards</p> <p>PC28. follow company policies and rules regarding use of hazardous materials to avoid health, safety and environmental impacts caused by them</p>
<b>Using safety tools or Personal Protective Equipment</b>	<p>To be competent, the user/individual must be able to:</p> <p>PC29. ensure the employees have access to first aid kit when needed</p> <p>PC30. ensure all equipment and tools are stored and maintained properly and safe to use</p> <p>PC31. ensure to use personal protective equipment and safety gear such as gloves, mask, headwear, footwear, glasses, goggles, etc. for specific tasks and work conditions where required</p> <p>PC32. ensure to display safety signs at places where necessary for people to be cautious</p> <p>PC33. ensure electrical precautions such as insulated clothing, adequate equipment insulation, dry work area, switch off the power supply when not required, etc.</p> <p>PC34. ensure availability of general health and safety equipment such as fire extinguishers, first aid equipment, safety equipment, clothing, safety installations such as fire exits, exhaust fans, etc.</p>
<b>Achieving health, safety and environmental standards</b>	<p>To be competent, the user/individual must be able to:</p> <p>PC35. document all the first aid treatments, inspections, etc., conducted to keep track of the safety measures undertaken</p> <p>PC36. document all the environmental hazards caused and the measures undertaken to comply with the established safety procedures of the workplace</p> <p>PC37. report to the supervisor on any problems and hazards identified and any breach of environmental procedures.</p> <p>PC38. ensure zero accident at workplace</p> <p>PC39. adhere to safety standards and ensure no material damage</p> <p>PC40. take necessary action and correct any environmental hazards caused</p>
<b>Knowledge and Understanding (K)</b>	
<b>A. Organizational Context</b> (Knowledge of the company / organization and its processes)	<p>The individual on the job needs to know and understand:</p> <p>KA1. company's policies on health, safety and environmental procedures at the workplace</p> <p>KA2. company's reporting structure</p> <p>KA3. company's documentation policy</p> <p>KA4. occupational health, safety and environmental standards.</p>

**PCS/N9903 Maintain OH&S standards and follow environmental norms**

<b>B. Technical Knowledge</b>	<p>The individual on the job needs to know and understand:</p> <p>KB1. the purpose and usage of protective gears such as gloves , protective goggles, masks, etc. while working</p> <p>KB2. use of first aid at workplace</p> <p>KB3. significance of accidental risks to the worker and productivity loss</p> <p>KB4. reporting procedure or heirarchy for signs of damage and potential hazards</p> <p>KB5. methods to minimize accidental risks</p> <p>KB6. safe handling of chemicals, acids, etc. for cleaning</p> <p>KB7. material handling procedure</p> <p>KB8. standard operating procedure for safety drills and equipment maintenance</p> <p>KB9. precautionary activities to be followed for work place safety</p> <p>KB10. operation of tools and electrical equipment</p> <p>KB11. emergency procedures to be followed in case of an mishap such as fire, accidents, etc.</p> <p>KB12. government and company's environmental norms</p> <p>KB13. solid, liquid and gaseous waste disposal, treatment norms and equipment</p> <p>KB14. necessary action to be taken for the hazards identified</p> <p>KB15. methods to minimize environmental hazards</p> <p>KB16. precautionary activities to be followed to minimize environmental impacts</p>
<b>Skills (S)</b>	
<b>A. Core Skills/ Generic Skills</b>	<p><b>Reading Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA1. read and interpret the relevant organisation policies, procedures and diagrams that identify health, safety and safe environmental practices.</p> <p>SA2. read job sheets, company policy documents and information displayed at the workplace for health, safety and environment.</p> <p>SA3. read notes/comments from the supervisor</p> <p><b>Writing Skills</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA4. fill up documentation related to health, safety and environmental standards, if required</p> <p><b>Oral Communication (Listening and Speaking skills)</b></p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SA5. verbally report health, safety and environmental hazards and poor organisation practice.</p> <p>SA6. communicate to the supervisor about the work health, safety and environmental issues</p> <p>SA7. receive instructions from supervisor on minimizing the risks</p> <p>SA8. communicate with co-workers about the precautions to be taken for hazards free work</p>

