



## PRIMEVA® P1820F

### REPSOL - Ethylene Vinyl Acetate Copolymer

Sunday, November 3, 2019

#### General Information

##### Product Description

EVA copolymer REPSOL PRIMEVA® P1820F is suitable for film extrusion and extrusion coating. This material combines easy processability with excellent mechanical and optical properties. It contains antioxidant additives.

##### Applications:

- Film extrusion.
- Extrusion coating.

Recommended melt temperature below 200°C to avoid the decomposition of the polymer. Processing conditions should be optimised for each production line.

##### General

|                   |                                          |                                                        |                       |
|-------------------|------------------------------------------|--------------------------------------------------------|-----------------------|
| Material Status   | • Commercial: Active                     |                                                        |                       |
| Availability      | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America                            | • North America       |
| Additive          | • Antioxidant                            |                                                        |                       |
| Features          | • Antioxidant<br>• Copolymer             | • Food Contact Acceptable<br>• Good Optical Properties | • Good Processability |
| Uses              | • Coating Applications                   | • Film                                                 |                       |
| Agency Ratings    | • EU Food Contact, Unspecified Rating    |                                                        |                       |
| Processing Method | • Extrusion Coating                      | • Film Extrusion                                       |                       |

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

| Physical                                              | Nominal Value | Unit              | Test Method     |
|-------------------------------------------------------|---------------|-------------------|-----------------|
| Density (73°F)                                        | 0.937         | g/cm <sup>3</sup> | ISO 1183        |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)             | 2.0           | g/10 min          | ISO 1133        |
| Environmental Stress-Cracking Resistance (ESCR) (F50) | > 300         | hr                | ASTM D1693      |
| Vinyl Acetate Content                                 | 18.0          | wt%               | Internal Method |
| Films                                                 | Nominal Value | Unit              | Test Method     |
| Film Thickness - Tested <sup>2</sup>                  | 2             | mil               |                 |
| Tensile Stress                                        |               |                   | ISO 527-3       |
| MD : Break, 2.0 mil                                   | 3770          | psi               |                 |
| TD : Break, 2.0 mil                                   | 3190          | psi               |                 |
| Tensile Elongation                                    |               |                   | ISO 527-3       |
| MD : Break, 2.0 mil                                   | 320           | %                 |                 |
| TD : Break, 2.0 mil                                   | 640           | %                 |                 |
| Dart Drop Impact <sup>3</sup> (2.0 mil)               | 600           | g                 | ISO 7765-1      |
| Elmendorf Tear Strength                               |               |                   | ISO 6383-2      |
| MD : 2.0 mil                                          | 0.45          | lbf               |                 |
| TD : 2.0 mil                                          | 62            | lbf               |                 |
| Hardness                                              | Nominal Value | Unit              | Test Method     |
| Shore Hardness                                        |               |                   | ISO 868         |
| Shore A                                               | 90            |                   |                 |
| Shore D                                               | 38            |                   |                 |

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| Thermal                     | Nominal Value | Unit | Test Method     |
|-----------------------------|---------------|------|-----------------|
| Vicat Softening Temperature | 147           | °F   | ISO 306/A       |
| Melting Temperature         | 189           | °F   | Internal Method |
| Optical                     | Nominal Value | Unit | Test Method     |
| Haze                        | 4.00          | %    | ASTM D1003      |

### Processing Information

| Extrusion        | Nominal Value | Unit |
|------------------|---------------|------|
| Melt Temperature | 392           | °F   |

### Notes

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

<sup>2</sup> blow up ratio 2.25:1, frost line height 40 cm

<sup>3</sup> F50