



CAR PAINT
Automotive

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CMC GROUP HISTORY

Guangdong Chengming Chemical S&T Co., Ltd. was founded and invested by Cheng Ming (H.K.) Limited (Old Name: Hongkong International Paper Chemicals S&T Co.Ltd.) and it sets up 3 production Bases and 1 oversea branch;

2003 Dongguan Longteng Industrial
2013 Nantong Tenglong Chemical S&T
2017 Guangdong Tenglong Chem S&T
2018 Cheng Ming Chemical (Thailand)

The company is a modern high-tech papermaking chemical enterprise specializing in the production of AKD neutral, alkaline sizing agent, surface sizing agent and dry strength agent for papermaking as well as providing technical services (providing total solution service), with the production of bactericide, retention aid agents, coating aid agents and sewage treatment agent as secondary businesses.

Chengming Chemical constructed factories with a high starting point, high-profile design ideas and equipment. The company has passed the ISO9001 quality management system certification and is coupled with professional quality management team to guarantee good quality and stability of the products and ensure to provide customers with first class products.

Chengming Chemical has more than 500 employees and has set up a well-equipped and strong R&D center to develop specific products according to different needs of customers.

With over 15 years of effort, the company has been recognized by the market and we will keep pace with the times, struggle to technological innovation and continue to enhance our core competitiveness. We will adhere to the principle of customer-orientend, and create greater value for our customers with excellent quality and first-class service!

CMC (THAILAND) AT A GLANCE

In the direction of offering limitless solutions to papermaking industrial, CMC (Thailand) was established on 2018 to focus on developing extensive range of colorants to expand our service areas that can fulfill the industrial's requirements. We are building on the steps toward to the most comprehensive paper chemical company.

CMC (Thailand) started in order to promote sales nad to research the requirements of customers apart from China, so that we can more vigorously answer back to the market.

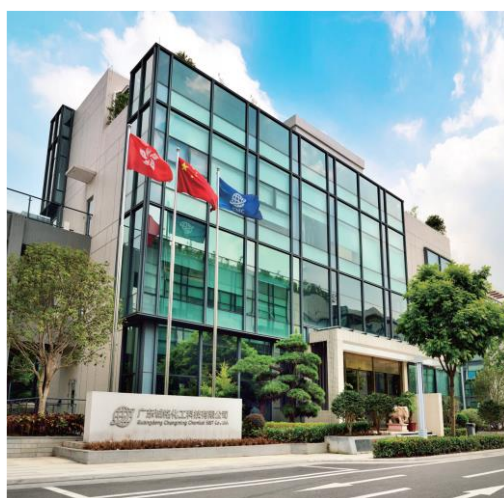
We offer various types of dyes and pigments together with CMC's high performance car paint.

We are totally committed to providing our valued business partners with quality products and solutions that match their need in every aspect.

ENTERPRISE INTRODUCTION

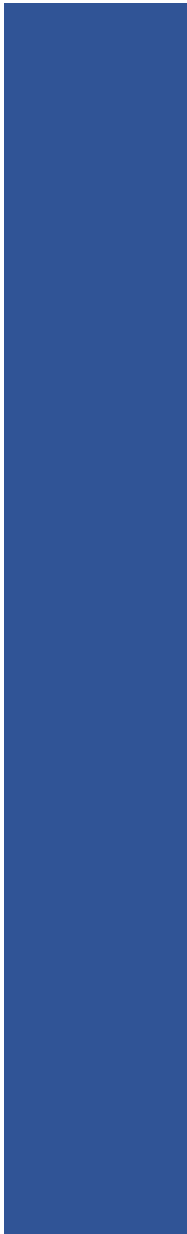


THE HISTORY OF THE DEVELOPMENT



Elite Technology

Chengming Chemical has a colorant paint for automotive technology center and a R&D center with many experienced technology researchers, equipped with excellent equipment. The centers establish strong long-term technical cooperation with many domestic research institutions. We have the ability to continuously innovate to provide our customers with comprehensive colorant paint for automotive and to help customers with environmental, social and economic sustainability.



Our Products



CMC® High Performance Car Paint & Ancillary Materials

2K Epoxy Primer

RC-D505



RC-D505 is a kind of multi use two pack epoxy primer, it has strong adhesion for most of the slashing metal substrates, it has good rust resistance for nude metal substrate.

PHYSICAL PROPERTIES

Specific Gravity	1.60-1.63 KG/L
Viscosity	80-90 S
Ingredients	Epoxy resin, pigments, fillers, solvents
Colour	Grey putty

PROCESS

	Mix Ratio (by volume)	2K Epoxy Primer RC-D505: 4 parts
		Hardener RC-G285 or RC-G286: 1 part
		Thinner RC-X 105: 1-2 parts
	Pot Life	4 hour at 20 °C
	Spray Gun & Air Pressure	Gravity type: 1.2-1.5mm, 3-4Pa
		Suction type: 1.2-1.7mm
	Spray Methode	Viscosity 15S (spray-4 cups) @20C. 1-2 layers two sprays, viscosity 19 seconds (spray-4 cups) @20C. One layer spray
	Drying Time	3 hour at 20 °C 30 minutes at 60 °C
	Sanding	Sand after the finish become drying and solid, wet sanding with P800#-P1000#
	Substrate	Nude iron
	Packaging	4KG x 4 tins/ctn
	Shelf Life	5 years

PRECAUTIONS

1. Remove oil and then sand the surface with P180 before spray, use degreaser to clean the surface. Keep it 10 minutes before spray.
2. the epoxy primer must be sanded if the drying time exceeds 24 hours at 20 °C before spraying the new surface.
3. It is a must to use the CMC® supporting hardener and thinner.
4. Close the tin cover shortly after from the tin

Unsaturated Polyester Putty

RC-D701



Two pack polyester putty. The end user can fill the pits and uneven metal surface with RC-D701.

