



Code	Colors
509	Colori a richiesta
B509	Binder per serie MCS

Description product

Ultra High Solid polyacrylic enamel, extremely bright and durable, made with special high-quality raw materials, enriched with special additives that make the surface highly resistant to chemical and mechanical agents. Additionally, it imparts distinct characteristics to the coating, such as ease of cleaning, very high scratch resistance, and long-lasting brilliance. It is a two-component product with a non-yellowing aliphatic isocyanate curing agent to be mixed at the time of use. The product has specific features for use as a premium finish in the automotive, industrial bodywork, and marine sectors.



Mixing ratio	Vol	Weght (g)
Component A	S.509	- 100
Hardeners	H47 series	- 50
Thinner	T40 Series	>10 <20



Pot-Life at 20°C

With hardeners H472 Slow-H4755 Medium	4 h
With hardener H477 Fast	3,5 h
<i>The high temperature to less the pot-life time</i>	



Example mixing ratio tab	Quantity to be made									
Comp. A	g ±	100	150	250	300	500	600	800	1000	1500
Hardener	g ±	50	75	125	150	250	300	400	500	750
Thinner	g ±	10	15	25	30	50	60	80	100	150



Preparation of the support

Raw Iron	Sandblast or sand the support with P240-P320 paper, degrease with T90 series, finally apply 2-3 coats of Epoxy Primer as an anti-corrosive. Finally complete the work by applying 2 coats of 2K Gloss Boat Ceramic.
Old painting	Sand the support with P240-P320 paper, degrease with T90 series, apply 1 maximum 2 coats of Epoxy Primer as an insulator, finally complete the work by applying 2 coats of 2K Gloss Boat Ceramic.
Aluminum and light alloys	Sand the support with very fine abrasive fibre, degrease with T90 series, apply 1 coat of Epoxy Primer as a primer, taking care to create a low thickness. Finally complete the work by applying 2 coats of 2K Gloss Boat Ceramic.
Galvanized still	Sand the support with very fine abrasive fibre. Degrease the surface with our phosphating degreaser with X550. Apply a light coat of Epoxy Primer as a primer, taking care to create a light coat. Finally complete the work by applying 2 coats of 2K Gloss Boat Ceramic.
Generic plastics	Sand with very fine abrasive fibre. Then clean and degrease with T90 series, then apply a light coat of Plastic Primer 8700 as an adhesion promoter, alternatively it is also possible to use Epoxy Primer as a primer. Complete the job by applying 2 coats of 2K Gloss Boat Ceramic. Important note; It is mandatory to always carry out a specific adhesion test on plastic. If the test fails, it is advisable to repeat it, taking care to flame the surface before repeating the test. If this operation is not successful either, it is necessary to send a sample of the plastic to be treated to our R&D laboratory so that we can evaluate the right cycle to apply.



Tools	Ø
Gravity Air Gun at high performance	1,3-1,4
HVLP Gravity Air Gun	1,3-1,4



Layers	
Full coats	2
By full coats we mean full coverage application starting from the 1st coat.	



Available hardeners

Slow	Medium	Fast
H402	H405	H407
H502	H505	H507

Hardeners packaging

12X0,5L - 4X2,5L	12X0,5L - 4X2,5L	12X0,5L - 4X2,5L
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Application

Spray pressur (to the gun)	Bar	2,0-2,2
Distance from support	Cm	15-20
Thickness for layer	µm	>50



Drying

	20°C	60°C	IR
Time between coats	10'-15'	-	ND
Repaintable *	15'-20'	-	ND
Time first start of paint curing	10'-15'	-	ND
Dry dust	30'-40'	-	ND
Dry to the touch	50'-60'	20'-25'	ND
Deep drying	10-12 h	45'+10'	ND
Dry for assembly	9-10 h	45'+10'	ND
Polishability	9-10 h	45'+10'	ND
Maximu chemical resistance	7 gg	45'+1g	ND

After 24 hours, if an additional coat of paint is needed, sanding the surface is required.