**PCS/N9903 Maintain OH&S standards and follow environmental norms**

<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to:
	SB1. take preventive measures for the identified hazards
	SB2. select appropriate hand tools and personal protection equipment
	SB3. identify first aid needs in case of an injury
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to:
	SB4. incorporate elements of health, safety and environment in daily work practices
	<b>Customer Centricity</b>
	The user/ individual on the job needs to know and understand how to:
	SB5. ensure targeted product/ service delivery by practicing stipulated standards of occupational health safety and environmental measures
	<b>Problem Solving</b>
	The user/individual on the job needs to know and understand how to:
	SB6. take care of personal and equipment protection
	SB7. identify the hazards and suggest possible solutions
	<b>Analytical Thinking</b>
	The user/individual on the job needs to know and understand how to:
	SB8. use safety equipment such as fire extinguisher during fire accidents
	SB9. store chemicals and tools in a safe way
	SB10. use tools and equipment without causing any injury to fellow workers
	SB11. analyse the seriousness of the hazards
	<b>Critical Thinking</b>
	The user/individual on the job needs to know and understand how to:
	SB12. evolve smooth workflow by avoiding hazards at workplace
	SB13. evaluate and apply the possible solutions for the hazards, as necessary

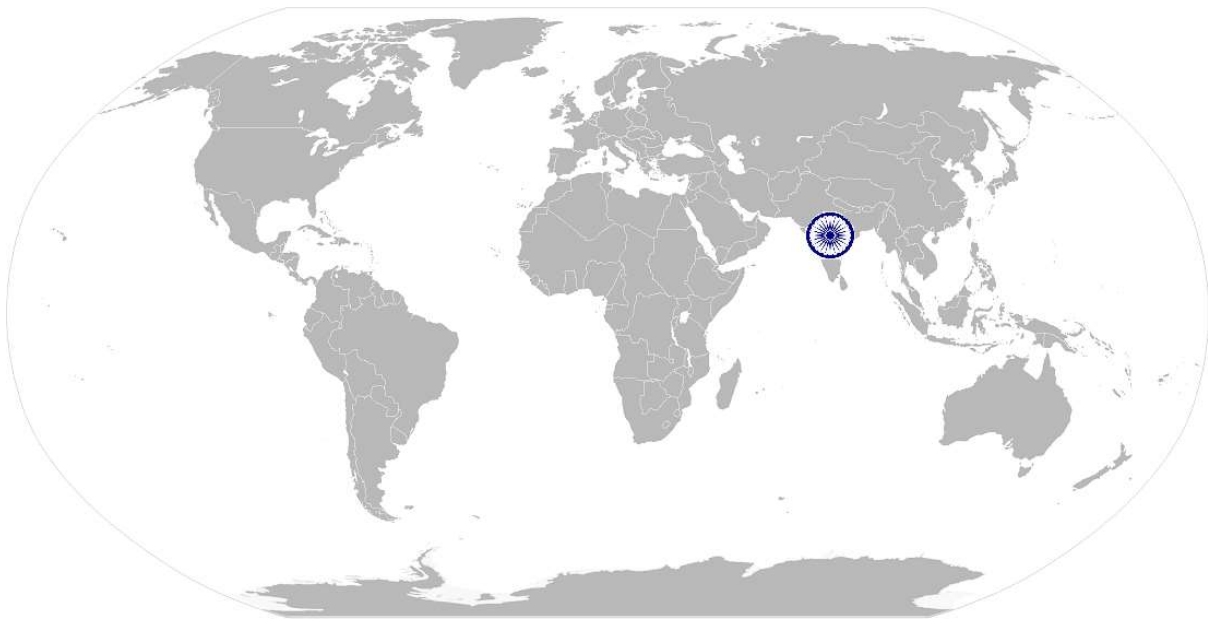
**PCS/N9903 Maintain OH&S standards and follow environmental norms**

## **NOS Version Control**

NOS Code	PCS/N9903		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/03/16
Industry Sub-sector	Manufacturing and Application	Last reviewed on	30/06/17
Occupation	Quality Control	Next review date	30/06/19



# National Occupational Standard



## Overview

This unit is about securing intellectual property rights (IPR) of the employee's organisation and respecting customer's copyright.