PHYSICAL PROPERTIES

Specific Gravity	1.6-1.7 KG/L
Viscosity	Pasty mass
Ingredients	Unsaturated Polyester resin, pigments, fillers
Colour	Greyish-white

PROCESS

	Mix Ratio (by volume)	Unsaturated Polyester Putty: 100 parts
		Hardener: 2-3 part
	Pot Life	7-8 Minutes at 20 °C
	Scrape Tool	Putty knife, soft rubber or plastic coating blade
	Drying Time	20 minutes at 25 °C
	Sanding	Before spray: P80-P180 by dry sanding After spray: P80-P180-P360 by wet sanding
	Substrate	Epoxy primer, steel surface, Fiber Reinforced Plastics, OEM paints, etc.
	Unapplicable Substrate	Eroded primer, alloy primer
	Packaging	3.5KG x 4 tins/ctn
	Shelf Life	1 years

PRECAUTIONS

1. Used putty and mixture are not allowed to put back into the original tins.
2. The relative tools should be washed with thinner in time after use.
3. Keep in cool and dry place. Keep away from ignition source, direct sunray and rain.
4. The main components and dry agent should be fully and evenly mixed before scrape coating.
5. Scrape the coating by 500-1000 μm after drying. Scrape the coating several times. The effect will be good.
6. Keep the surface dry after wet sanding. Otherwise the bubbles will appear on the finish.

1K Surfacer

RC-D400



RC-D400 is fast drying, one pack surfacer.

PHYSICAL PROPERTIES

Specific Gravity	1.2-1.3 KG/L
Viscosity	1100-1200 S
Ingredients	Alkyd resin, nitro-cellulose, pigment
Colour	Drey putty

PROCESS

	Mix Ratio (by volume)	1 K surface RC-D400: 1 part
		Thinner (RC-x111): 1 part
	Pot Life	48 hours at 20 °C
	Spray Gun & Air Pressure	Gravity type: 1.2-1.5 mm, 4Pa
		Suction type: 1.4-1.6mm (Spray 25 u.m)
	Spray Methode	2 single coating with wet spray (volatilization time of each layer: 5 to 10 mutes)
	Drying Time	30 minutes at 20° 15 minutes at 60°
	Sanding	Before spray: P280-P360 by dry sanding. after spray: P800-P1000 by wet sanding, P360-P400 by dry sanding.
	Substrate	OEM paints, steel, putty, eroded primer, alloy primer
	Unapplicable Substrate	Galvanized steel, stainless stell, aluminum, wood
	Packaging	3.6 KGx 4 tins/ctn
	Shelf Life	1 year

PRECAUTIONS

1. It cannot be used until string evenly after open the tin
2. All Roch@ automotive refinish can be knifed on the surfacer.
3. Maximum adhesive force and and anti corrosion performance can be available eith CMC® two pack middle coating.
4. Fast drying will be affected if knife too much.

2K Primer Surfacer

RC-D480
(Grey)



2K primer surfacer is a fast drying, high build, good adhesion primer. They are suitable for new vehicle parts and repair.

PHYSICAL PROPERTIES

Specific Gravity	1.40+0.05KG/L 150-180S
Viscosity	150-180S
Ingredients	Hydroxy acrylic resin, pigments, fillers, organic solvents
Colour	Grey

PROCESS

	Mix Ratio (by volume)	2K Primer Surfacer (RC-D480): 4 parts Hardener (RC-G270): 1 part Thinner (RC-X110, RC-X111, RC-X112): 1 part *Choose the materials according to the temperature
	Pot Life	2 hours at 20 °C
	Spray Gun & Air Pressure	Gravity type: 1.2-1.5 mm, 4Pa Suction type : 1.4-1.6 mm. (Spray 30-50 mm)
	Spray Methode	2-3 single coating to coverage (volatilization time of each layer: 5 to 10 minutes)
	Drying Time	3 hours at 20 °C 30 minutes at 60 °C
	Sanding	Before spray: P180-P400 by dry sanding After spray:P800-P1000 by wet standing
	Substrate	OEM paint,steel surface. Fiber Reinforced Plastics,surface of putty
	Unapplicable Substrate	Galvanized steel, stainless steel
	Packaging	4 KG x 4 tins/ctn
	Shelf Life	5 years

PRECAUTIONS

1.2K primer surfacer can be sprayed after sanding and removing the oil and stain on the surface of the putty, epoxy primer, old paints.
2.30 µm must be kept after sanding on the intermediate coating

Red Filling Putty

RC-D700



Red filling putty (red silver), it can be used to fill the super small cracks, sand hole, and small scratches.

PHYSICAL PROPERTIES

Specific Gravity	1.2-1.3 KG/L
Viscosity	Pasty mass
Ingredients	Alkyd resin, nitto-cotton, pigments, fillers
Colour	Red

PROCESS

	Scrape Method	Scrape the coating slightly, the volatilization time of each layer is 15 minutes
	Scrape Tool	Putty knife. soft rubber or plastic coating blade
	Drying Time	48 minutes at 20 °C
	Sanding	Before spray P360-P400 by dry sanding or P600-P800 by wet sanding After spray: P360-P400 by dry sanding or P800-P1000 by wet sanding
	Substrate	All Roch brand primer and OEM paints
	Unapplicable Substrate	Nude iron surface
	Packaging	1 KG x 12 tins/ctn
	Shelf Life	1 year

PRECAUTIONS

1. Polish the surface carefully after scrape and dry, then spray Roch brand finish coat.
2. The dry speed will be affected if the end user scrape the surface hard.
3. After use part of the product, please put the tin cover back firmly.
4. The product cannot be kept in big area after polish, except nilling putty in eyelet.

2K Solid Colour Paint

RC-S series



High quality 2K acrylic solid colour paints with high gloss, good exterior durability, good build, high end hardness, and good adhesion for high class cars. It is used for new vehicle parts or repair.

