

## Technical Data Sheet

### Icorene N2808

High Density Polyethylene  
LyondellBasell Industries  
Custom Powders

#### Product Description

ICORENE® N2808 is a gas phase homopolymer HDPE and offers high stiffness, high temperature resistance (antioxidant stabilizers), low water vapour transmission and relatively high grease resistance.

This grade has a low gel level. It's typically used for masterbatch applications related to food packaging, release paper and photographic paper.

#### General

|                |                                                                                                     |                                                                                                 |                                                                 |
|----------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Features       | <ul style="list-style-type: none"><li>• Good Processability</li><li>• Good Stability</li></ul>      | <ul style="list-style-type: none"><li>• High Heat Resistance</li><li>• High Stiffness</li></ul> | <ul style="list-style-type: none"><li>• Low Gel</li></ul>       |
| Uses           | <ul style="list-style-type: none"><li>• Automotive Interior Trim</li><li>• Carpet Backing</li></ul> | <ul style="list-style-type: none"><li>• Food Packaging</li><li>• Masterbatch</li></ul>          | <ul style="list-style-type: none"><li>• Release Paper</li></ul> |
| Agency Ratings | <ul style="list-style-type: none"><li>• EU Food Contact</li></ul>                                   | <ul style="list-style-type: none"><li>• FDA Food Contact</li></ul>                              |                                                                 |
| Forms          | <ul style="list-style-type: none"><li>• Powder</li></ul>                                            |                                                                                                 |                                                                 |

| Physical                                  | Nominal Value (English)                                     | Nominal Value (SI)                                     | Test Method     |
|-------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------|-----------------|
| Density                                   | 0.963 g/cm <sup>3</sup>                                     | 0.963 g/cm <sup>3</sup>                                | ASTM D1505      |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 Kg) | 8.0 g/10 min                                                | 8.0 g/10 min                                           | ASTM D1238      |
| Films                                     | Nominal Value (English)                                     | Nominal Value (SI)                                     | Test Method     |
| Tensile Strength                          |                                                             |                                                        | ISO 527-3       |
| MD : Yield                                | 3770 psi                                                    | 26.0 MPa                                               |                 |
| TD : Yield                                | 3480 psi                                                    | 24.0 MPa                                               |                 |
| MD : Break                                | 3190 psi                                                    | 22.0 MPa                                               |                 |
| TD : Break                                | 2610 psi                                                    | 18.0 MPa                                               |                 |
| Tensile Elongation                        |                                                             |                                                        | ISO 527-3       |
| MD : Break                                | 700 %                                                       | 700 %                                                  |                 |
| TD : Break                                | 800 %                                                       | 800 %                                                  |                 |
| Flexural Modulus                          |                                                             |                                                        | ISO 527-3       |
| MD                                        | 84100 psi                                                   | 580 MPa                                                |                 |
| TD                                        | 84100 psi                                                   | 580 MPa                                                |                 |
| Oxygen Permeability (73°F (23°C))         | 0.25 cm <sup>3</sup> ·mil/<br>100in <sup>2</sup> /atm/24 hr | 0.10 cm <sup>3</sup> ·mm/m <sup>2</sup> /atm/2<br>4 hr | Internal Method |
| Water Vapor Transmission <sup>1</sup>     | 0.26 g/100 in <sup>2</sup> /24 hr                           | 4.0 g/m <sup>2</sup> /24 hr                            | Internal Method |
| Thermal                                   | Nominal Value (English)                                     | Nominal Value (SI)                                     | Test Method     |
| Peak Melting Temperature                  | 273 °F                                                      | 134 °C                                                 | DIN 53765       |

#### Notes

<sup>1</sup> 38°C at 100% RH

#### Notes

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