

<b>IMIVPR05</b>	<b>IMIARC09</b>
<b>Apply fillers and foundation materials in an automotive environment</b>	<b>Prepare and apply foundation materials to motor vehicles</b>
	<b>Overview</b>
This standard is about identifying substrates and mixing and applying fillers and foundation materials to vehicles.	This NOS is about identifying substrates including any unrecorded damage, mixing and adjusting the viscosity of fillers and foundation materials, applying fillers and foundation materials.
<b>Performance criteria</b>	<b>Performance criteria</b>
You must be able to:	You must be able to:
P1 use the appropriate personal protective equipment when carrying out the preparation and application of foundation materials	P1 use the appropriate personal protective equipment when carrying out the preparation and application of foundation materials
P2 protect the vehicle and its contents effectively when carrying out the preparation and application of foundation materials	P2 protect the vehicle and its contents effectively when carrying out the preparation and application of foundation materials
P3 support the preparation and application activities by reviewing:	P3 support the preparation and application activities by reviewing:
P3.1 foundation material data	P3.1 foundation materials data
P3.2 work instructions	P3.2 work instructions
P4 prepare, check and adjust all the equipment required, following manufacturer's instructions, prior to use	P4 prepare, test and adjust all the equipment required following manufacturer's instructions, prior to use
P5 apply the correct type of fillers and stoppers to rectify substrate defects, when necessary	P5 apply the correct type of fillers and stoppers to rectify substrate defects, when necessary
P6 promptly and accurately report any unrecorded damage to substrates and ancillary equipment to the relevant person(s)	P6 report any unrecorded damage to substrates and ancillary equipment to the relevant person(s) promptly and accurately
P7 mix all the foundation materials required following health and safety requirements and using:	P7 mix all the foundation materials required following health and safety requirements and using:
P7.1 suitable compatible materials	P7.1 suitable compatible materials
P7.2 the approved method	P7.2 the approved method
P7.3 the approved equipment	P7.3 the approved equipment
P8 apply all the foundation materials required following health and safety requirements and using:	P8 apply all the foundation materials required following health and safety requirements and using:
P8.1 the approved method	P8.1 the approved method
P8.2 the approved equipment	P8.2 the approved equipment
P9 dry and cure foundation materials following health and safety requirements and using:	P9 dry and cure foundation materials following health and safety requirements and using:
P9.1 the approved method	P9.1 the approved method
P9.2 the approved equipment	P9.2 the approved equipment
P10 ensure the finished surface is suitable to accept the next process	P10 ensure the finished substrate is suitable to accept the next process
P11 dispose of waste materials to conform with legal, environmental and workplace requirements	P11 dispose of waste materials to conform with legal, environmental and workplace requirements
P12 leave tools, equipment and work environment in a clean and serviceable condition, as appropriate	P12 leave all application equipment in a clean and serviceable condition and return it to the correct location
P13 complete all preparation and application activities within the agreed timescale and to an agreed quality control process	P13 complete all preparation and application activities within the agreed timescale
P14 promptly report any anticipated delays in completion to the relevant person(s)	P14 report any anticipated delays in completion to the relevant person(s) promptly
<b>Knowledge and understanding</b>	<b>Knowledge and understanding</b>
You need to know and understand:	You need to know and understand:
	<b>Legislative and organisational requirements and procedures</b>
K1 the health and safety legislation and workplace procedures relevant to workshop practices and personal and vehicle protection	K1 the health and safety legislation and workplace procedures relevant to workshop practices and personal and vehicle protection
K2 the importance of disposing of waste safely in compliance with any relevant environmental procedures and the consequences of not doing so to the business, others and the environment	K2 the importance of disposing of waste appropriately and the consequences of not doing so to others, the business and the environment
K3 the importance of selecting, using and maintaining the appropriate personal and vehicle protective equipment when preparing and applying foundation materials	K3 the importance of selecting, using and maintaining the appropriate personal protective equipment when preparing and applying foundation materials

