



# Ravago Compounds HMP-307 (Roto)

## Ravago Manufacturing Americas - Medium Density Polyethylene

Tuesday, November 5, 2019

### General Information

#### Product Description

##### Key Features:

- 35-mesh powder
- Excellent moldability
- Excellent long term outdoor weatherability, (UV8)
- Balance of toughness and rigidity
- Excellent low temperature impact
- Excellent environmental stress crack resistance, ESCR
- Compounded for uniform additive dispersion
- Natural as well as standard, custom or special effect colors available
- Stock colors may be available. See Stock color bulletin
- Excellent opacity
- UL component recognition listing (E141240)
- Also available in pellet form as HM-307

#### General

|                   |                                                                                                                                                                                                                                                                       |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material Status   | • Commercial: Active                                                                                                                                                                                                                                                  |
| Availability      | • North America                                                                                                                                                                                                                                                       |
| Features          | <ul style="list-style-type: none"><li>• Good Moldability</li><li>• Good Stiffness</li><li>• Good Toughness</li><li>• Good Weather Resistance</li><li>• High ESCR (Stress Crack Resist.)</li><li>• High Rigidity</li><li>• Low Temperature Impact Resistance</li></ul> |
| UL File Number    | • E141240                                                                                                                                                                                                                                                             |
| Appearance        | <ul style="list-style-type: none"><li>• Colors Available</li><li>• Natural Color</li></ul>                                                                                                                                                                            |
| Forms             | • Powder                                                                                                                                                                                                                                                              |
| Processing Method | • Rotational Molding                                                                                                                                                                                                                                                  |

### ASTM & ISO Properties <sup>1</sup>

| Physical                                                                               | Nominal Value | Unit              | Test Method |
|----------------------------------------------------------------------------------------|---------------|-------------------|-------------|
| Density / Specific Gravity                                                             | 0.935         |                   | ASTM D792   |
| Apparent (Bulk) Density <sup>2</sup>                                                   | 0.34          | g/cm <sup>3</sup> | ASTM D1895  |
| Melt Mass-Flow Rate (190°C/2.16 kg)                                                    | 6.8           | g/10 min          | ASTM D1238  |
| Environmental Stress-Cracking Resistance (ESCR)<br>100% Igepal, Rotational Molded, F50 | 1000          | hr                | ASTM D1693B |
| Mechanical                                                                             | Nominal Value | Unit              | Test Method |
| Tensile Strength (Yield, Rotational Molded)                                            | 2800          | psi               | ASTM D638   |
| Tensile Elongation (Break, Rotational Molded)                                          | 400           | %                 | ASTM D638   |
| Flexural Modulus - Tangent (Rotational Molded)                                         | 110000        | psi               | ASTM D790   |
| Impact                                                                                 | Nominal Value | Unit              | Test Method |
| Impact Strength <sup>3</sup> (-40°F, Rotational Molded)                                | 61            | ft-lb             | ARM         |
| Thermal                                                                                | Nominal Value | Unit              | Test Method |
| Deflection Temperature Under Load<br>66 psi, Unannealed, Rotational Molded             | 145           | °F                | ASTM D648   |
| Deflection Temperature Under Load<br>264 psi, Unannealed, Rotational Molded            | 108           | °F                | ASTM D648   |

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| Flammability             | Nominal Value | Unit | Test Method |
|--------------------------|---------------|------|-------------|
| Flame Rating             |               |      | UL 94       |
| 0.06 in                  |               | HB   |             |
| 0.12 in                  |               | HB   |             |
| Additional Information   | Nominal Value | Unit | Test Method |
| Pourability <sup>2</sup> | 30.0          | sec  | ASTM D1895  |

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 35-mesh powder

<sup>3</sup> F50