PHYSICAL PROPERTIES

Specific Gravity	White: 1.3-1.35KG/L, Others: 1.0-1.2KG/L
Viscosity	130-140 S
Ingredients	Hydroxy acrylic resin, pigments, additives, solvents
Colour	All kinds of solid colours. For detailed information please refer to Roch Tinter in the catalogue

PROCESS

	Mix Ratio (by volume)	2K Solid colour paints(RC-S series): 2 parts Hardener(RC-G221 RC-G222 RC-G223) 1 part Thinner(RC-X110.RC X111.RC-X112):0.3-0.5 parts "Choose the materials according to the temperature
	Pot Life	2.5 hours at 20 °C
	Spray Gun & Air Pressure	Gravity type: 1.2-1.5 mm, 4Pa Suction type 14-1.6 mm
	Spray Methode	2-3 single coating to coverage (volatilization time of each layer: 15 to 20 minutes)
	Drying Time	24 hours at 20 °C 45 minutes at 70 °C Keep the coating for 15 to 20 minutes before baking
	Sanding	Before spray P360-P400 by dry sanding or P600-P800 by wet sanding After spray P360-P400 by wet sanding or P800- P1000 by wet sanding
	Substrate	OEM paint. steel surface. Fiber Reinforced Plastics surface of putty
	Unapplicable Substrate	Thermal plasticity acrylic paint or alloy base coat
	Packaging	1L x 12 tins/ctn
	Shelf Life	5 years

PRECAUTIONS

1. Light colour paint is not allowed to add varnish for spray. otherwise the colour will become yellow.
2. The basecoat should be polished by 800# sand paper before spray the finish coat.
3. Keep the basecoat dry before spray the finish coat. otherwise the blisters will appear

1K Metallic Basecoat

RC-M series



Basecoat for high class cars and commercial vehicles, it is used for new vehicles and repair

PHYSICAL PROPERTIES

Specific Gravity	0.95-0.98 KG/L
Viscosity	Solid colour 110-120s
	Silver colour. 180-120s
Ingredients	Acrylic resin, CAB, pigment, addition agents, solvents
Colour	All kinds of solid colours and metallic. For Detailed information please refer CMC Tinters in the catalogug.

PROCESS

	Mix Ratio (by volume)	1 K Metallic basecoat (RC-M series): 1 part Thinner (RC-X110.RC-X111.RC-X112): 0.8-1 part.
	Pot Life	48 hours at 20 °C
	Spray Gun & Air Pressure	Gravity type: 1.2-1.5 mm, 3. 4 Pa Suction type: 1.4-1.6mm
	Spray Methode	2 -3 single coating to coverage (volatilization time of each layer: 5 to 20 mutes)
	Drying Time	Varnish can be sprayed within 15 munites to 1 hour
	Sanding	Before spray: P600-P800 by dry sanding.
	Substrate	OEM paints, CMC® brand primer surfacer
	Unapplicable Substrate	Thermal plasticity acrylic paint or alloy base coat.
	Packaging	11 x 12 tins/ctn
	Shelf Life	5 year

PRECAUTIONS

1. The result will be perfect if the users use CMC® brand supporting thinner.
2. It is highly recommended to use light metallic paint with RC-9000.RC-800 or RC 3000 varnish.

1K Pearl Paint

RC-Pearl



High quality, two or three layers basecoat system with pearlescent colour basecoat for high class and commercial vehicles.

PHYSICAL PROPERTIES

Specific Gravity	0.98-1.01 KG/L
Viscosity	140-180 S
Ingredients	Acrylic resin, CAB pearly-lustre pigment. addition agent, solvents.
Colour	All kinds of metallic pearlescent colour, For detailed information please refer to Roch Tinters in the catalogue.

PROCESS

	Mix Ratio (by volume)	1K pearl paint: 1 part
		Thinner(RC-X110,RC-X111,RC-X112): 0.7-1 parts
	Pot Life	48 hours at 20 °C
	Spray Gun & Air Pressure	Gravity type: 1.2-1.5 mm, 3. 4Pa
		Suction type: 1.4-1.6mm
	Spray Methode	2 -3 single coating to coverage(volatilization time of each layer: 15 to 20 minutes)
	Drying Time	Varnish can be sprayed within 15 minutes to 5 hour
	Sanding	Before spray : P600-P800 by dry sanding.
		After spray: P1000 by wet sanding.
	Substrate	OEM paints, CMC brand primer surfacer
	Unapplicable Substrate	Thermal plasticity acrylic paint or alloy base coat.
	Packaging	11 x 12 tins/ctn
	Shelf Life	5 year

PRECAUTIONS

1. The result will be perfect if the users use CMC® brand supporting thinners.
2. Light pearlescent paint should be spray with RC-9000. RC-8000 or RC-3000.
3. The basecoat must keep dry before spray the finish coat, otherwise the blisters will appear.

High Efficiency Clearcoat

RC-8000



RC-8000 Clearcoat has high gloss, high buid, good exterior durability high end hardness and good adhesion results on metallic basecoats, good leveling. The application function is good and it is fast drying coat.

PHYSICAL PROPERTIES

Specific Gravity	0.96-1.0 KG/L
Viscosity	30-40 S
Ingredients	Hydroxy acrylic resin,addition agents, solvent
Colour	Clear,free of extraneous matters

PROCESS

	Mix Ratio (by volume)	Clear coat(RC-8000): 2 parts
		Hardener (RC-G221,RC-G222,RC-G223) : 1parts
		Thinner (RC-X110,RC-X111,RC-X112) :0.2-0.5 parts
	Pot Life	4 hours at 20 °C
	Spray Gun & Air Pressure	Gravity type: 1.2-1.5 mm.,3-4 Pa
		Suction type: 1.4-1.6 mm. (Spray 60 mm)
	Spray Methode	2-3 Single coating to coverage (volatilization time of each layer :15 to 20 minutes)
	Drying Time	24 hours at 20 °C, 45 minutes 270 °C
	Substrate	CMC brand base coating
	Packaging	5Lx4 tins/ctn, 1Lx12 tins/ctn
	Shelf Life	5 years

PRECAUTIONS

1. Keep it for 15 to 20 minutes after spray, and then bake it.
2. Keep the baking room dry when baking, otherwise the gloss will disappear.
3. Add 15% quick dry liquid for fast solidity.
4. Choose the right hardener according to the temprature.
5. It is suitable to spray the whole car body.

