



# Recycled Plastics Portfolio

Technical Properties & Applications

**FKUR**  
*plastics - made by nature!*

# Plastics care for Future –

## Thinking tomorrow's solutions today

| Properties                 | Raw Material | Source    | Features                   | Color                              | Density              | MFR 230 °C / 2.16 kg | Tensile Modulus | Tensile Strength | Tensile Strain at Break | Notched Impact Strength (Charpy) | Impact Strength (Charpy) | Recycled Content | Possible Applications  |
|----------------------------|--------------|-----------|----------------------------|------------------------------------|----------------------|----------------------|-----------------|------------------|-------------------------|----------------------------------|--------------------------|------------------|--|
| Unit                       |              |           |                            |                                    | [g/cm <sup>3</sup> ] | [g/10 min]           | [MPa]           | [MPa]            | [%]                     | [kJ/m <sup>2</sup> ]             | [kJ/m <sup>2</sup> ]     | [%]              |  |
| Standard                   |              |           |                            |                                    | ISO 1183             | ISO 1133             | ISO 527         | ISO 527          | ISO 527                 | ISO 179/1 eA                     | ISO 179/1 eU             |                  |  |
| Injection Molding          |              |           |                            |                                    |                      |                      |                 |                  |                         |                                  |                          |                  |  |
| Macolen® rPP 250340        | PP           | PCR       | PP copo                    | natural / white                    | n.a.                 | 13                   | 1300            | 25               | 90                      | 5                                | 200                      | 70               | Medical drop boxes   |
| Macolen® rPP 250450        | PP           | PCR       | PP copo                    | natural / white                    | n.a.                 | 16                   | 1200            | 23               | 50                      | 9                                | 150                      | 50               | Medical drop boxes   |
| Macolen® rPP 352530        | PP           | PCR       | 20 % Talc, stabilized      | mixed color / black                | n.a.                 | 28                   | 1700            | 24               | 12                      | 2.3                              | 43                       | 100              | Boxes, housing   |
| Macolen® rPP 452630        | PP           | PCR       | 20 % Talc, stabilized      | natural / white                    | n.a.                 | 38                   | 2300            | 25               | 8.3                     | 2.7                              | 38                       | 100              | Boxes, housing   |
| Macolen® rPP 554530        | PP           | PCR       | 40 % Talc, stabilized      | mixed color / black                | n.a.                 | 21                   | 2700            | 23               | 3.6                     | 2.0                              | 22                       | 100              | Boxes, housing   |
| Macolen® rPP 654630        | PP           | PCR       | 40 % Talc, stabilized      | natural / white                    | n.a.                 | 34                   | 3500            | 25               | 2.1                     | 2.2                              | 17                       | 100              | Boxes, housing   |
| Terralene® rPP 3505        | PP           | PCR / PIR | 33 % biobased <sup>a</sup> | natural / white                    | 0.952                | 14                   | 1000            | 19               | 150                     | 7.3                              | 150                      | 33               | Bins, closures, containers   |
| Terralene® rPP 3509        | PP           | PCR / PIR | 33 % biobased <sup>a</sup> | natural / white                    | 0.934                | 30                   | 1060            | 21               | 15                      | 3.2                              | 100                      | 33               | Bins   |
| PP copo white MFI40        | PP           | PCR       | PP copo                    | white                              | 0.887                | 40                   | 1200            | 24               | 21                      | 5.5                              | n.a.                     | 100              | Technical parts, general injection molded articles                 |
| PP copo white MFI20        | PP           | PCR       | PP copo                    | white                              | 0.897                | 20                   | 1500            | 27               | 80                      | 5                                | n.a.                     | 100              | Technical parts, general injection molded articles                 |
| PP homo raffia white       | PP           | PCR       | PP homo                    | white                              | 0.9                  | 7.5                  | 1500            | 31               | 31                      | 4                                | 200                      | 100              | Technical parts, general injection molded articles                 |
| PP homo raffia mix color   | PP           | PCR       | PP homo                    | mix, light green                   | 0.898–0.905          | 5-10                 | 1465            | 31.3             | n.a.                    | n.a.                             | 47                       | 100              | Technical parts, general injection molded articles                 |
| PP homo black              | PP           | PCR       | PP homo                    | black                              | 0.9                  | 7                    | 1280            | 28               | 100                     | 2.5                              | 60                       | 100              | Thick-walled components  |
| PP homo transparent        | PP           | PIR       | PP homo                    | transparent                        | 0.9                  | 8.4                  | 1600            | 34               | 148                     | 3.9                              | 123                      | 100              | Technical parts, general injection molded articles                 |
| PP homo raffia natural     | PP           | PCR       | PP homo                    | natural                            | 0.898–0.905          | 8-10                 | n.a.            | n.a.             | n.a.                    | n.a.                             | n.a.                     | 100              | Technical parts, general injection molded articles                 |
| PP recycled pellets raffia | PP           | PCR       | Regrenulate, PP-1002       | black                              | 0.9-0.93             | 8-10                 | n.a.            | n.a.             | n.a.                    | n.a.                             | n.a.                     | 100              | Technical parts, general injection molded articles                 |
| Profil Extrusion           |              |           |                            |                                    |                      |                      |                 |                  |                         |                                  |                          |                  |  |
| Macolen® rPP 674130        | PP           | PCR       | stabilized                 | white                              | 1.168                | 3.0                  | 3800            | 28               | 9.1                     | 3.5                              | 34                       | 40               | Profiles, furniture  |
