

## Technical Data Sheet

### *Petrothene* NA340163

Ethylene Vinyl Acetate



#### Product Description

*Petrothene* NA340 is a series of LDPE/EVA copolymer resins selected by customers for film applications that require clarity and good impact strength. Typical applications include heavy produce, textile, frozen food packaging and sealant films.

#### Regulatory Status

For regulatory compliance information, see *Petrothene* NA340163 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

|                          |                       |
|--------------------------|-----------------------|
| <b>Status</b>            | Commercial: Active    |
| <b>Availability</b>      | North America         |
| <b>Application</b>       | Clarity Film          |
| <b>Market</b>            | Flexible Packaging    |
| <b>Processing Method</b> | Blown Film; Cast Film |

| Typical Properties                                     | Nominal Value | English Units | Nominal Value | SI Units | Test Method |
|--------------------------------------------------------|---------------|---------------|---------------|----------|-------------|
| <b>Physical</b>                                        |               |               |               |          |             |
| Melt Flow Rate, (190 °C/2.16 kg)                       | 1.0           | g/10 min      | 1.0           | g/10 min | ASTM D1238  |
| Vinyl Acetate Content                                  | 4.0           | %             | 4.0           | %        | LYB Method  |
| <b>Film</b>                                            |               |               |               |          |             |
| Dart Drop Impact Strength, F50                         | 140           | g             | 140           | g        | ASTM D1709  |
| Tensile Strength at Break                              |               |               |               |          |             |
| MD                                                     | 3700          | psi           | 25.5          | MPa      | ASTM D882   |
| TD                                                     | 3100          | psi           | 21.4          | MPa      | ASTM D882   |
| Tensile Elongation at Break                            |               |               |               |          |             |
| MD                                                     | 340           | %             | 340           | %        | ASTM D882   |
| TD                                                     | 500           | %             | 500           | %        | ASTM D882   |
| 1% Secant Modulus                                      |               |               |               |          |             |
| MD                                                     | 21000         | psi           | 145           | MPa      | ASTM D882   |
| TD                                                     | 24000         | psi           | 165           | MPa      | ASTM D882   |
| Elmendorf Tear Strength                                |               |               |               |          |             |
| MD                                                     | 180           | g             | 180           | g        | ASTM D1922  |
| TD                                                     | 250           | g             | 250           | g        | ASTM D1922  |
| <b>Thermal</b>                                         |               |               |               |          |             |
| Vicat Softening Temperature                            | 203           | °F            | 95            | °C       | ASTM D1525  |
| <b>Optical</b>                                         |               |               |               |          |             |
| Haze                                                   | 4.0           | %             | 4.0           | %        | ASTM D1003  |
| As measured on NA340141 (high slip, medium antiblock). |               |               |               |          |             |
| Gloss, (45°)                                           | 75            |               | 75            |          | ASTM D2457  |
| As measured on NA340141 (high slip, medium antiblock). |               |               |               |          |             |
| <b>Additive</b>                                        |               |               |               |          |             |

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|                              |              |              |            |
|------------------------------|--------------|--------------|------------|
| Slip                         | 500 ppm      | 500 ppm      | LYB Method |
| Antiblock                    | 2000 ppm     | 2000 ppm     | LYB Method |
| <b>Processing Parameters</b> |              |              |            |
| Melt Temperature             | 330 - 375 °F | 165 - 191 °C |            |

| Product  | Slip(ppm) | Antiblock<br>(ppm) |
|----------|-----------|--------------------|
| NA340013 | None      | None               |
| NA340141 | 1000      | 1700               |
| NA340163 | 500       | 2000               |
| NA340185 | 850       | 3000               |
| NA340212 | None      | 2000               |

### Notes

Film data obtained from sample produced on a 3 1/2" (89mm) blown film line, commercially available 8" (203 mm) die, 375°F (191°C) melt extrusion temperature, 2:1 BUR, 1.25 mil (32 micron) gauge, 0.025" die gap at 130 lbs/hr.

These are typical property values not to be construed as specification limits.

### Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

### Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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Users should review the applicable Safety Data Sheet before handling the product.

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- (ii) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices;
- (iii) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration;
- (iv) tobacco related products and applications, electronic cigarettes and similar devices.
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