PCS/N9904

Maintain IPR of organisation and customer

National Occupational Standard

<b>Unit Code</b>	<b>PCS/N9904</b>
<b>Unit Title (Task)</b>	<b>Maintain IPR of organisation and customer</b>
<b>Description</b>	This OS unit is about securing intellectual property rights (IPR) of the employee's organisation and respecting customer's copyright
<b>Scope</b>	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> <li>Secure company's IPR</li> <li>Respect customers copyright</li> </ul>
<b>Performance Criteria(PC) w.r.t. the Scope</b>	
<b>Element</b>	<b>Performance Criteria</b>
<b>Securing company's IPR</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. prevent leak of new plans and designs to competitors by reporting on time</p> <p>PC2. be aware of any of company's product or design patents</p> <p>PC3. report IPR violations observed in the market, to supervisor or company head</p>
<b>Respecting customer's copyright</b>	<p>To be competent, the user/ individual must be able to:</p> <p>PC4. read copyright clause of the material published on the internet and any other printed material</p> <p>PC5. protect infringement upon customer's business or design plans</p> <p>PC6. consult supervisor or senior management when in doubt about using information available from customer</p> <p>PC7. report any infringement observed by anyone in 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. company's policies on intellectual property rights and infringement reporting policy</p> <p>KA2. company's HR policies</p> <p>KA3. company's reporting structure</p> <p>KA4. company's documentation policy</p> <p>KA5. company's customer profile</p> <p>KA6. occupational health and safety standards</p>
<b>B. Technical Knowledge</b>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. patents and IPR laws</p> <p>KB2. how IPR protection is important for competitiveness of a company</p> <p>KB3. significance of damages resulting from IPR infringement</p> <p>KB4. industrial and political espionages</p>

PCS/N9904

Maintain IPR of organisation and customer

Skills (S)	
<b>A. Core Skills/ Generic Skills</b>	<b>Reading Skills</b>
	The user/ individual on the job needs to know and understand: SA1. read job sheets, company policy documents and information displayed at the workplace on IPR SA2. read notes/comments from the supervisor
	<b>Writing Skills</b>
	The user/ individual on the job needs to know and understand: SA3. fill up documentation pertaining to one's role in protecting IPR infringement
	<b>Oral Communication (Listening and Speaking skills)</b>
	The user/ individual on the job needs to know and understand how to: SA4. interact with team members to work efficiently SA5. communicate effectively with the customers about IPR protection and building trust
<b>B. Professional Skills</b>	<b>Decision Making</b>
	The user/individual on the job needs to know and understand how to: SB1. identify IPR related issues
	<b>Plan and Organize</b>
	The user/individual on the job needs to know and understand how to: SB2. prevent information leaks SB3. Avoid being caught up in copyright issues
	<b>Customer Centricity</b>
	The user/individual on the job needs to know and understand how to: SB4. inform superior about any copyright infringement
	<b>Problem Solving</b>
	NA
	<b>Analytical Thinking</b>
	The user/ individual on the job needs to know and understand: SB5. basics of what constitutes IPR violations under WTO agreement SB6. penalties to company or individual on evidence of IPR violations SB7. likely effect of IPR violation on customer
	<b>Critical Thinking</b>
	The user/ individual on the job needs to know and understand how to: SB8. improve work IPR related safety and adopting best practices SB9. resolve conflicts related to IPR by reporting in time

