RUCOTE® powder resins provide a broad range of high quality properties for powder coatings. These are manufactured to demanding ISO 9001:2008 quality standards, and are backed by focused technical support. With Stepan’s RUCOTE® resins for powder coatings, formulators can achieve the coatings performance that is desired: High to low gloss finishes, standard and superdurable applications, good to excellent chemical resistance and even anti-graffiti applications.

**POLYURETHANE POWDER COATINGS**

RUCOTE® 100 resin series can be formulated in a wide variety of powder coatings with high gloss, textured, matte, and sand finishes that are useful in automotive, outdoor furniture, lawn and garden, and general industrial applications. In addition, the RUCOTE® 100 resin series can be used to formulate TGIC-free systems.

**EPOXY POLYESTER HYBRID POWDER COATINGS**

RUCOTE® 500 resin series can be formulated in a wide variety of powder coatings with high gloss, river textures, matte, metallic, hammertone, and sand finishes. These hybrid powder coatings are especially useful in appliance, shelving, office furniture, fixtures, and general industrial applications.

**POLYESTER POWDER COATINGS (TGIC & HAA)**

RUCOTE® 900 resin series can be formulated in a wide variety of powder coatings with high gloss, satin, matte, metallic, and sand finishes. Polyester powder coatings are especially useful in architectural, lawn and garden, agricultural, and construction equipment applications.
## Cure Chemistry RUCOTE®

### Polyurethane 102
- **Standard**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Smooth and excellent gloss, excellent mechanical properties
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 40
  - **Tg (ºC)**: 57
  - **Hydroxyl Value**: 42
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 10' @ 400º F

### Polyurethane 104
- **Interior Use Only**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Designed for detergent resistance with high gloss and excellent elasticity
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 40
  - **Tg (ºC)**: 57
  - **Hydroxyl Value**: 112
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 15' @ 400º F

### Polyurethane 106
- **Standard**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Good flow and high gloss, higher Tg than RUCOTE® 102
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 40
  - **Tg (ºC)**: 65
  - **Hydroxyl Value**: 47
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 10' @ 400º F

### Polyurethane 107
- **Standard**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Very high gloss and excellent mechanical properties, high Tg
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 35
  - **Tg (ºC)**: 53
  - **Hydroxyl Value**: 295
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 12' @ 400º F

### Polyurethane 108
- **Interior Use Only**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Designed for one-shot low gloss system when used in conjunction with RUCOTE® 123 or 118
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 35
  - **Tg (ºC)**: 55
  - **Hydroxyl Value**: 265
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 15' @ 400º F

### Polyurethane 117
- **Standard**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Anti-graffiti coatings, designed for high chemical resistance and toughness in combination with high gloss
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 40
  - **Tg (ºC)**: 60
  - **Hydroxyl Value**: 110
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 15' @ 400º F

### Polyurethane 118
- **Interior Use Only**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Highest Tg, provides greatest resistance to sintering, good for low gloss and wrinkle finishes
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 72
  - **Tg (ºC)**: 68
  - **Hydroxyl Value**: 42
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 10' @ 400º F

### Polyurethane 121
- **Interior Use Only**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Very flexible (0 T-Bend) and excellent corrosion resistance. Used in low gloss systems
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 40
  - **Tg (ºC)**: 58
  - **Hydroxyl Value**: 40
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 15' @ 400º F

### Polyurethane 123
- **Interior Use Only**: Matte Finishes
- **Super Durable**: Matte Finishes
- **Permeation Features**: Specifically designed for use in combination with RUCOTE® 109 for one shot low gloss finishes
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 75
  - **Tg (ºC)**: 64
  - **Hydroxyl Value**: 23
  - **Acid Value**: NA
  - **Recommended Bake Cycle**: 15' @ 400º F

## Cure Chemistry RUCOTE®

### 50:50 Hybrid 5006
- **Super Durable**: Matte Finishes
- **Permeation Features**: Excellent flow and leveling
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 25
  - **Tg (ºC)**: 67
  - **Hydroxyl Value**: NA
  - **Acid Value**: 85
  - **Recommended Bake Cycle**: 10' @ 365º F