K4	the vehicle work specification agreed	K4 the vehicle work specification agreed
K5	your workplace procedures for:	K5 your workplace procedures for:
K5.1	the referral of problems	K5.1 the referral of problems
K5.2	reporting of delays to the completion of work	K5.2 reporting of delays to the completion of work
K5.3	the use of personal protection	K5.3 personal protection
K6	the requirements for protecting the vehicle and contents from damage before, during and after preparing and applying foundation materials	K6 the requirements for protecting the vehicle and contents from damage before, during and after preparing and applying foundation materials
K7	the importance of working to agreed timescales and keeping others informed of progress	K7 the importance of working to agreed timescales and keeping others informed of progress
K8	the relationship between time, cost and productivity	K8 the relationship between time and cost
K9	the importance of promptly reporting anticipated delays to the relevant person(s)	K9 the importance of reporting anticipated delays to the relevant person(s) promptly
		<b>Equipment</b>
K10	how to prepare, check and adjust all the equipment required for the preparation and application of foundation materials	K10 how to prepare, test and adjust all the equipment required for the preparation and application of foundation materials
K11	how to select use and adjust measuring equipment, paint mixing and application equipment, heating and drying equipment (including spray booths), fume and dust extraction, air supply systems and air fed breathing apparatus	K11 how to use viscosity measuring equipment, paint mixing and application equipment, heating and drying equipment, fume and dust extraction, air supply systems, and air fed breathing apparatus
K12	spray gun faults, their cause and their rectification	K12 spray gun faults, their cause and their rectification
		<b>Materials</b>
K13	how to mix and prepare foundation materials	K13 how to prepare foundation materials
K14	the properties of foundation materials	K14 the properties of foundation materials
K15	the factors affecting the choice and use of foundation materials	K15 the factors affecting the choice and use of foundation materials
K16	the principles of paint mixing and the importance of the right additive in the correct ratio	K16 the principles of paint mixing and the importance of the right additive (hardener or thinner) in the correct ratio
K17	the curing and drying recommendations for various fillers and foundation materials	K17 the curing and drying recommendations for various fillers and foundation materials
		<b>Preparation and application of foundation materials</b>
K18	how to find, interpret and use sources of information relevant to the mixing and application of foundation coatings	K18 how to find, interpret and use sources of information relevant to the mixing and application of foundation coatings
K19	how to condition and clean substrates prior to the application of foundation coats	K19 how to condition and clean substrates prior to the application of foundation coats
K20	how to rectify substrate defects	K20 how to rectify substrate defects
K21	how to apply foundation coatings	K21 how to apply foundation coatings
K22	how to avoid application defects	K22 how to avoid application defects
K23	how to dispose of waste materials in compliance with any environmental requirements/legislation and workplace procedures	K23 how to dispose of waste materials following environmental requirements
K24	how to work safely avoiding damage to vehicles, injury to yourself and injury to colleagues	K24 how to work safely avoiding damage to vehicles, personal injury and injury to colleagues
K25	the importance of viscosity and its effect on the surface finish	K25 the importance of viscosity and its effect on the substrate finish
K26	the importance of cleaning and using the correct foundation material to ensure adequate adhesion of the paint system	K26 the importance of proper cleaning and using the correct foundation material to ensure adequate adhesion of the paint system
K27	the manufacturer's approved instructions for working when applying foundation materials	K27 the manufacturer's approved instructions for working when applying foundation materials
K28	the implications of not following an agreed quality control process	
		<b>Scope/range</b>
		<b>1 Equipment is:</b>
		1.1. viscosity measuring
		1.2. paint mixing and application equipment
		1.3. paint rollers
		1.4. spray booth
		1.5. heating and drying equipment

	1.6. air fed breathing apparatus
	<b>2 Foundation materials are:</b>
	2.1. etch primers
	2.2. primer fillers
	2.3. primer surfacers
	2.4. stoppers
	2.5. anti-stone chip treatments
	2.6. anti-corrosion treatments
	<b>3 Materials are:</b>
	3.1. chemical cleaning agents
	3.2. conditioning agents
	3.3. dilutants and hardeners
	3.4. adhesion promoters
	<b>4 Substrate defects are:</b>
	4.1. stone chips
	4.2. scratches
	4.3. pin holes
	<b>5 Substrates are:</b>
	5.1. electro-coated panels
	5.2. repaired panels
	5.3. original manufacturer's finish
	5.4. plastic components