PCS/N9904

Maintain IPR of organisation and customer

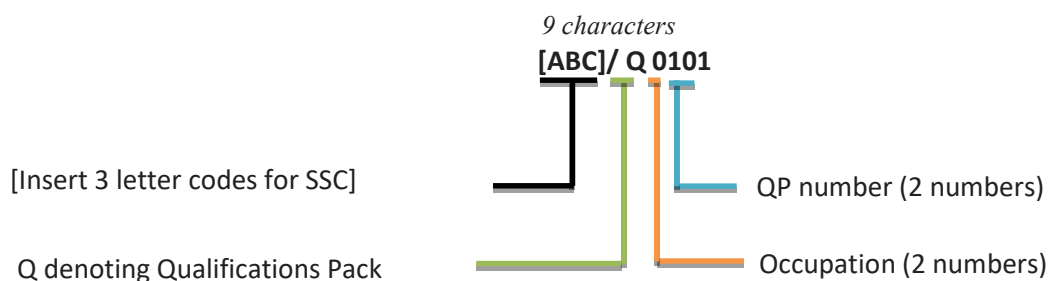
## NOS Version Control

NOS Code	PCS/N9904		
Credits(NSQF)	TBD	Version number	1.0
Industry	Paints and Coatings	Drafted on	17/03/16
Industry Sub-sector	Manufacturing and Application	Last reviewed on	30/06/17
Occupation	Quality Control	Next review date	30/06/19

## Annexure

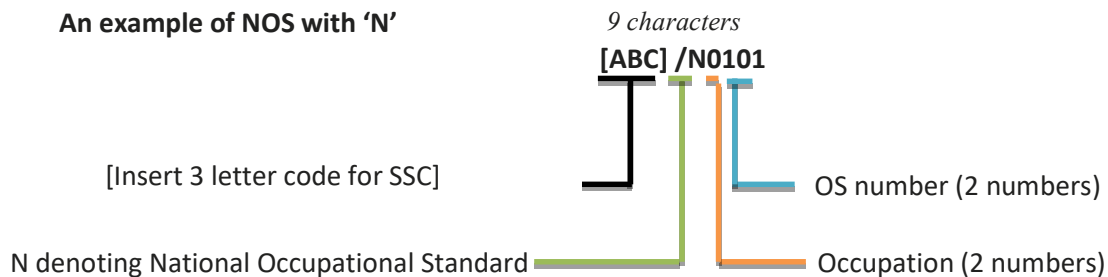
### Nomenclature for QP and NOS

#### Qualifications Pack



#### Occupational Standard

##### An example of NOS with 'N'



The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
Manufacturing	01 - 49
Application	50 - 59
Unused	60 - 97
Generic occupation	98 - 99

Sequence	Description	Example
Three letters	Industry name	PCS
Slash	/	/
Next letter	Whether QP or NOS	Q / N
Next two numbers	Occupation code	01
Next two numbers	OS number	01

## ASSESSMENT CRITERIA

**Job Role :** QC Chemist

**Qualification Pack :** PCS/Q0802

**Sector Skill Council :** Paints and Coatings

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 60% 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.

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
<b>PCS/N0801</b> <b>Check quality of incoming raw materials and finished goods</b>	PC1. prepare sample lots for testing of different types of raw materials including packaging materials, as per sampling procedure fro a given quantity or weight		0.7	0.2	0.5
	PC2. retract and collect samples from the bags, liquid containers or tankers and packaging materials		0.7	0.2	0.5
	PC3. document the sample details and prepare bags/ modules of the sample collected		0.7	0.2	0.5
	PC4. mark and label the samples as per standard quality management procedure		0.7	0.2	0.5
	PC5. avoid contamination of samples		0.7	0.2	0.5
	PC6. seal and send samples for testing to laboratory		0.7	0.2	0.5
	PC7. follow prescribed Quality Managment Systems		0.7	0.2	0.5
	PC8. identify the most appropriate equipment for QC testing as per standard quality management procedure, e.g., for solvent, or packaging material (plastic, tin, carton) or for extender powder or resin		0.7	0.2	0.5
	PC9. use recommended test and measurement process manual for tesing the sample		0.7	0.2	0.5
	PC10. create paint batch and record any R&D changes		0.7	0.2	0.5
	PC11. follow ISO standards as applicable		1	0.2	0.8

Qualifications Pack For QC Chemist (RM and FG)

