

PUR 840-M

Polyurethane antioxidant 2K

High performance, tough, industrial strength direct to metal flat 2K Polyurethane topcoat with anticorrosive protection and superior chemical resistance. Product designed to be applied in a wide variety of DTM industrial applications where good protection is required

PRODUCTS

| | | |
|----------|--|-----------|
| Toners | DISOLAC | 20 (w) |
| Binder | PUR 840-M | 80 (w) |
| Hardener | E9005 - medium | 4:1 (v) |
| | E9003 - slow | 4:1 (v) |
| | E9006 - fast | 4:1 (v) |
| | E9105 – concentrated high solids medium | 8:1 (v) |
| | E9103 – concentrated high solids slow | 8:1 (v) |
| | E9106 – concentrated high solids fast | 8:1 (v) |
| Reducer | UNIVERSAL SOLV 5 - medium | 0-20% (v) |
| | UNIVERSAL SOLV 3 - slow | 0-20% (v) |
| | UNIVERSAL SOLV 6 – fast | 0-20% (v) |
| | R225 – exempt VOC & 0 HAPS reducer | 0-20% (v) |

**For use with E-910X the amount of reducer has to be increased about 10%.*

CHARACTERISTICS OF PUR 840-M

| | | |
|---|-------------------------------|------------------|
| Appearance | Matt | |
| Gloss | 10 at 60°, 20-25 at 85° | |
| Specific weight | 9.2 lb/gal @68°F | |
| Solid content (binder) | 50-54% (weight) | 38-43% (volume) |
| Solid content RFU (without reducer) | 48-55 % (weight) | 37-42 % (volume) |
| Dry film thickness | 2.4-2.8 mils (2 coats) | |
| Theoretical coverage per Gallon of mixing without dilution @ 1 mil DFT | 600-685 ft ² | |
| Corrosion category system 840-M (ISO 12944) | C3 Medium / C4 Low (5.1 mils) | |
| Salt spray resistance | 240 h | |
| Humidity resistance | 120 h | |
| Pencil hardness | H | |

VOC

| E-9005 | | | | | | | | |
|-----------|------------------------------|-------|--------------------------|-------|---------------------|-------|-----------------|-------|
| % reducer | VOC REGULATORY Univ. Solv. 5 | | VOC ACTUAL Univ. Solv. 5 | | VOC REGULATORY R225 | | VOC ACTUAL R225 | |
| | lb/gal | g/L | lb/gal | g/L | lb/gal | g/L | lb/gal | g/L |
| 0 | 4,5 | 534,4 | 4,5 | 534,4 | 4,5 | 534,4 | 4,5 | 534,4 |
| 10 | 4,7 | 562,0 | 4,7 | 562,0 | 4,5 | 534,4 | 4,1 | 494,9 |
| 20 | 4,9 | 585,9 | 4,9 | 585,9 | 4,5 | 534,4 | 3,9 | 461,3 |

| E-9105 | | | | | | | | |
|-----------|------------------------------|-------|--------------------------|-------|---------------------|-------|-----------------|-------|
| % reducer | VOC REGULATORY Univ. Solv. 5 | | VOC ACTUAL Univ. Solv. 5 | | VOC REGULATORY R225 | | VOC ACTUAL R225 | |
| | lb/gal | g/L | lb/gal | g/L | lb/gal | g/L | lb/gal | g/L |
| 0 | 4,1 | 490,1 | 4,1 | 490,1 | 4,1 | 490,1 | 4,1 | 490,1 |
| 10 | 4,4 | 523,6 | 4,4 | 523,6 | 4,1 | 490,1 | 3,8 | 449,3 |
| 20 | 4,6 | 552,4 | 4,6 | 552,4 | 4,1 | 490,1 | 3,5 | 415,8 |

*VOC in the table is average, for specific colors check on iCrom







SUSTRATE AND PREPARATION OF THE SURFACE

| | CLEAN | SANDED | FINAL CLEAN |
|------------------|-------|---------------------|-------------|
| Old paint | DA93 | P320/400 | DA93 |
| Steel | DA93 | P320/400 (optional) | DA93 |
| Galvanized steel | DA93 | P320/400 (optional) | DA93 |
| Aluminum | DA93 | P320/400 (optional) | DA93 |
| PRIMERS | | | |
| Primanyl 5011 | DA93 | -- | -- |
| Primapox 6021 | DA93 | Optional (P320) | DA93 |
| Primapox 6041 | DA93 | Optional (P320) | DA93 |
| Primapur 9051 | DA93 | Optional (P320) | DA93 |

For other substrates consult with the Technical Assistance (SAT).