### 50:50 Hybrid 5016
- **Super Durable**: Matte Finishes
- **Permeation Features**: Low reactivity resin, FDA CFR 175.300 compliant
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 25
  - **Tg (ºC)**: 67
  - **Hydroxyl Value**: NA
  - **Acid Value**: 85
  - **Recommended Bake Cycle**: Varies by catalyst

### 50:50 Hybrid 5500
- **Super Durable**: Low cure with good mechanical properties and flow
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 21
  - **Tg (ºC)**: 61
  - **Hydroxyl Value**: NA
  - **Acid Value**: 75
  - **Recommended Bake Cycle**: 10' @ 320º F

### 50:50 Hybrid 5551
- **Super Durable**: Low cure, FDA CFR 175.300 compliant
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 21
  - **Tg (ºC)**: 61
  - **Hydroxyl Value**: NA
  - **Acid Value**: 75
  - **Recommended Bake Cycle**: 10' @ 320º F

### 60:40 Hybrid 560
- **Super Durable**: Excellent flow and leveling, good chemical resistance
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 30
  - **Tg (ºC)**: 60
  - **Hydroxyl Value**: NA
  - **Acid Value**: 55
  - **Recommended Bake Cycle**: 10' @ 375º F

### 60:40 Hybrid 561
- **Super Durable**: Low reactivity resin, FDA CFR 175.300 compliant
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 30
  - **Tg (ºC)**: 60
  - **Hydroxyl Value**: NA
  - **Acid Value**: 55
  - **Recommended Bake Cycle**: Varies by catalyst

### 60:40 Hybrid 562
- **Super Durable**: Excellent flow and leveling, good chemical resistance
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 30
  - **Tg (ºC)**: 60
  - **Hydroxyl Value**: NA
  - **Acid Value**: 55
  - **Recommended Bake Cycle**: 10' @ 375º F

### 70:30 Hybrid 570
- **Super Durable**: Good flow and leveling
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 50
  - **Tg (ºC)**: 62
  - **Hydroxyl Value**: NA
  - **Acid Value**: 37
  - **Recommended Bake Cycle**: 15' @ 392º F

### TGIC or HAA 93:7/95:5
- **Super Durable**: Good flow and leveling
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 18
  - **Tg (ºC)**: 60
  - **Hydroxyl Value**: NA
  - **Acid Value**: 38
  - **Recommended Bake Cycle**: 15' @ 302º F

### TGIC or HAA 93:7/95:5
- **Super Durable**: Low reactivity, excellent flow, good overbake stability
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 34
  - **Tg (ºC)**: 68
  - **Hydroxyl Value**: NA
  - **Acid Value**: 36
  - **Recommended Bake Cycle**: 10' @ 400º F

### TGIC or HAA 93:7/95:5
- **Super Durable**: Improved chemical resistance
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 25
  - **Tg (ºC)**: 69
  - **Hydroxyl Value**: NA
  - **Acid Value**: 50
  - **Recommended Bake Cycle**: 10' @ 374º F

### TGIC or HAA 93:7/95:5
- **Super Durable**: Better UV resistance, high gloss, AAMA 2604 approvable
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 42
  - **Tg (ºC)**: 66
  - **Hydroxyl Value**: NA
  - **Acid Value**: 32
  - **Recommended Bake Cycle**: 10' @ 374º F

### TGIC or HAA 93:7/95:5
- **Super Durable**: Improved chemical resistance, AAMA 2604 approvable
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 30
  - **Tg (ºC)**: 65
  - **Hydroxyl Value**: NA
  - **Acid Value**: 50
  - **Recommended Bake Cycle**: 10' @ 400º F

### TGIC or HAA 93:7/95:5
- **Super Durable**: Excellent smoothness and clarity, AAMA 2604 approvable
- **Typical Chemical Properties**:
  - **Viscosity at 200°C (Poise)**: 25
  - **Tg (ºC)**: 67
  - **Hydroxyl Value**: NA
  - **Acid Value**: 34
  - **Recommended Bake Cycle**: 10' @ 400º F
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