



TECHNICAL DATA SHEET

PRODUCT NAME: UNIPOL R-EPS

GRADES:

- R-EPS DDS 6+
- R-EPS CCS 6+

PROPERTIES AND APPLICATIONS

EPS (Expandable Polystyrene) contains pentane acting as an expansion agent. UNIPOL R-EPS contains no flame-retardant ingredient and is suitable for use as insulation material where the presence of a flame-retardant ingredient is not strictly necessary.

| Properties | R-EPS DDS 6+ | R-EPS CCS 6+ | | |
|------------------------------|---|--|--|--|
| Sieves | 0.8 - 1.25 mm | 1.25 - 1.8 mm | | |
| Bead size | 0.71 - 1.25 mm (> 90%) | 1.12 - 1.8 mm (> 95%) | | |
| Pentane (%) | 6% (5.8-6.4%) | 6% (5.8-6.4%) | | |
| Bulk density | 550 - 650 kg/m³ | 550 - 650 kg/m³ | | |
| Prefoam density ¹ | 15 - 30 kg/m³ | 14 - 20 kg/m³ | | |
| Applications | Shape and Block molding of medium to high density | Block molding of low to medium density | | |
| Water content | < 0.4% (w/w) | < 0.4% (w/w) | | |

¹ Depending on the type of pre-foamer, pre-foaming method and/or predefined requirements.

Remark:

For emptying an octabin, we strongly recommend making an opening in the lower part of the octabin and not opting for the use of a tilting mechanism (extra static charging).



PROCESSABILITY OF UNIPOL R-EPS GRADES

| | | | | ı | | | |
|--|-------------|------------|--|-------------------|-------------|------------|----------|
| R-EPS DDS 6+ | | | R-EPS CCS 6+ | | | | |
| Achievable prefoam density (kg/m³) | | | Achievable prefoam density (kg/m³) | | | | |
| | - | | Batch/ | | | | Batch/ |
| Type of prefoamer | | Continuous | pressure | Type of prefoamer | | Continuous | pressure |
| Density | 1x | 16 | 15 | Density | 1 x | 15 | 14 |
| | 2x | 12 | 10 | | 2 x | 11 | 9 |
| | | | | | 3 x | 10 | |
| | | | | | | | |
| Maturing time as function of temperature | | | Maturing time as function of temperature | | | | |
| and density | | | and density | | | | |
| Density | Temperature | Hours | | Density | Temperature | Hours | |
| 10kg/m³ | 0-12 | 24 | | 10kg/m³ | 0-12 | 8 | |
| | 12-20 | 16 | | | 12-20 | 4 | |
| | 20+ | 12 | | | 20+ | 4 | |
| 15kg/m³ | 0-12 | 48 | | 15kg/m³ | 0-12 | 48 | |
| | 12-20 | 36 | | | 12-20 | 36 | |
| | 20+ | 24 | | | 20+ | 24 | |
| 20kg/m³ | 0-12 | 96 | | 20kg/m³ | 0-12 | 96 | |
| | 12-20 | 72 | | | 12-20 | 72 | |
| | 20+ | 48 | | | 20+ | 48 | |

Maturing times still depending on specific/local circumstances.