APPLICATION

| | PIECE | | BIG SURFACE | |
|-------|----------------------------|---------------------------------|----------------|----------------------------|
| T(°F) | Hardener | Reducer | Hardener | Reducer |
| 64-77 | E9005/E9006 E9105/E9106 | UNIVERSAL SOLV 5 or 6 / R225 | E9005 E9105 | UNIVERSAL SOLV 5 / R225 |
| 77-90 | E9005 E9105 | UNIVERSAL SOLV 5 / R225 | E9003 E9103 | UNIVERSAL SOLV 3 / R225 |
| >90 | E9005/E9003 E9105 | UNIVERSAL SOLV 3 / R225 | E9003 E9103 | UNIVERSAL SOLV 3 / R225 |

|  | Application | % reducer (Vol.) | Viscosity – 68°F (Ford Cup 4) | Pressure (psi) | Product pressure (psi) | Nozzle (mm) | Num. Of coats x dry mil | Flash off (min) |
|---|------------------------|---------------------|-------------------------------------|-------------------|------------------------------|----------------|-------------------------------|-----------------------|
|  | Gravity feed spray gun | 20-30% | 20-25" | 26-36 | --- | 1.3-1.6 | 2x0.8-1.4 | 10-15' 68°F |
|  | Airless | 10-20% | 28-40" | --- | 1500-2200 | 9-13 | 1.5x3-4 | 10-15' 68°F |
|  | Air assisted airless | 10-20% | 28-40" | 5-15 | 1000-1700 | 9-13 | 2x2-2.4 | 10-15' 68°F |
|  | Pressure pot | 20-30% | 20-25" | 20-30 | 5-15 | 1-1.4 | 2x0.8-1.4 | 10-15' 68°F |
|  | Pot life (68°F) | 8h | --- | --- | --- | --- | --- | --- |

If the application requires the use of an additive, it should be taken into account in the addition of reducer.

DRYING

|  TEMPERATURE |  DUST DRY |  TO TOUCH | DRY THROUGH |  TO RECOAT |
|--|---|---|-------------|--|
| 68° F (air dry) | 10-15 min | 1h-1h 30 min | 4h | 24h |
| 86°F | 5-10 min | 1h 30 min | 3h 30 min | 24h |
| 140° F (30' forced dry) | --- | --- | 30 min | 24h |

Drying at lower temperature or higher thickness increases drying time.

The product reaches its maximum performance after 15 days of drying in the air (ambient temperature 64-72°F) or in a shorter time at higher temperature.

ADDITIONAL ADDITIVES FOR SPECIAL USES

| SITUATION | ADDITIVE | DESCRIPTION | EFFECT |
|---|-------------------------------|--|--|
| Craters | Anti-crater additive | Film protection against external contaminations. | Anti-crater, film protection. |
| Outdoor resistance / UV filters | UV additive | Film protection against UV rays. | Increases film durability. |
| Sensitivity to spray / Too fast film drying | Flow additive | Improves the applicability, for example in wide superficies or drying weathers. | Increases open film time. |
| Resistivity adjustment | Electrostatic additive | It's used to adjust the coating resistivity according to the equipment used. | Decreases coating resistivity. |
| Slip / cleaning | Ultraclean additive | Increases the slip power of the film and facilitate the cleanliness. | More slip and easy to clean. |
| Anti-slip | Textured additive | Convert smooth coatings to textured coatings increasing the film hardness and gives a powder paint effect. | Anti-slip, film hardness. |
| Sagging resistance | Tixo additive | Sagging resistance and it is used to have higher film thicknesses. | Higher film thicknesses with sagging resistance. |

For use and instructions of the additives consult the technical data sheet of each product.

REMARKS

- Recommended to be used in ventilated spray booth at 68°F.

EQUIPMENT CLEANING

- Use a cleaning thinner before the pot life has expired.

SAFETY

- Follow instructions on product label.
- For more information check the Safety Data Sheet.
- Compliant with the National Statutory Regulation for Health and Safety at Work and Waste Disposal.

STORAGE

- Store the product in a ventilated place far from direct exposure to sunlight.
- Keep between 41 and 86°F.

SHELF LIFE

- One year in unopened original packaging.

ANNEX A

Brightness table (60° angle)

| PUR 840G | PUR 840M | E9005 (in volume) | GLOSS (^60°) | CATEGORY |
|----------|----------|----------------------|-----------------|------------|
| 100 | 0 | 4:1 | >90 | HIGH GLOSS |
| 75 | 25 | 4:1 | 70-90 | GLOSS |
| 50 | 50 | 4:1 | 40-70 | SEMI-GLOSS |
| 25 | 75 | 4:1 | 20-40 | SATIN |
| 0 | 100 | 4:1 | <20 | FLAT |

Degree of gloss obtained through the mixture ratio Toner / Binder (20/80).

The degree of gloss depends on the color applied, dry thickness, substrate, drying temperature...

These products are for professional use only. The Safety Data Sheet should be consulted before use and the precautionary warnings on the product packaging should be observed. Its correct use, according to its purpose and respecting its technical and security data, provided in these documents, is the sole and exclusive responsibility of the user. ROBERLO S.A.U declines any liability due to the incorrect use of any product.

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