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC12. use designated space for sample storage as per recommended standards, such as ambient temperature, moisture level, pests, theft and fire safety		1	0.2	0.8
	PC13. if possible, suggest remedy for materials that have failed tests		1	0.2	0.8
	PC14. conduct regular and exceptional testing as per the established standards for specific product categories		1	0.2	0.8
	PC15. test for retention period of materials as well as specified quality for production		1	0.2	0.8
	PC16. conduct tests such as specific gravity, water content, evaporation ratio, etc. for solvent		1	0.2	0.8
	PC17. conduct tests on powders such as appearance, colour, brightness, water, purity		1	0.2	0.8
	PC18. conduct practical trials for recommended raw materials samples and check against prescribed standards and declared standards		1	0.2	0.8
	PC19. conduct checks on drying time, viscosity, solid content, etc.		1	0.2	0.8
	PC20. conduct tests on packaging materials, e.g., look, appearance, weight, dimension, drop test, bursting strength of carton, ply-strength, age classifying test		1	0.2	0.8
	PC21. use brightness meter, melting point meter, gas liquid chromatography for solvent test, moisture analyser, Karl-Fischer instrument for water content, etc.		1	0.2	0.8
	PC22. analyse the results and findings and suggest appropriate corrective action in consultation with manufacturing / production incharge		1	0.2	0.8
	PC23. conduct regular and exceptional testing as per the established standards for specific product categories		1	0.2	0.8
	PC24. use dispersion gauge		1	0.2	0.8
	PC25. measure viscosity using instrument such as rotothinner		1	0.2	0.8
	PC26. use glossometer for checking gloss level		1	0.2	0.8
	PC27. use Elcometer for film thickness test		1	0.2	0.8

Qualifications Pack For QC Chemist (RM and FG)

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC28. check performance on wall or metal or wood for the paint type		1	0.2	0.8
	PC29. check corrosion resistance in salt-spray chamber		1	0.2	0.8
	PC30. check UV resistance using weatherometer		1	0.2	0.8
	PC31. conduct pencil hardness test		1	0.2	0.8
	PC32. use stone chip resistance machine for resistance to gravel, etc.		1	0.2	0.8
	PC33. use barcoding machine		1	0.2	0.8
	PC34. use incubation chamber for logevity test		1	0.2	0.8
	PC35. use ambient guage to measure surface condition before applying panis and coats		1	0.2	0.8
	PC36. analyse the results and findings and suggest appropriate corrective action in consultantation with manufacturing / production incharge		1	0.2	0.8
	PC37. ensure zero defect in finished product as per specified standards		1	0.2	0.8
	PC38. check packaging of finished goods, e.g., type of packaging, damage, etc.		1	0.2	0.8
	PC39. check labelling is accurate and as per agreed/ spcified standards for the batch		1	0.2	0.8
	PC40. ensure timely and safe dispatch of batch of finished goods to warehouse, without any logistics damage		1	0.2	0.8
	PC41. record results and findings as per the established reporting and documentation templates		1	0.2	0.8
	PC42. document sample progression, from sampling stage to testing and production		1	0.2	0.8
	PC43. fill and dispatch copies for each batch of samples tested		1	0.2	0.8
	PC44. prepare test conformance reports with pass or reject outcomes		1	0.2	0.8
	PC45. record batch test results against prescribed tolerance level		1	0.2	0.8
	PC46. ensure data and process integrity		1	0.2	0.8

Qualifications Pack For QC Chemist (RM and FG)

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC47. calibrate the testing equipments for QC check periodically as per the standards		1	0.2	0.8
	PC48. identify defective equipment and take appropriate corrective actions		1	0.2	0.8
	PC49. clean the lab periodically, as per prescribed standards		1	0.2	0.8
	PC50. clean the test apparatus as per prescribed standards		1	0.2	0.8
	PC51. dispose materials to plant in usable condition		1	0.2	0.8
	PC52. maintain lab safety standards		1	0.2	0.8
	PC53. stacking and labelling of samples as per prescribed standards		1	0.2	0.8
	<b>POINTS</b>		<b>50</b>	<b>10.6</b>	<b>39.4</b>
	<b>TOTAL POINTS</b>		<b>50</b>		