Fast Drying Clearcoat

RC-4700



RC-4700 is super fast drying clearcoat, the application function is good and it is fast drying coat. The scratch resistance and hardness is good, as well as good exterior durability. It is suitable to spray the high class and middle class vehicles and the whole car body.

PHYSICAL PROPERTIES

Specific Gravity	0.96-1.0 KG/L
Viscosity	30-40 S
Ingredients	Hydroxy acrylic resin, addition agents, solvent
Colour	lighty seasoned yellow transparent liquid

PROCESS

	Mix Ratio (by volume)	Clear coat (RC-4700): 4parts
		Hardener(RC-4708): 1part
		*Doesn't need Thinner
	Pot Life	2-3 hours at 20 °C
	Spray Gun & Air Pressure	Gravity type:1.2-1.3 mm.,3-4 Pa
		Suction type :1.4-1.6 mm. (Spray 60 mm)
	Spray Methode	2-3 Single coating to coverage (volatilization time of each layer :15 to 20 minutes)
	Drying Time	40 minutes to 1 hour at 18 °C
	Substrate	Roch brand base coating
	Packaging	4L x 6 tins/ctn, 1L x 12 tins/ctn
	Shelf Life	5 years

PRECAUTIONS

1. High efficiency automotive refinish.
2. It needs to be baked when the tempreture is below 10C, the tempreture of the baking room must be in creased to 40 C.
3. It is a must to use our supporting accessories such as Hardener
4. It is suitable for quick repair, it is not allowed to spray the whole car body.
5. Pay attention to the interval of each layer.

Hardener

Fast drying hardener RC-G221
 Standard hardener RC-G222
 Slow drying hardener RC-G223



Our hardener are suit for 2k paint and clearcoat.

PHYSICAL PROPERTIES

Specific Gravity	0.95-0.98 KG/L
Viscosity	10-12 S
Ingredients	Aliphatic isocyanate
Colour	Clear, free of extraneous matter

PROCESS

	Mix Ratio (by volume)	2K coat: 2parts Hardener: 1part Thinner: 0.1-0.3 parts
	Pot Life	4 hours at 20 °C
	Spray Gun & Air Pressure	Gravity type:1.2-1.3 mm.,3-4 Pa Suction type :1.4-1.6 mm. (Spray 60 mm)
	Spray Methode	Choose the hardener according to the temperature, mix the lhardener with 2K paint, spray 2 single layer coating, volatilization time of each layer: 5 to 10 minutes
	Drying Time	It depends by the temperature and the type of the hardener
	Substrate	Roch base coat and clear coat
	Packaging	2.5L x 8 tins/ctn, 1L x 12 tins/ctn
	Shelf Life	2 years

PRECAUTIONS

1. The effect of spray and leveling will be perfect if the fast drying, standard and slow drying hardener are used in the right way.
2. After spray, the finish can be polished or repaired after 24 hour at 20 °C or 30 minutes at 70 °C
3. Add 1.5% RC-F17 Dry Accelerator, it can fasten the drying spped.
4. If the finish exposed in the air for a long time,the hardener will go bad and it will be invalid.

Thinner

Fast drying Thinner RC-X110
 Standard Thinner RC-X111
 Slow drying Thinner RC-X112



It is produced specially for Roch series paint. Fast drying, standard, slow drying can be chosen in order to match the applications in different temperature. It can decrease the viscosity of the paint, and improve the leveling property of the paints.

PHYSICAL PROPERTIES

Specific Gravity	0.8-0.9 KG/L
Viscosity	9-10 S
Ingredients	Esters, aromatic hydrocarbon organic component solvent
Colour	Transparency, free of extraneous matter

PROCESS

	<p>Mix Ratio (by volume)</p>	<p>Choose the mix ratio and the type of thinner according to different products and different temperature. 2K paint: 1 part Thinner: 0.1-0.3 parts How to choose the thinner: 1K paint: 1 part Fast drying thinner: suitable for the repair of partial area or less than 20 C. Standard thinner: suitable for whole car spray or partial repair. temperature between 20C-30 C. Slow drying thinner: suitable for whole car spray or big area spray, temperature is higher than 30°C.</p>
	<p>Packaging</p>	<p>1L x 12 tins/ctn, 5L tins/ctn.</p>
	<p>Shelf Life</p>	<p>5 years</p>

PRECAUTIONS

If the temperature is too high or the weather is humid, add 10 % Roch Thinner SRA in order to extend the open time and the metallic paint will not be blanched.

Thinner SRA

RC-F350



RC-F350 is a powerful blending solvent for partial repair. It is used to dissolve the junctions between the new and old paint film and fuse them to get a perfect mending effect.

PHYSICAL PROPERTIES

Specific Gravity	0.8-0.9 KG/L
Viscosity	9-10 S
Ingredients	Special ester, ether acid ester, addition agents
Colour	Transparent, free of extraneous matter

PROCESS

	Mix Ratio (by volume)	It can be applied to the junction directly without mixing in advance. If required, mix with the rest paint inside the spray gun and blending reducer. The mix ratio: RC-F350 Thinner SRA reducer 0.4 parts, rest paint in the spray gun: 0.6 parts.
	Spray Gun & Air Pressure	Gravity type: 1.2-1.5 mm., 2Pa Suction type : 1.4-1.6 mm. (Spray 60 mm)
	Spray Methode	Spray the junction position slightly at once after finish the painting, and spray again after 15 seconds
	Substrate	Dissolved solid coating. clearcoat, the junction between the new and old positions
	Rcapplicat	Do not mix with M & P series paint
	Packaging	1L x 12 tins/ctn
	Shelf Life	5 years

Retarder

RC-F301




It is used to spray the basecoat at high humidity condition in order to avoid paint film blushing.