Direct application on painted surfaces

Yes / No

2K Polyester putty's and primers	Yes*
2K Acrylic Primers	Yes
2K Acrylic Primers	Yes
Old strong painting	Yes
Alchydic paints	NO

We recommend isolating first with our 2K Epoxy Primer 680 series



Repaintable with

Yes / No

Fondi acrilici 2K a solvente	Yes
2K Acrylic Primers	Yes
1K acrylic base matt (solvent & waterborne)	Yes
2K Acrylics and Polyurethane finish	Yes
1K Nitrocellulose and Alchyd finish	Yes



Packaging

Box

1Kg (upon request)	6 Pz
5Kg (upon request)	4 Pz
20 Kg (upon request)	1 Pz
0,7 Kg Binder per MCS	6 Pz
3,5 Kg Binder per MCS	2 Pz
14 Kg Binder per MCS	1 Pz



Physical properties

Appearance product	Liquid
Appearance dried	95-98 gloss (indicative)
Smell	Solvent typical
Specific weight colors	1,3 Kg./L (± 5%) (medium)
Specific weight binder	1,0 Kg./L (± 5%)
Dry Residue	>60<55% (medium)
Paint coverage m ² /L	8-10 m ²
V.O.C. (Binder)	VOC (Dir. 2010/75/CE):42,94%-428,54 gr/L
V.O.C. (prodotto finito)	ND



Storage time

>5°C <35°C

Shelf-Life	2 anni
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Precautions and general safety

Before use, read the safety data sheet carefully.



Precautions and individual safety

Use appropriate respiratory protection. Setra Vernici recommends the use of a respirator for fresh air supply.



Warnings

The information contained herein is based on laboratory tests and our current knowledge. We reserve the right to make changes to the product's characteristic data in relation to technological progress or production developments. Due to factors beyond our control during the product's application phase, the information provided here does not constitute a warranty for specific product specifications or its suitability for a particular application. In the event of proven liability, it will be limited to the value of the products supplied and used by the user. However, we guarantee the consistency of quality in our products. We are responsible for the product only within the framework of the General Sales Conditions. This Technical Data Sheet supersedes all previous versions.