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
<b>PCS/N9901 Coordinate with colleagues and/or customers</b>	PC1. receive job order and instructions from reporting superior	50	0.5	0.0	0.5
	PC2. understand the work output requirements, targets, performance indicators and incentives		2.0	0.5	1.5
	PC3. deliver quality work on time and report any anticipated reasons for delays		2.0	0.5	1.5
	PC4. escalate unresolved problems or complaints to the relevant senior		2.0	0.5	1.5
	PC5. communicate maintenance and repair schedule proactively to the superior		2.0	0.5	1.5
	PC6. receive feedback on work standards		1.0	0.0	1.0
	PC7. document the completed work schedule and handover to the superior		2.0	0.5	1.5
	PC8. exhibit trust, support and respect to all the colleagues in the workplace		1.0	0.25	0.75
	PC9. aim to achieve smooth workflow		2.0	0.5	1.5
	PC10. help and assist colleagues with information and knowledge		1.0	0.0	1.0
	PC11. seek assistance from the colleagues when required		1.0	0.25	0.75
	PC12. identify the potential and existing conflicts with the colleagues and resolve		1.0	0.25	0.75
	PC13. pass on essential information to other colleagues on timely basis		1.0	0.0	1.0

Qualifications Pack For QC Chemist (RM and FG)

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC14. maintain the etiquette, use polite language, demonstrate responsible and disciplined behaviors to the colleagues		2.0	0.5	1.5
	PC15. interact with colleagues from different functions clearly and effectively on all aspects to carry out the work among the team and understand the nature of their work		1.0	0.25	0.75
	PC16. put team over individual goals and multi task or share work where necessary supporting the colleagues		2.0	0.0	2.0
	PC17. highlight any errors of colleagues, help to rectify and ensure quality output		1.0	0.25	0.75
	PC18. work with cooperation, coordination, communication and collaboration, with shared goals and supporting each other's performance		1.0	0.0	1.0
	PC19. ask more questions to the customers and identify their needs		1.0	0.25	0.75
	PC20. possess strong knowledge on the product, services and market		2.0	0.5	1.5
	PC21. brief the customers clearly on potential costs and hazards		1.0	0.25	0.75
	PC22. communicate with the customers in a polite, professional and friendly manner		1.0	0.25	0.75
	PC23. build effective but impersonal relationship with the customers		0.5	0.25	0.25
	PC24. ensure the appropriate language and tone are used with customers		1.0	0.25	0.75
	PC25. listen actively and have a two way communication		1.0	0.25	0.75
	PC26. be sensitive to the gender, cultural and social differences such as modes of greeting, formality, etc.		1.0	0.25	0.75
	PC27. understand the customer expectations correctly and provide the appropriate products and services		2.0	0.5	1.5
	PC28. understand the customer dissatisfaction and address or escalate their complaints effectively		2.0	0.5	1.5
	PC29. maintain a positive, sensible and cooperative manner all time		1.0	0.25	0.75
	PC30. ensure to maintain a proper body language, dress code, gestures and etiquettes towards the customers		1.0	0.25	0.75
	PC31. avoid interrupting the customers while they talk		1.0	0.0	1.0
	PC32. ensure to avoid negative questions and statements to the customers		1.0	0.0	1.0

Qualifications Pack For QC Chemist (RM and FG)

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC33.inform the customers on any issues or problems before hand and also on the developments involving them		2.0	0.5	1.5
	PC34. ensure to respond back to the customer immediately for their voice messages, e-mails, apps, etc.		1.0	0.0	1.0
	PC35. develop good rapport with the customers and promote other products and services		2.0	0.5	1.5
	PC36. seek feedback from the customers on their understanding to what was discussed		1.0	0.0	1.0
	PC37. explain the terms and conditions clearly		2.0	0.5	1.5
	<b>POINTS</b>		<b>50</b>	<b>10</b>	<b>40</b>
	<b>TOTAL POINTS</b>			<b>50</b>	