PHYSICAL PROPERTIES

Specific Gravity	0.8-0.9 KG/L
Viscosity	9-10 S
Ingredients	Special ester, ether, addition agents
Colour	Water white transparency liquid

PROCESS

	Mix Ratio (by volume)	Standard or slow drying thinner add 10% retarder
	Spray Gun & Air Pressure	S series and M series
	Packaging	5L x 4 tins/ctn, 1L x 12 tins/ctn
	Shelf Life	5 years

Degreaser

RC-F202



RC-F202 can remove the oil stain on the surface which need to be sprayed in order to avoid defects in the paint film.

PHYSICAL PROPERTIES

Specific Gravity	0.6-0.7 KG/L
Viscosity	9-10 S
Ingredients	Special aliphatic hydrocarbon Colour Water white transparency liquid
Colour	Water white transparency liquid

PROCESS

	Mix Ratio (by volume)	No need to mix
	Use	1.Clean the surface with water, and dry the surface. 2.Add RC-F202 into a rag, clean the surface which needs to be sprayed or sanded with a wet rag. 3. Dry the surface with a dry rag at once.
	Substrate	Any top coat, base coat, iron surface
	Packaing	5L x 4 tins/ctn, 1L x 12 tins/ctn
	Shelf Life	5 years

Fisheye Preventer

RC-F303





RC-F303 can remove the fish eye appearance in the paint film. It is suitable for 2K solid paint or 2K clearcoat. It can make the paint film smooth and sleek.

PHYSICAL PROPERTIES

Specific Gravity	0.87-0.88 KG/L
Viscosity	9-10 S
Ingredients	Ester, addition agents
Colour	Transparent free of exiraneous matter

PROCESS

	Mix Ratio (by volume)	Add 3% RC- F303 into the mixed paints
	Use	When spray 2K solid paint or 2k clearcoat, when the fish eye appear after the first spray, add 3% into the mixed paint. Then, use continue to spray, the fish eye will disappear
	Packaing	1L x 12 tins/ctn
	Shelf Life	5 years

PRECAUTIONS

If add more than 3% RC-F303 into the mixed paint, the eyelet will appear in the paint flm.

Dry Accelerator

RC-F17




RC-F17 is for 2K topcoat. It can accelerate the drying and curing.

PHYSICAL PROPERTIES

Specific Gravity	0.96-1.0 KG/L
Viscosity	9-10 S
Ingredients	Ester, addition agents
Colour	Water white transparency liquid

PROCESS

	Mix Ratio (by volume)	Add 10 to 15 gram per liter
	Packaging	1L x 12 tins/ctn
	Shelf Life	5 years

PRECAUTIONS

Add no more than 15 gram retarder, otherwise the paint film will be crisp and the gloss will be lost.

Matting Agent

RC-F110



RC-F110 can reduce the gloss of 2K solid paint. It is used on matt parts and curing.

PHYSICAL PROPERTIES

Specific Gravity	1.0-1.1 KG/L
Viscosity	350±50 S
Ingredients	Acrylic resin, flatting silica, solvents, additon agents
Colour	Milk white cloudy goup

PROCESS

	<p>Mix Ratio (by volume)</p>	<p>1) 50% gross: 2K solid paint: 2 parts Hardener: 1 part Matting agen: 1 part Thimner: 10-30%</p> <p>2) iess shas 10% gross: 2K soiid paint: 2 parts Hardener: 1 part Matting agent: 2 parts Thinner: 10 30%</p>
	<p>Packaing</p>	<p>IL x 12 tins/ctn</p>
	<p>Shelf Life</p>	<p>5 years</p>

PRECAUTIONS

If add more than 3% RC-F303 into the mixed paint, the eyelet will appear in the paint flm.

Flip Controller

RC-B153





RC-F303 can remove the fish eye appearance in the paint film. It is suitable for 2K solid paint or 2K clearcoat. It can make the paint film smooth and sleek.

PHYSICAL PROPERTIES

Specific Gravity	0.95-1.0 KG/L
Viscosity	120 ± 10 S
Ingredients	Acrylic resin, CAB, Addition agent, solvents
Colour	Transporent clear liquid

PROCESS

	Mix Ratio (by volume)	1K metallic and pearl paint can be added into. B153: 0~100% 150, 160: 0~100%
	Use	RC-B153 can dilute 1K metallic and Pearl series paints and speed up the wind-dry of paint film and benefit the arrangement of metal and pearl powder grains to improve the application performance.
	Packaing	1L x 12 tins/ctn
	Shelf Life	5 years

Tone Controller

RC-B160





Tone controller is the special additive for 1K metallic and pearl paint.

PHYSICAL PROPERTIES

Specific Gravity	0.95-1.0 KG/L
Viscosity	310 ± 10 S
Ingredients	Acrylic resin, CAB, Addition agent, solvents
Colour	Milk white cloudy goup

PROCESS

	Mix Ratio (by volume)	1K metallic and pearl paint can be added into: B160: 0~10%
	Use	After adding B160, the particulate size of metallic powder will become coarse, the flip become deeper, flop become lighter
	Packaing	1L x 12 tins/ctn
	Shelf Life	5 years

PRECAUTIONS

The adhesive force between the silver powder and gloss oil will be affected if B160 is use too much.

CMC[®] Tinters

2K Solid Colour Paint (S Series)

