# **NF120**

## **Transparent Non-Heat Sealable, Both Side Treated**



Last update: 1-May-2016

#### DESCRIPTION:

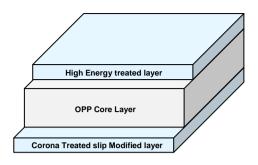
**Gulf Pack NF120** is a transparent non heat sealable film, treated both side.

## PRODUCT FEATURES:

Superior transparency and high gloss Both side treated Excellent hot slip characteristics Stable slip Excellent extrusion lamination bonds

### **APPLICATIONS:**

Outer-Web of packaging laminations film/film, film/paper



| PROPERTIES |   |          | UNIT         | TYPICAL VALUES |        |        |        |        |        |        | TEST METHOD.                           |
|------------|---|----------|--------------|----------------|--------|--------|--------|--------|--------|--------|--|
| PHYSICAL   | Thistores                                       |          | Microns      | 12             | 18     | 19     | 20     | 25     | 30     | 50     | ASTM D 374                             |
|            | Thickness                                       | Gauge    | 48           | 72             | 76     | 80     | 100    | 120    | 200    |        |  |
|            | Grammage  |          | g/m²         | 11.0           | 16.38  | 17.29  | 18.2   | 22.75  | 27.3   | 45.5   | *GPIM                                  |
|            | Grammage  | lbs/ream | 6.8          | 10.10          | 10.66  | 11.2   | 14.0   | 16.8   | 27.97  |        |  |
|            | Yield   |          | m²/kg        | 90.90          | 61.05  | 57.84  | 54.95  | 43.96  | 36.63  | 21.97  |  |
|            |   |          | in²/lb       | 64,515         | 43,000 | 40,740 | 38,700 | 31,000 | 25,800 | 15,479 |  |
|            | Coefficient of Friction (Corona treatment Side) |          |              | 0.35           |        |        |        |        |        |        | ASTM D 1894                            |
|            | Surface Tension (High energy flame Side)        |          | dynes/cm     | 40             |        |        |        |        |        |        | ASTM D 2578                            |
|            | Surface Tension (Corona treatment Side)         |          |              | 38             |        |        |        |        |        |        | ASTM D 2578                            |
| OPTICAL    | Haze  |          | %            | 2.0            |        |        |        |        |        |        | ASTM D 1003                            |
|            | Gloss (45°)                                     |          |              | 90             |        |        |        |        |        |        | ASTM D 2457                            |
| MECHANICAL | Tensile Strength at Break                       | *MD      | kg/mm²       | 15             |        |        |        |        |        |        | - ASTM D 882                           |
|            |   | *TD      |              | 28             |        |        |        |        |        |        |  |
|            |   | MD       | psi          | 21,330         |        |        |        |        |        |        |  |
|            |   | TD       | μδι          | 39,816         |        |        |        |        |        |        |  |
|            | Elongation at Break                             | MD       | %            | 155            |        |        |        |        |        |        | ASTM D 882                             |
|            | Liongation at break                             | TD       |              | 50             |        |        |        |        |        |        |  |
| THERMAL    | Thermal Shrinkage TD                            |          | %            | < 4.0          |        |        |        |        |        |        | GPIM<br>(120°C (248°F),<br>5 min, air) |
|            |   |          |              | < 2.0          |        |        |        |        |        |        |  |
| BARRIER    | Water Vapor Permeability (W.V.T.R.)             |          | g/m²/24h     | 9.2            | 7.3    | 6.8    | 6.2    | 4.8    | 3.3    | 2.0    | ASTM F 1249<br>(38°C / 90% RH)         |
|            |   |          | g/100in²/24h | 0.60           | 0.48   | 0.45   | 0.39   | 0.31   | 0.21   | 0.13   |  |

<sup>\*</sup> GPIM – Gulf Pack Internal Method

**Gulf Pack NF120** films comply with EU Regulation 10/2011/EC and USA FDA Code of Federal Regulations CFR21 section 177.1520 (c) 1.1 and are suitable for use in packaging, carrying and transporting foodstuffs.

The information contained in this technical leaflet illustrates typical values only and are to the best of our knowledge. Since the conditions under which our films may be used are beyond our control, such values are declared without warranty or guarantee.

Bi-axially oriented polypropylene films age with time and will exhibit deterioration of some properties if not stored in a suitable environment at a temperature 30°C or below. We strongly advise our customers to use recommended storage conditions and consume products before 6 months from date of production in our plant.

Detailed advice regarding other specific applications of Gulf Pack NF120 and other films in the Gulf Pack range is available upon request.

<sup>\*</sup>MD – Machine Direction

<sup>\*</sup>TD - Transverse Direction