F.A.Q.	Causes	How to avoid the defect	Remedy
The film shows the presence of water bubbles on the surface of the finish.	<p>Condensation water present in the compressed air system;</p> <p>Existing water on the substrate not removed before painting;</p> <p>Pre-existing water-based primer or base not perfectly dry and/or compatible with the finish;</p> <p>Water splashes from sources outside the painting process accidentally deposited on the film.</p>	<p>Check and periodically maintain the air system by purging any traces of existing water inside the compressor and the system itself;</p> <p>Equip the system with moisture-filtering and/or air dryers;</p> <p>Avoid applications in adverse climatic conditions such as particularly humid and drizzly days, especially if the application is carried out outside the spray booth.</p>	<p>Wait for the film to be completely dried, then:</p> <ol style="list-style-type: none"> 1) In more extreme cases: sand and prepare the object for repainting with the finish; 2) In less evident cases: sand with P1200-P1500 and proceed with polishing.
The film shows the existence of areas with more or less extensive reduced gloss compared to the overall result.	<p>This type of defect can occur immediately after painting or even after a more or less short period. In cases where the defect occurs immediately, the main causes could be:</p> <ol style="list-style-type: none"> 1. Inconsistent air pressure and/or incorrect distance between the substrate and the airbrush; 2. Use of solvents and/or catalysts that are too fast and do not allow the absorption of spray fumes; 3. Malfunctioning of the spray booth ventilation system; 4. Substrate absorption due to the use of aggressive diluents and/or catalysts. <p>If the defect appears in the short to medium term, the causes may be:</p> <ol style="list-style-type: none"> 1. When the affected areas coincide with areas pre-treated with putty and/or primers, probable absorption of the substrate cycle caused by too high a thickness and/or not perfectly dried. 	<p>Adhere scrupulously to the thicknesses indicated in the technical data sheet of the preparation primers used;</p> <p>Wait before painting with the finish until the substrate is perfectly dried;</p> <p>Use high-quality preparation primers; it is emphasized that to achieve an excellent final result, it is necessary to start with excellent preparation;</p> <p>Do not expose the freshly painted substrate to irregular heat sources such as hot air flows directed directly onto a freshly painted area of the substrate.</p>	<p>Wait for the film to be completely dried, then:</p> <ol style="list-style-type: none"> 1) In more extreme cases, repainting of the object is necessary after appropriate sanding of the paint film; 2) In less evident cases, polishing of the film is sufficient, using conventional polishing cycles.
The dried film has an unlevelled and smooth surface with the typical unsightly appearance of orange peel.	<p>Spray pressure too low;</p> <p>Application of paint layers that are too dry and do not sufficiently wet the support;</p> <p>High distance between airbrush and support;</p> <p>Adjustment of the airbrush in relation to the quantity of paint to be sprayed;</p> <p>Failure to respect the drying times between the first coat and the second;</p> <p>Application of the first coat too dry (so-called anchoring half coat);</p> <p>Use of thinners that are too fast;</p> <p>Operating temperature too high;</p> <p>Excessive and/or insufficient paint thickness;</p>	<p>Apply following what is indicated in the technical data sheet regarding the size of the nozzle and the air pressure;</p> <p>Use catalysts and thinners appropriate for ambient temperatures;</p> <p>Do not apply the product at excessively hot temperatures, a maximum of 25/30°C, using thinners and slow catalysts;</p> <p>Apply the first coat immediately, wetting the support well;</p> <p>Avoid the so-called first coat of anchoring coat, this technique with some products creates this type of problem irreparably;</p>	<p>When the film is totally dried:</p> <ol style="list-style-type: none"> 1) Sand the film with very fine paper (P1500-P2000), complete by polishing the support with the usual polishing cycle; 2) In cases that are not particularly obvious and on surfaces that are not particularly large, it is possible to directly polish the film using our Denim disc combined with our One-Shot paste; 3) In particularly obvious cases it will be necessary to sand with P800 and repeat the painting;
Presence of paint drips which normally occur on vertically painted surfaces.	<p>Application of excessive product in one solution;</p> <p>Excessive dilution;</p> <p>Pressure too high;</p> <p>Failure to wait for the correct drying times between hands;</p> <p>Hardener and/or Thinner too slow based on surrounding ambient temperatures;</p> <p>Airbrush incorrectly adjusted;</p> <p>Airbrush nozzle too large;</p>	<p>Respect the thicknesses recommended in the technical data sheet;</p> <p>Respect the drying times between one coat and the other;</p> <p>Use a suitable airbrush with a nozzle suitable for the product to be applied as indicated in the technical data sheet;</p> <p>Use catalysts and thinners indicated as suitable and suitable for environmental temperatures;</p> <p>Respect the catalysis and dilution percentages indicated in the technical data sheet;</p>	<p>Wait until the film is completely dry, then:</p> <ol style="list-style-type: none"> 1) Sand the area involved in the dripping, smoothing the surface until the dripping is completely eliminated and proceed with polishing;