COLOUR	CODE	TINTERS SPECIFICATION
White	RC-S01	Standard pure white tinter, good effect in any proportion.
Black	RC-S02	Black with blue shade, can be used for the whole spray.
Bluish Black	RC-S03	Black with blue shade.
Violet	RC-S04	Darker purple.
Blue (reddish)	RC-S05	The reddest blue on front view and side view.
Organic Blue	RC-S06	Green on front view and side view.
Transparent Blue	RC-S07	The front view and side view are blue with the green shade.
Standard Blue	RC-S09	The front view and side view are blue with the red shade.
Green	RC-S10	Standard green with the blue on the side view.
Lemon Yellow	RC-S11	Yellow with a little blue and green shade.
Medium Yellow	RC-S12	Yellow with red shade.
Mud Yellow	RC-S13	Yellow with red shade, low saturation.
Transprent Yellow	RC-S14	Red shade on front view and green shade on side view, with good chroma.
Orange Yellow	RC-S15	Orange red with yellow shade.
Bright Red	RC-S16	Slightly purple than RC-S17.
Showy Red	RC-S17	Red with slightly yellow shade, good chroma.
Claret Red	RC-S18	Red with slightly yellow shade.
Puple Red	RC-S19	Red with slightly violet shade.
Maroon Red	RC-S20	Dark red with slightly yellow shade, mainly used for metal paint.
Iron Oxide Red	RC-S21	Red with slightly yellow shade, low saturation and mainly used for solid color.
Rose Red	RC-S22	Rose red with a little blue shade, good chroma.
Crimson Red	RC-S23	Red with a little purple shade on the front view, yellow on the side view.
Transparent Red	RC-S25	Transparent red with a little yellow shade on the front view and blue shade on the side view
Yellosish Green	RC-S26	Green tone with yellow on front view and side view, good saturation.
Yellosish Green	RC-S26	Green tone with yellow on front view and side view, good saturation.

CMC[®] Tinters

1K Metallic Paint (M Series)

COLOUR	CODE	TINTERS SPECIFICATION
Super Fine Silver	RC-M30	Shining of front view and comparatively grey on side view with finest particles.
Fine Silver	RC-M31	Shining on front view and comparatively white on side view with finest particles.
Fine White Silver	RC-M31A	Make the silver paint grey on the front view and shallow the side view.
Medium Silver	RC-M32	Medium particle size of Aluminum powder, the front view and side view are white and shining.
Medium White Silver	RC-M32A	Medium particle size of Aluminum powder, make the Silver paint grey on the front view and the side view.
Medium Coarse Silver	RC-M33	Medium particle size of Aluminum powder, show white and shining on the front view and the side view.
Coarse White Silver	RC-M33A	Grey on the front view, more white than RC-M33
Coarse Silver	RC-M34	Crude Aluminum powder shining on the front view and dark on the side view.
Super Coarse Silver	RC-M34A	
Coarse Bright Silver	RC-M35	Strong shining coarse Aluminum powder.
Extra Fine Shining Silver	RC-M36	Fine particles shining Silver.
Fine Shining Silver	RC-M37	White and shining on the front view, dark on the side view.
Medium Shining Silver	RC-M38	The most white on the front view, dark on the side view.
Black	RC-M50	Black with slightly blue shade. One of the most common color.
Violet	RC-M51	Purple with violet shade on the front view and burguMy shade on the side view.
Blue (Reddish)	RC-M52	The reddest blue.
Organic Blue	RC-M53	Blue with green shade on the front view and red shade on the side view.
Transparent Blue (Greenish)	RC-M54	Green shade on the front view and the side view are lighter than RC-M55.
Transparent Blue (Blueish)	RC-M55	Blue shade on the front view and green shade on the side view. It can make the silver paint dark on the side view.
Standard Blue	RC-M56	Standard blue with red shade on the front view and the side view.
Green	RC-M57	Standard 1K Green, blue shade on the side view.
Transparent Yellow	RC-M58	High transparency yellow with red shade on the front view and green shade on the side view.
Claret Red	RC-M59	Red pigment with a little yellow.
Reddish Purple	RC-M60	Red Pigment with a little violet.
Maroon Red	RC-M61	Dark red with a little yellow.
Iron Yellow (Transparent)	RC-M62	High transparency yellow with green shade.
Iron Red (Transparent)	RC-M63	High transparency red with golden shade.
Transparent Brown	RC-M64	Brown with yellow shade, commonly used in champagne color.
Rose Red	RC-M65	Rose red with blue shade, good chroma.
Crimson Red	RC-M66	Red with purple shade.
Chesnut Red	RC-M67	Deepred with yellow shade, mainly used for metal paint.
Transparent Red	RC-M68	Red with yellow shade on the front view, blue shade on the side view.
Extra Bluish Black	RC-M69	1K black with blue shade, especially used for 1K Audi Black.
Bluish Black	RC-M70	1K black with blue shade.
White	RC-M71	Two layer coating white.
Super Fine White	RC-M72	A little golden on the front and blue shade on the side view. It can optimise the effect of Silver paint.
Yellowish Green	RC-M73	Green with yellow shade on the front and side view, good chroma.
Orange	RC-M74	Orange with yellow shade. High transparency.
Transparent Red	RC-M76	Good Chroma transparency.
Mud Yellow	RC-M77	Low chroma yellow with red shade.
Lemon Yellow	RC-M78	Yellow with a little blue shade.
Iron Oxide Red	RC-M79	Low chroma red with yellow shade.

