
604 ACRYLIC URETHANE ENAMEL

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DESCRIPTION

604 ACRYLIC URETHANE ENAMEL is a premium quality, high performance, two pack acrylic urethane coating. It has been developed in Australia, for Australian conditions, and has superior resistance to U.V. degradation when compared to most imported similar products.

604 ACRYLIC URETHANE ENAMEL is ideally suited for the repair and refinishing of motor vehicles because of its ease of use. Although it can be low baked, its extremely fast curing properties allow it to air dry satisfactorily at normal ambient temperatures thus negating the necessity for heated booths. In addition, its unique formulation and solvent balance allow it to be used with conventional one pack primers and putties such as 458 PRIMER SURFACER. It can also be applied direct to clean baked enamel and two pack enamel surfaces. Maximum adhesion to these surfaces is achieved after a light sand.

FEATURES

604 ACRYLIC URETHANE ENAMEL exhibits the following outstanding properties:

- Brilliant gloss and gloss retention
- Non-yellowing
- Excellent colour retention
- Outstanding resistance to weathering
- Excellent hardness and abrasion resistance
- Excellent solvent and chemical resistance
- Excellent water and humidity resistance
- Very fast drying properties

Exceptional adhesion to most properly cleaned surfaces including non ferrous metals, timber, fibreglass, most plastics, and previously painted surfaces including baked enamel and 2 pack acrylic urethane enamel.

SUITABLE SUBSTRATES

604 ACRYLIC URETHANE ENAMEL is ideally suited for use over the following primers-

- 408 EPOTEC PRIMER
- 466 PARABUILD ICF HIGH SOLIDS PRIMER-FILLER
- 443 PARAFILL PRIMER FILLER
- 464 PARATHON PRIMER SURFACER
- 429 PARAPHOS PRIMER SURFACER

It can also be used over degreased and sanded baked enamel, two pack enamel and fibreglass. Due to the diversity of use of this product, it is recommended that potential users contact the PROTEC TECHNICAL SERVICE DEPARTMENT for advice regarding each specific application.

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DRYING

At normal ambient conditions and a nominal film thickness of 40 microns, 604 ACRYLIC URETHANE ENAMEL is:

- **DUST FREE** 5 minutes
- **TOUCH DRY** 15-20 minutes
- **DRY TO HANDLE** 4 hours

Full cure is not achieved for at least 7 days under normal conditions. 604 ACRYLIC URETHANE ENAMEL may be low baked for 20 minutes at 60 deg C.

RECOAT

604 ACRYLIC URETHANE ENAMEL may be taped and recoated after one of the following drying conditions:

- Coating has been cured at 60°C metal temperature for 60 minutes and then left for one hour to reach ambient temperature.
- Air drying overnight. In cool or humid conditions this time may be longer.

POT LIFE

- Once 604 ACRYLIC URETHANE ENAMEL -PACK A has been mixed with 604 HARDENER -PACK B the useable life of the mixed material is approximately 3 to 4 hours, depending on the ambient temperature.
- Higher ambient temperatures may considerably reduced the pot life therefore do not mix any more material than can be immediately used.

EQUIPMENT

CONVENTIONAL

| | Spray Gun Fluid Tip | Spray Pressure |
|------------------------|------------------------|------------------------|
| Gravity feed spray gun | 1.4-1.6 mm | 280-375 (35-55 psi) |
| Suction feed spray gun | 1.4-1.8 mm | 280-375 (35-55 psi) |

HVLP – DeVILBISS - Gravity

| | |
|--------------------------|------------------------|
| Mixing Ratio | 4 : 1 V/V |
| Thinner Ratio/ Reducer | 30% See Thinning Below |
| Air Cap Number | 105 |
| Fluid Tip (mm) | 1.4 – 1.6 |
| Pressure at Air C Ap | 2 Bar / 29 psi |
| Paint Visc Flow Cup 25°C | 18 – 20 sec |
| Distance from Object | 180 – 210 mm |

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MIXING RATIO

- Mix 4 parts by volume of 604 ACRYLIC URETHANE ENAMEL -PACK A with 1 part by volume of 604 HARDENER -PACK B.
- 604 HARDENER - PACK B -may be any of the following depending on the ambient conditions and requirements.
- Refer to PROTEC TECHNICAL SERVICE DEPARTMENT for advice.
 - 604--9101 Standard Hardener.
 - 604--9016 Medium Hardener.
 - 604--9033 Slow Hardener.