F.A.Q.	Causes	How to avoid the defect	Remedy
Peeling of the paint film from the underlying substrate.	<p>If the detachment is partial and non-uniform:</p> <ul style="list-style-type: none"> - The primer involves sanding but has not been sanded; - The primer has been sanded with an unsuitable fine-grade paper for the type of finish; - The primer has been sanded, but too much time has elapsed between sanding and final painting; - The primer has not been uniformly degreased and/or unsuitable or low-quality products have been used for this purpose. <p>If the detachment is total and uniform:</p> <ul style="list-style-type: none"> - Application of the finish under adverse climatic conditions such as excessive heat or high humidity; - Prolonged drying times between coats or excessive total finish thickness. 	<p>Thoroughly clean the sanded primer using specific and high-quality degreasers, such as our T90 series;</p> <p>Adhere to the drying times between coats and achievable thicknesses as indicated in the technical data sheet;</p> <p>Pay attention to the type of primer used; some primers have very precise repaint times;</p> <p>Follow the sanding cycle according to the recommended grits specified in the technical data sheet of the chosen primer;</p> <p>Do not apply on excessively hot surfaces, and do not expose the freshly painted object to strong heat sources.</p>	<p>In this case, it is necessary to redo the work:</p> <ol style="list-style-type: none"> 1) Sand until obtaining a perfectly smooth surface ready for painting and repeat the painting. Normally, it is not necessary to reapply the primer as well, but if during the sanding process the circumstance of uncovering the substrate occurs, it will be necessary to reapply the primer, at least in the areas that have been uncovered, to avoid the onset of other issues.
The film appears hazy and not perfectly glossy.	<ol style="list-style-type: none"> 1. Presence of excessive humidity during or immediately after application; 2. Unsuitable thinner; 3. Exposure of the painted object to sources of excessive air; 4. Exposure to drying with an IR lamp at excessive temperature or with a distance from the substrate that is too short; 5. Exposure of the substrate to localized heat sources; 6. Application at incorrect pressures. 	<ol style="list-style-type: none"> 1. Avoid application in unfavorable weather conditions; 2. Do not wet the floor before painting; 3. Use only thinners indicated as suitable in the technical data sheet; 4. Do not expose the painted surface to sources of excessive and/or localized heat or forced air; 5. Ensure that the compressed air system operates correctly and consistently. 	<p>Attend for the film to be completely dried, then:</p> <ol style="list-style-type: none"> 1) Sand the area, preparing it for the polishing cycle, and proceed with the polishing itself; 2) In particularly evident cases, repeat the painting, taking care to follow the above instructions.
The dried film shows the presence of more or less dense micro-craters, randomly distributed, which are sometimes very evident, and sometimes, to be noticed, it is necessary to observe the painting very carefully.	<ol style="list-style-type: none"> 1. Excessively high thickness applied without respecting the proper drying times between coats; 2. Use of overly fast solvents based on ambient temperatures; 3. Use of a Hardener that is too fast based on ambient temperatures; 4. Excessive oven temperature during and/or after the clearcoat application; 5. Exposure of the object to the sun immediately after the clearcoat application; 6. Too short drying times between coats; 7. Too short drying times between coats; 8. Poor dilution of the product. 	<ol style="list-style-type: none"> 1. Adhere to the spraying viscosity specified in the technical data sheet; 2. Adhere to the drying times between coats; 3. Adhere to the dilution and catalysis percentages indicated in the technical data sheet; 4. Adhere to the recommended thicknesses; 5. Use only catalysts and thinners indicated in the technical data sheet; 6. Adhere to the temperature and baking times specified in the technical data sheet; 7. Adhere to the temperature and baking times specified in the technical data sheet; 8. Use only curing aids specified in the technical data sheet (do not use other untested aids not provided for). 	<p>Wait for the film to be completely dried, then:</p> <ol style="list-style-type: none"> 1) In more extreme cases, repainting of the object is necessary after appropriate sanding of the paint film; 2) In less evident cases, polishing of the film is sufficient, always after sanding with P1500 -P2000 sandpaper.
The film shows the existence of small crater-shaped pin-holes (silicones); their presence is sometimes very apparent, while in other cases, only a few sporadic occurrences are detected.	<ol style="list-style-type: none"> 1. Acetic silicone has been inadvertently used inside or in areas surrounding the spray booth; 2. Presence of oil or other greasy contamination in the compressed air line; 3. External air intakes of the spray booth positioned in a way that draws impurities from the outside, such as exhaust gases or residues expelled from diesel heating system boilers; 4. Use in the workshop of products containing silicone, such as polishers, perfumes, and/or cleaning detergents; 5. Use of unsuitable degreasing solvents; 6. Use of dirty, silicone-contaminated cloths. 	<ol style="list-style-type: none"> 1. The use of any product containing or potentially containing silicone must be completely banned from the spray area (preferably from the entire workshop); 2. Perform regular maintenance of the compressed air system, paying particular attention to possible oil leaks from the compressor unit's engine; 3. Strongly recommend the use of final-stage compressed air filters and filters before the airbrush air intake; 4. Thoroughly clean the painting substrate using strictly purpose-specific solvents and degreasers of proven quality. 	<p>Wait for the film to be completely dried, then:</p> <ol style="list-style-type: none"> 1) Sand the surface until complete leveling of imperfections, degrease with an anti-silicone like our T905, and proceed with repainting; 2) In particularly challenging cases, it is recommended to use an anti-silicone additive to be added to the paint mixture.