| PP homo raffia mix color   | PP           | PCR       | PP homo                    | mix, light green                   | 0.898–0.905          | 5–10                 | 1465            | 31.3             | n.a.                    | n.a.                             | 47                       | 100              | Technical parts, general injection molded articles                 |
| PP homo black              | PP           | PCR       | PP homo                    | black                              | 0.9                  | 7                    | 1280            | 28               | 100                     | 2.5                              | 60                       | 100              | Profiles   |
| HDPE black PE80/100        | HDPE         | PCR       |                            | black                              | 0.96                 | 0.4-0.7              | 700             | 25               | 40                      | 45                               | no break                 | 100              | Pipes, tubes   |
| Extrusion Blow Molding     |              |           |                            |                                    |                      |                      |                 |                  |                         |                                  |                          |                  |  |
| HDPE C blow color          | HDPE         | PCR       |                            | blue or green                      | n.a.                 | 3.4                  | 950             | 28               | 45                      | 120                              | 150                      | 100              | Bottles, canisters, drums (up to 80 l)                             |
| HDPE C blow natural        | HDPE         | PCR       |                            | natural                            | 0.95                 | 8.5                  | 980             | 31               | 30                      | 65                               | 140                      | 100              | Bottles, canisters, drums (up to 80 l)                             |
| HDPE blow color            | HDPE         | PIR       |                            | orange                             | 0.95                 | 19                   | 670             | 20               | 450                     | 24                               | 125                      | 100              | Bottles, canisters (up to 10 l)                                    |
| HDPE blow color            | HDPE         | PIR       |                            | red                                | 0.95                 | 19                   | 670             | 20               | 450                     | 24                               | 125                      | 100              | Bottles, canisters (up to 10 l)                                    |
| HDPE blow color            | HDPE         | PIR       |                            | blue                               | 0.95                 | 22                   | 540             | 20               | 410                     | 20                               | 110                      | 100              | Bottles, canisters (up to 10 l)                                    |
| HDPE blow color            | HDPE         | PIR       |                            | white                              | 0.95                 | 19                   | 710             | 20               | 450                     | 23                               | 130                      | 100              | Bottles, canisters (up to 10 l)                                    |
| HDPE IBC natural           | HDPE         | PCR       |                            | natural                            | 0.937                | 7.4                  | 790             | 27               | 32                      | 44                               | 125                      | 100              | Barrels, canisters, IBC tank bladders                              |
| Blown Film Extrusion       |              |           |                            |                                    |                      |                      |                 |                  |                         |                                  |                          |                  |  |
| LDPE standard natural      | LDPE         | PCR       |                            | natural                            | 0.92                 | 0.7                  | 210 / 370       | 28 / 25          | 100 / 570               | 20 / 130                         | 135                      | 100              | Films, flexible packaging  |
| LDPE natural               | LDPE         | PCR       |                            | natural                            | 0.92                 | 0.5–2.0              | n.a.            | n.a.             | n.a.                    | n.a.                             | n.a.                     | 100              | Films, flexible packaging  |
| LDPE green transparent     | LDPE         | PCR       |                            | green transparent                  | 0.92                 | 0.7                  | 190 / 310       | 22 / 18          | 100 / 540               | 22 / 135                         | 175                      | 100              | Films, flexible packaging  |
| LDPE F premium transparent | LDPE         | PCR       |                            | transparent                        | 0.926                | 0.4                  | 280 / 400       | 24 / 12          | 225 / 610               | 30 / 115                         | 160                      | 100              | Films, flexible packaging  |
| LDPE GS mix color          | LDPE         | PCR       |                            | mixed colors: white, grey, blueish | 0.92                 | 0.5-1.0              | n.a.            | n.a.             | n.a.                    | n.a.                             | n.a.                     | 100              | Films, flexible packaging  |
| LDPE LD 9299               | LDPE / LLDPE | PCR       | 80 % LDPE + 20 % LLDPE     | translucent                        | < 0.94               | 0.8–1.3              | n.a.            | > 18             | n.a.                    | n.a.                             | n.a.                     | 100              | Films (≥ 15 µm)  |
| LDPE LD 9298               | LDPE / LLDPE | PCR       | 80 % LDPE + 20 % LLDPE     | translucent                        | < 0.94               | 0.7 - 0.9            | > 500           | > 18             | n.a.                    | n.a.                             | n.a.                     | 100              | Films (≥ 15 µm)  |
| LLDPE LL 9289              | LLDPE        | PCR       |                            | translucent                        | < 0.94               | 2.2 +/-1             | > 1000          | > 20             | n.a.                    | n.a.                             | n.a.                     | 100              | Agriculture films, stretching films, general package films, liners |
| LLDPE stretch natural      | LLDPE        | PCR       |                            | natural                            | 0.915                | 2.4                  | 160 / 180       | 22 / 22          | 595 / 690               | 55 / 75                          | 75                       | 100              | Stretch films  |

<sup>a</sup> Biobased carbon content calculated

The technical values stated in this brochure may vary depending on the batch and are therefore only to be understood as guide values.

# FKuR – Plastics care for Future



## FKuR

We make circular plastic products work!

Our team works passionately every day to make the world a little better. Our customers are always the focus of our 360° service approach. We know the right turn to more circular economy and offer an unbeatable range of different bioplastics, circular grades and recycled plastics. Our customers benefit from our decades of global and cross-industry expertise in the development, production and distribution of renewable raw materials.

Successful products start with great ideas – get in touch with us!

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