THINNING

- **SOLID COLOUR/CLEAR:** For normal spray application, thin the mixed material (4 parts by volume 604 Pack A & 1 part by volume Pack B) by addition of up to 30% by volume of the appropriate Reducer for solid colours. 604 ACRYLIC URETHANE ENAMEL - CLEAR may be reduced up to 20% by volume after mixing with appropriate hardener.
- **METALLIC COLOURS:** For Normal spray application, thin the mixed material (4 parts by volume 604 Pack A & 1 part by volume Pack B) by addition of up to 25% R125 for application of 604 Mono-coat.

604 Reducers

- R125 -604 ACRYLIC URETHANE REDUCER (normal thinner for solid colours)
- R229 604 ACRYLIC URETHANE MEDIUM REDUCER (slower drying thinner for solid colours in warmer conditions or over larger areas)

SPRAY VISCOSITY

For best results, the spraying viscosity should be adjusted as follows:

- **SOLID COLOURS:** 19-21 seconds BS4 @ 25°C
- **METALLIC COLOURS:** 19-21 seconds BS4 @ 25°C

APPLICATION

- **SOLID COLOURS -** Apply two or three medium coats allowing a few minutes flash off between coats. For the final coat, add 50% by volume of 604 ACRYLIC URETHANE CLEAR (plus hardener) to mixed colour.
- **MONO-METALLICS –** Apply two or three medium wet coats allowing a few minutes flash off between coats. Final coat may need to be cross patterned to achieve an even metallic finish.

COVERAGE

- Theoretical coverage at 40 microns dry film thickness is 9.3 square metres per litre.
- Practical spreading rate would be approximately 6-7 square metres per litre, depending on overspray.

CONTAINER SIZE

- | | | |
|-------------------------------|---------------------|---------------------|
| 604 Mixed Colours Pack A | 604 Tinters Pack A | 604 Hardener Pack B |
| • 4 Litres, 2 Litres, 1 Litre | • 4 Litres, 1 Litre | • 1 Litre, 500mL |

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PRECAUTIONS

Avoid breathing vapour and contact with skin. Ensure all mixing and handling of hardener and paint containing hardener is carried out under working conditions that prevent skin contact or inhalation of vapour. Wear impervious gloves in a ventilated booth filled with an effective filtered exhaust system. Do NOT smoke whilst handling this material. Breathing of fumes or spray mist can cause sensitisation and asthma like reaction. Persons suffering from chronic respiratory problems should not use this product. Hardener is extremely sensitive to moisture and should be used as soon as possible after opening. Keep all containers thoroughly closed when not in use.

HEALTH AND SAFETY

604 ACRYLIC URETHANE ENAMEL contains flammable solvents and must be kept away from heat and open flames. Do not smoke whilst handling this product . 604 ACRYLIC URETHANE HARDENER - PACK B also contains a maximum content of 0.3% volatile free Isocyanate. Avoid breathing the vapour and unnecessary skin contact. Breathing vapour, spray mist or dust from sanding is harmful and may cause lung irritation and asthma-like respiratory reaction. Keep containers thoroughly sealed when not in use. When spraying mixed material (Pack A to which Pack B has been added) the operator must wear a positive pressure air supplied full face respirator. The spray area must be isolated from other people whilst spraying is in progress and until all spray mist has been effectively dispersed. Spray in a booth fitted with an effective filtered exhaust system and comply to local regulations regarding spray painting.

FIRST AID

| | |
|-------------------|--|
| Eyes | If splashed in eyes, irrigate with copious amounts of clean water for 15 minutes. Seek medical aid if irritation persists. |
| Skin | If splashed on skin, wash affected area thoroughly with soap and water. If irritation persists seek medical aid. Remove all contaminated clothing and launder before re-use. |
| Inhalation | If affected by exposure to vapours, remove from area, keep at rest and seek medical aid if symptoms persist. |
| Ingestion | If swallowed, give glass of water to drink and seek medical assistance. DO NOT induce vomiting. |

Consult separate Material Safety Data Sheet for more detailed Health and Safety information.