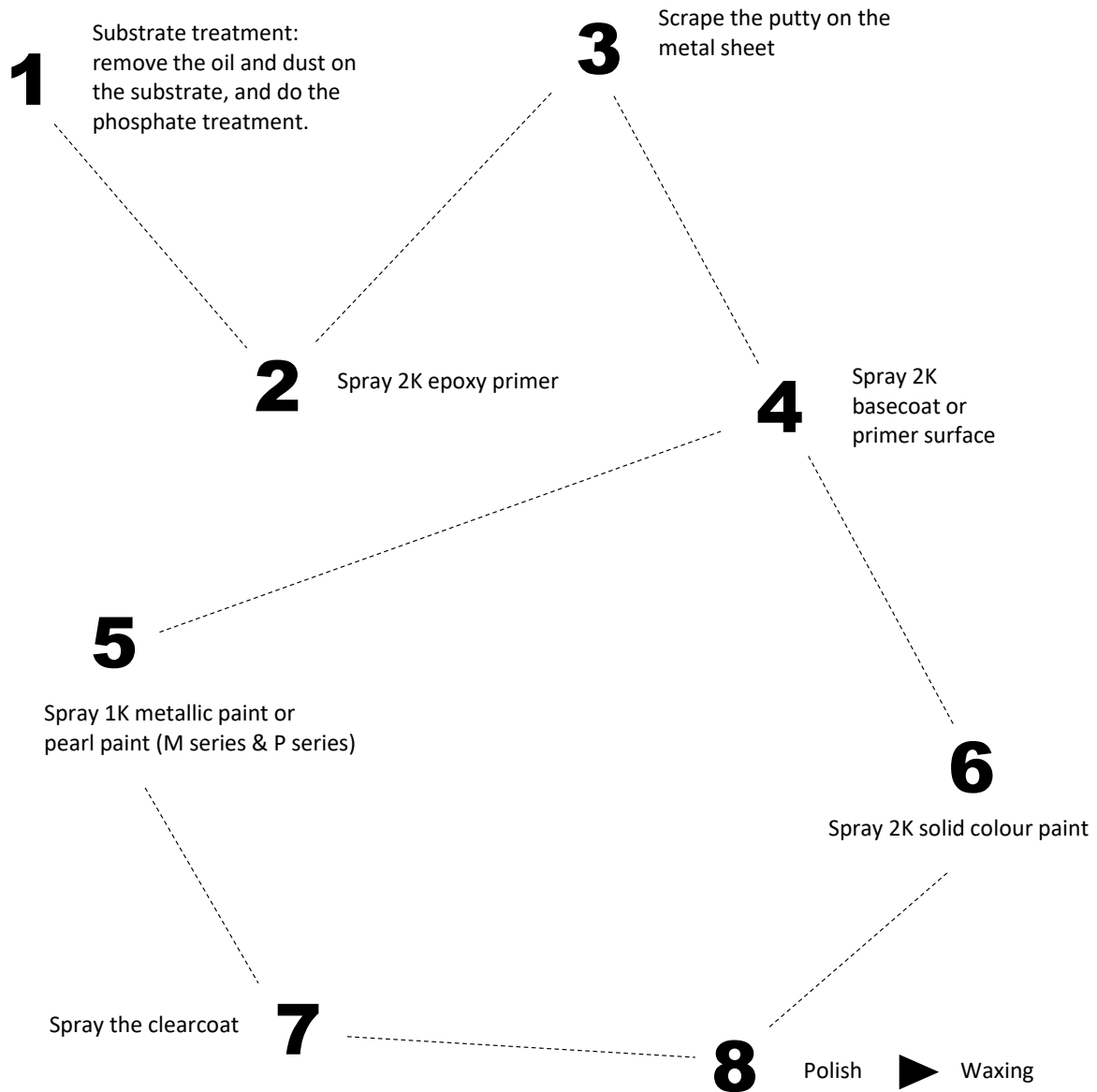
CMC[®] Tinters

1K Pearl Paint (P Series)

COLOUR	CODE	TINTERS SPECIFICATION
Fine Copper Pearl	RC-P41A	Yellow and red tone with soft metallic gloss.
Copper Pearl	RC-P41	Yellow and red tone.
Fine Red Pearl	RC-P42A	Wine red tone.
Red Pearl	RC-P42	A little violet and red on the front view, yellow shade on the side view.
Fine White Pearl	RC-P43A	The finest white pearl.
Pearl White	RC-P43	Standard white pearl color.
Coarse White Pearl	RC-P43B	The particle is coarser than RC-P43.
Fine Blue Pearl	RC-P44A	Fine particles blue pearl tone.
Blue Pearl	RC-P44	Blue pearl tone with blue on the front view and beige shade on the side view.
Fine Green Pearl	RC-P45A	Fine particles green pearl tone.
Green Pearl	RC-P45	Green pearl tone with green on the front view and pink shade on the side view.
Fine Yellow Pearl	RC-P46A	Fine particles golden pearl tone.
Gold Pearl	RC-P46	Golden pearl tone.
Pure Yellow Pearl	RC-P47	Yellow on the front view and violet shade on the side view.
Violet Pearl	RC-P48	Pearl tone with violet shade on the front view and green shade on the side view.
Dark Violet Pearl	RC-P49	Burgundy on the front view and dark on the side view.



General Application Process of Automotive Refinish



Application Process of CMC® Automotive Refinish

Substrate treatment	• Remove the oil, rust, etc.
	• Clean the substrate completely.
	• Keep the substrate still for half an hour after cleaning.

Spray two component epoxy primer	• Suitable substrate	OEM paints, stainless steel, wood, aluminum, galvanized sheet, putty, galvanized steel, glass fibre reinforced plastic.			
	• Sanding	Sand after the finish become dry and solid, wet sanding with P800# ~ P1000#			
	• Mix ratio (by volume)	2K Epoxy Primer RC-D505: 3 parts			
		Hardener RC-G285 or RC-G286: 1 part			
	• Spray Equipment	Gravity type: 1.2 ~ 1.5 mm, 3 ~ 4 Pa			
		Suction type: 1.2 ~ 1.7 mm			
	• Flash-off	5 ~ 10 minutes between coats			
• Flash-off Non cohesive time Drying time before sanding		10 °C	20 °C	40 °C	70 °C
		60 minutes	15 minutes	10 minutes	5 minutes
		24 hours	12 hours	2 hours	30 minutes
		24 hours	12 hours	2 hours	30 minutes

Precautions

1. Remove oil and then sand the surface with P180 before spray, use degreaser to clean the surface. Keep it 10 minutes before spray.
2. The epoxy primer must be sanded if the drying time exceeds 24 hours at 20 °C before spraying the new surface.
3. It is a must to use the CMC® supporting hardener and thinner.
4. Close the tin cover shortly after taking some paints from the tin.

Scrape putty	• Mix Ratio (by weight)	Putty RC-D701: 100 parts
		Hardener RC-G285 or RC-G286P 2 ~ 3 parts

Procedure

1. Scrape and fill up the putty on the metal surface in order to fill up the defects on the surface.
2. Please scrape and fill up the dents for many times for the deeper dents.
The scrape can not be done. before drying each time in order to avoid the blisters and sand holes.
3. Before spray: P80 ~ P180 by dry sanding. After spray: P80 ~ P180 ~ P360 by wet sanding.
4. Sand and repair the surface after drying.