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
<b>PCS/N9902 Maintain standards of product/ service quality</b>	PC1. keep in mind the profiles of expected customers	50	2.0	0.5	1.5
	PC2. understand the target customers and their product/ service quality requirements as defined by the company		3.0	0.5	2.5
	PC3. receive superior's/ customer feedback regularly		2.0	0.0	2.0
	PC4. aim to build a good connect with the customers through quality product/ service		2.0	0.5	1.5
	PC5.keep tab on frequent discussions with regular customers on general likes and dislikes in the market, latest trends, customer expectations, etc.		2.0	0.5	1.5
	PC6. receive updates on regular feedbacks from the clients on current service, complaints, and improvements to be made, etc.		2.0	0.5	1.5
	PC7. if necessary, compulsively seek customer rating of product/ service in order to help develop a set of regularly improved procedures		2.0	0.5	1.5
	PC8. demonstrate quality orientation at all level		4.0	1.5	2.5
	PC9. aim to gain their long lasting loyalty through satisfaction		3.0	1.0	2.0
	PC10. ensure 100% customer satisfaction via product/ service quality		3.0	0.5	2.5
	PC11.treat the customers fairly and with due respect		3.0	0.5	2.5
	PC12. focus on executing company's marketing strategies and product		3.0	1.0	2.0

Qualifications Pack For QC Chemist (RM and FG)

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	development needs				
	PC13. focus on enhancing brand value of company by maintaining or enhancing quality standards		3.0	1.0	2.0
	PC14. ensure that customer expectations are met		2.0	0.5	1.5
	PC15. learn to read customers' needs and wants		2.0	0.5	1.5
	PC16. willingly accept and implement new and innovative products and services that help improve customer satisfaction		3.0	1.0	2.0
	PC17. communicate feedback of customer to senior, especially, the negative feedback		2.0	0.5	1.5
	PC18. maintain close contact with the customers and focus groups		2.0	0.5	1.5
	PC19. offer promotions to improve product satisfaction level to the customers periodically		3.0	1.0	2.0
	PC20. weigh the cost of fulfilling unscheduled customer requests, consult with senior and advise the customer on alternatives		2.0	0.5	1.5
	<b>POINTS</b>		<b>50</b>	<b>13</b>	<b>37</b>
	<b>TOTAL POINTS</b>			<b>50</b>	

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
<b>PCS/N9903 Maintain O&amp;HS standards and follow environmental norms</b>	PC1. assess the various health, safety and environmental hazards in the work areas	50	1.5	0.4	1.1
	PC2. take necessary steps to eliminate or minimize the hazards		1.0	0.4	0.6
	PC3. analyze the causes of accidents at the workplace		1.5	0.4	1.1
	PC4. suggest measures to prevent such accidents from taking place		1.5	0.4	1.1
	PC5. take preventive measures to avoid risk of burns and other injury due to contact with hot surfaces, gas, fire, hot fluids/ liquids, etc.		1.5	0.4	1.1
	PC6. suggest methods to improve the existing safety procedures at the workplace		1.5	0.4	1.1
	PC7. dispose waste in the designated areas safely as per company's policies and rules		1.5	0.4	1.1
	PC8. maintain appropriate ventilation in the rooms while there is more exposure to paint vapours		1.0	0.4	0.6

Qualifications Pack For QC Chemist (RM and FG)