F.A.Q.	Causes	How to avoid the defect	Remedy
Presence on the surface of areas covered with particles and spray vapor that the film failed to reabsorb;	<p>Operating temperature too high;</p> <p>Use of hardeners and/or thinners too fast;</p> <p>Insufficient spray booth aeration;</p> <p>Persistence of the artifact inside the spray booth oven even after the vacuum function has been turned off and the booth doors have remained closed;</p>	<p>Use hardeners and thinners appropriate for actual operating temperatures;</p> <p>Use only hardeners and thinners indicated in the data sheet;</p> <p>Keep the spray booth in perfect working condition, especially the fume extraction system;</p> <p>Never leave the newly painted item inside the spray booth with the doors closed and suction off;</p>	<p>When the film is completely dried:</p> <p>1) In the most extreme cases, an application of a final coat is necessary after appropriate sanding of the paint film;</p> <p>2) In less obvious cases, a polishing of the film is sufficient, again after sanding with P1500-P2000 paper;</p>
More or less obvious lines can be glimpsed in the substrate.	<p>The last pass performed for sanding was done with too coarse a grit;</p> <p>Some sanding residue remained between the disc and the backing causing deeper scratches;</p> <p>The grit scaling passes between sandpaper passes were not respected;</p> <p>Although the grit size was respected, the marks remain because the sandpaper used did not conform to what was indicated on the back (so-called grainy papers);</p> <p>Insufficient thickness of the matte base, little thickness;</p>	<p>Strictly adhere to the steps of paper from coarser to finer scaling by 100P maximum;</p> <p>Use quality abrasive papers that comply with the FEPA table/scale that ensure their grit conforms to what is indicated on the back;</p> <p>Frequently check that the sanding disc is free of clogging or sanding residue;</p> <p>Check that the last sanding pass was made with a grit size not below P500;</p> <p>Apply the correct thickness of matte base coat as indicated in its technical data sheet;</p> <p>Always apply on perfectly dried primers;</p>	<p>When the film is completely dried:</p> <p>1) If the defect is not very evident, finely sand the affected area preparing it for re-painting and proceed with the application of the clear coat always respecting the recommended thicknesses;</p> <p>2) In cases where the lines are too deep it will be necessary to repeat the work by also applying a filler primer, sand appropriately preparing the surface for repainting as indicated in the previous point;</p>
Wrinkled areas of the paint film are present in some areas.	<p>The nature of the paint compound of the substrate cannot be overpainted with this product;</p> <p>The substrate is not perfectly dry;</p> <p>The substrate is too thick and not perfectly dried even in depth;</p> <p>Use of unsuitable dilution solvents that are too aggressive;</p> <p>If the curling is confined to the joint areas between old and new paint, weakening of the pre-existing paint layer caused by sanding that has excessively reduced its thickness, making it easily attacked;</p> <p>- If the phenomenon occurs between the first and second coats, too much time has elapsed between application between the first and second coats, a phenomenon that is more common in warm months or when hardeners and solvents are used too quickly;</p>	<p>Verify that the substrate and finish are compatible for overpaintability with this product;</p> <p>Use only the solvents indicated as suitable for diluting this product;</p> <p>In the case of critical but executable situations, use the caution to give light coats by spacing them out with sufficient time for the solvent to evaporate so that it does not attack the substrate;</p> <p>If the phenomenon occurs between the first and second coats, reduce the flash off time, evidently the temperatures are too high and the crosslinking of the first coat reaches too advanced a stage;</p>	<p>When the film is completely dried:</p> <p>1) Finely sand the wrinkled area and polish with a conventional polishing cycle;</p> <p>2) In cases which consist of situations that are too obvious, it is necessary to sand the painted substrate, preparing it to be isolated with an epoxy-based insulating primer such as our Epoxy Primer 680 series, then repeat the painting cycle as if starting from scratch;</p>
Particles of various sizes sometimes embedded in the paint, sometimes deposited on top of the paint.	<p>Dirty spray booth;</p> <p>Oven filters dirty;</p> <p>Operator's clothing soiled;</p> <p>Contaminated product;</p> <p>Unfiltered product;</p>	<p>Keep the environment clean and dust-free;</p> <p>Change spray booth filtration systems periodically;</p> <p>Use clean clothing, preferably if the operator uses quality Tyvek suits that do not shed lint (specific to painting);</p> <p>Thoroughly clean the substrate before painting;</p> <p>Filter the compound before use;</p>	<p>Wait for the film to be totally dried, thereafter:</p> <p>1) In the most extreme cases, repainting of the artifact is necessary after appropriate sanding of the paint film;</p> <p>2) In less obvious cases, a polishing of the film is sufficient, again after sanding with P1200-P1500 paper;</p>