Application Process of CMC® Automotive Refinish

Spray 2K primer surfacer	• Suitable Substrate	OEM paint, steel surface, Fiber Reinforced Plastics, surface of putty.	
	• Unapplicable Substrate	Galvanized steel, stainless steel	
	• Colour	Grey	
	• Mix Ratio	2K primer surfacer RC-D480: 5 parts	
		Hardener RC-G270: 1 part	
		Thinner RC-X110 or RC-X111 or RC-112: 1 part	
	• Pot Life	2 hours at 20 °C	
	• Spray Tool and Pressure	Gravity type: 1.2 ~ 1.5 mm, 4 Pa	
		Suction type: 1.4 ~ 1.6 mm (Spray 30 ~ 50 μm)	
	• Spray	2 ~ 3 layers	
	• Flash-off	5 ~ 10 minutes between coats	
	• Drying Time Before Sanding	3 hours at 20 °C	
30 minutes at 60 °C			
• Sanding	Before spray: P180 ~ P400 by dry sanding		
	After Spray: P800 ~ P1000 by wet sanding		

Precautions

1. 2K surface can be sprayed after sanding and removing the oil and stain on the surface of the putty, epoxy primer, old paints.
2. 30 μm must be kept after sanding on the intermediate coating layer.

Spray the following topcoat: *1K metallic paint or pearl paint (M & P Series)	• Suitable Substrate	OEM paint, CMC brand middle coating		
	• Unapplicable Substrate	Thermal plasticity acrylic paint or alloy base coat		
	• Colour	According to the choices of the customers		
	• Sanding	Before spray: P600 ~ P800 by dry sanding		
		After spray: P1000 by wet sanding		
	• Mix Ratio (by volume)	Temperature	1 part	0.8 ~ 1 parts
		18 °C ~ 25 °C	M&P series	Thinner RC-X110
		25 °C ~ 35 °C	M&P series	Thinner RC-X111
		12 °C ~ 15 °C	M&P series	Thinner RC-X112
	• Spray Tool and Pressure	Gravity type: 1.2 ~ 1.5 mm, 3 ~ 4 Pa		
Suction type: 1.4 ~ 1.6 mm				
• Spray Method	2-3 Single coating to coverage			
• Drying Time	Varnish can be sprayed within 15 minutes to 5 hours			

Precautions

1. The result will be perfect if the users use CMC® brand supporting thinner.
2. It is highly recommended to use light metallic paint with RC-9000, RC-8000, RC-3000 varnish.

Application Process of CMC® Automotive Refinish

*2K Solid colour paint (S series)	• Suitable Substrate	OEM paint, steel surface, Fiber Reinforced plastics, surface of putty.			
	• Colour	According to the choices of the customers			
	• Sanding	Before spray: P360 ~ P400 by dry sanding or P600 ~ P800 by wet sanding.			
		After spray: P360 ~ P400 by wet sanding or P800 ~ P1000 by wet sanding.			
	• Mix Ratio (by volume)	Temperature	2 parts	1 part	0.5 ~ 0.8
		< 18 °C	2K solid paint	Hardener RC-G221	Thinner RC-X110
		18 °C ~ 25 °C	2K solid paint	Hardener RC-G222	Thinner RC-X111
	• Spray Toos and Pressure	25 °C ~ 35 °C	2K solid paint	Hardener RC-G223	Thinner RC-X112
		Gravity type: 1.2 ~ 1.5 mm, 4 Pa			
	Suction type: 1.4 ~ 1.6 mm				
• Pot Life	2.5 hours at 20 °C				
• Spray Method	2-3 single coating to voverage (volatilization time of each layer: 15 to 20 minutes)				
• Drying Time	Temperature	Non cohesive dust	Touchable with finger	Drying & Curing	
	20 °C	1 hours	1 ~ 2 hours	24 hours	
	60 °C	5 minutes	10 minutes	60 minutes	

Precautions

1. Light colour paint is not allowed to add varnish for spray, otherwise the colour will become yellow.
2. The basecoat should be polished by 800# sand paper before spray the finish coat.
3. Keep the basecoat dry before spray the finish coat, otherwise the blisters will appear.

2K Clearcoat	Suitable Substrate	CMC® brand base coating			
	Colour	Clear, free of extraneous matters			
	Mix Ratio (by volume)	Temperature	2 parts	1 parts	0.1 ~ 0.2 parts
			Clearcoat	Hardener	Thinner
		< 18 °C	RC-3000	RC-G221	RC-X110
		18 °C ~ 25 °C	RC-8000	RC-G222	RC-X111
		25 °C ~ 35 °C		RC-G223	RC-X112
	Pot Life	4 hours at 20 °C			
	Spray Tool and Pressure	Gravity type 1.2 ~ 1.5 mm, 3 ~ 4 Pa			
		Suction type 1.4 ~ 1.6 mm, 60 µm			
Spray Method	2-3 single coating to coverage (volatilization time of each layer: 15 to 20 minutes)				
Drying Time	24 hours at 20 °C, 45 minutes at 70 °C				

Precautions

1. Keep it for 15 to 20 minutes after spray, and then back it.
2. Keep the baking room dry when baking, otherwise the gloss will disappear.
3. Add 15% quick dry liquid for fast solidity.
4. Choose the right hardener according to the temperature.
5. It is suitable to spray the whole car body.

Polishing & Waxing	Sanded with sand paper, remove the dust particles and curtaining, then polish again.
	Polish with wax stone, then polish with sand paper, make the surface flat and glossy.
	Use the wax water to polish the surface in order to keep the gloss for long time.

Precautions

1. Do not wash the wool ball with corrosive materials.
2. Make sure the wool ball does not include sand s or other hard material.



Cheng Ming Chemical (Thailand) Co., Ltd.
139/128 Moo 1, Tambol Samet,
Amphur Muang Chonburi, Chonburi, Thailand 20000.

Tel. +663 309 9088
Fax. +663 313 8083
<http://en.cm-chemical.com/>
info.tha@chengming.com