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	PC9. avoid dumping unused cans to safeguard the environment		1.0	0.0	1.0
	PC10. be aware of the locations of fire extinguishers, emergency exits, etc.		1.0	0.4	0.6
	PC11. practice correct emergency procedures		1.5	0.4	1.1
	PC12. check and review the storage areas frequently		1.5	0.4	1.1
	PC13. stack items in an organized way and use safe lifting techniques to reduce risk of injuries from handling procedures at the storage areas		1.5	0.4	1.1
	PC14. ensure to be safe while handling materials, tools, acids, chemicals, equipment, etc.		1.0	0.4	0.6
	PC15. store the chemicals and acids in a well-ventilated and locked areas with warning signs displayed		1.5	0.4	1.1
	PC16. ensure safe techniques while moving furniture and fixtures		1.5	0.4	1.1
	PC17. ensure to reduce risk of injury from use of electrical tools		1.5	0.4	1.1
	PC18. read the manufacturer's manual carefully before use of any equipment		1.0	0.0	1.0
	PC19. unplug the electrical equipment before performing maintenance		1.0	0.4	0.6
	PC20. keep the floors free from oil, water and grease to avoid slippery surface		1.0	0.4	0.6
	PC21. use rubber mats in the places where floors are constantly wet		1.0	0.0	1.0
	PC22. ensure safety from injuries of cuts to loss of fingers, while handling sharp hazardous tools and equipment		1.5	0.4	1.1
	PC23. use flat surfaces, secure holding and protective wear while using such sharp tools		1.5	0.4	1.1
	PC24. use health, safety and environmental protection practices for storing, cleaning, and maintaining tools, equipment, and supplies		1.5	0.4	1.1
	PC25. practice ergonomic lifting, bending, or moving equipment and supplies		1.5	0.4	1.1
	PC26. identify the requirement for maintaining environmental norms		1.0	0.4	0.6
	PC27. comply with the environmental safety norms while on work to prevent accidents and health hazards		1.0	0.4	0.6
	PC28. follow company policies and rules regarding use of hazardous materials to avoid health, safety and environmental impacts		1.0	0.4	0.6

Qualifications Pack For QC Chemist (RM and FG)

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
	caused by them				
	PC29. ensure the employees have access to first aid kit when needed		1.0	0.0	1.0
	PC30. ensure all equipment and tools are stored and maintained properly and safe to use		1.0	0.4	0.6
	PC31. ensure to use personal protective equipment and safety gear such as gloves, mask, headwear, footwear, glasses, goggles, etc. for specific tasks and work conditions where required		1.5	0.4	1.1
	PC32. ensure to display safety signs at places where necessary for people to be cautious		1.5	0.4	1.1
	PC33. ensure electrical precautions such as insulated clothing, adequate equipment insulation, dry work area, switch off the power supply when not required, etc.		1.5	0.4	1.1
	PC34. ensure availability of general health and safety equipment such as fire extinguishers, first aid equipment, safety equipment, clothing, safety installations such as fire exits, exhaust fans, etc.		1.5	0.4	1.1
	PC35. document all the first aid treatments, inspections, etc., conducted to keep track of the safety measures undertaken		1.0	0.4	0.6
	PC36. document all the environmental hazards caused and the measures undertaken to comply with the established safety procedures of the workplace		1.0	0.0	1.0
	PC37. report to the supervisor on any problems and hazards identified and any breach of environmental procedures.		1.0	0.4	0.6
	PC38. ensure zero accident at workplace		1.0	0.4	0.6
	PC39. adhere to safety standards and ensure no material damage		1.0	0.4	0.6
	PC40. take necessary action and correct any environmental hazards caused		1.0	0.4	0.6
	<b>POINTS</b>		<b>50</b>	<b>14</b>	<b>36</b>
	<b>TOTAL POINTS</b>			<b>50</b>	

	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
<b>PCS/N9904</b> <b>Maintain IPR of organisation and</b>	PC1. prevent leak of new plans and designs to competitors by reporting on time	50	7.0	0.0	7.0
	PC2. be aware of any of company's product		8.0	1.0	7.0



	Performance Criteria	Total Marks (250)	Out of	Theory	Skills Practical
customer	or design patents				
	PC3. report IPR violations observed in the market, to supervisor or company head		8.0	2.0	6.0
	PC4. read copyright clause of the material published on the internet and any other printed material		8.0	0.5	7.5
	PC5. protect infringement upon customer's business or design plans		8.0	2.0	6.0
	PC6. consult supervisor or senior management when in doubt about using information available from customer		6.0	0.0	6.0
	PC7. report any infringement observed by anyone in the company		5.0	0.0	5.0
	<b>POINTS</b>		<b>50</b>	<b>5.5</b>	<b>44.5</b>
	<b>TOTAL POINTS</b>			<b>50</b>	
	<b>GRAND TOTAL</b>	<b>250</b>			