

## MOWITAL® G - MULTI-TALENTED THERMOPLASTICS

POLYMERS OF THE MOWITAL® G SERIES ARE AMORPHOUS THERMOPLASTIC POLYMERS WHICH ARE PROVIDED AS GRANULES WITH LOW RESIDUAL WATER CONTENT (< 0,5 %).

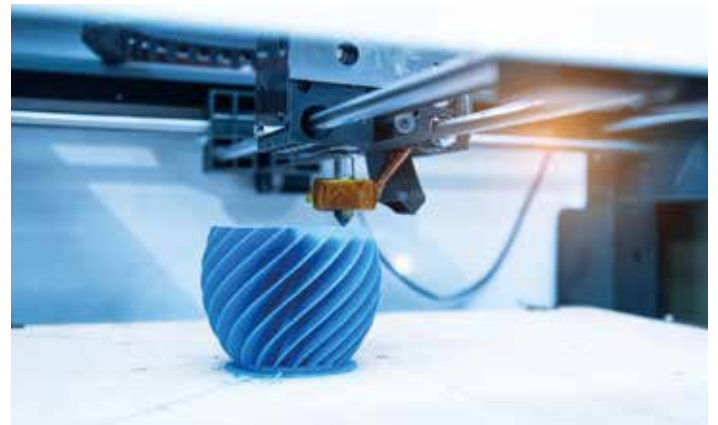
Even more applications with G: With the **Mowital® G** Series, Kuraray offers the PVB (polyvinyl butyral) materials of its Mowital brand as granulated grades as well. With the range of powders, granules and thin films, users in various application areas benefit from the unique properties and quality with which the European market leader for technical PVB materials sets standards across the globe.

### Properties of Mowital® G



- polyvinyl butyral-based polymers
- granules
- amorphous thermoplastic polymer
- colourless and lightfast transparent
- excellent adhesion to glass, metals, wood, and ceramics (thermoplastic adhesive)
- low residue moisture content (below 0,5 %)
- burns out without residue
- non-toxic and dust-free

### Applications of Mowital® G



- appropriate for 3D-printing
- suitable for thermoplastic processing (injection moulding and extrusion processes)
- compatible with various plastics, e.g. PMMA, PA, PVC, ABS, TPU, or thermoplastic elastomers
- use as compatibiliser and dispersing additive for pigments, inorganic fillers, metal particles
- adhesion promoter (glass, metals, wood, ceramics, etc.)
- use for formulations with high-colour purity
- reactivity of free OH-groups (cross-linking, base for chemically modified PVB-binders)
- compliance with food regulations

## Mowital® G product portfolio

Grade	Non-volatile content [%] <sup>1</sup>	Content of polyvinyl alcohol [%] <sup>2</sup>	Content of polyvinyl acetate [%] <sup>3</sup>	MFR-190 (2,16 kg/190 °C) [g/10 min] <sup>4</sup>
Mowital® G 13	≤ 99,5	24 - 27	1 - 4	18,0 - 22,0
Mowital® G 16	≤ 99,5	24 - 27	1 - 4	1,0 - 4,0
Mowital® G 36	≤ 99,5	18 - 21	1 - 4	2,0 - 6,0

1) According to DIN 53216

2) According to DIN 53240

3) According to DIN EN ISO 3681

4) According to DIN EN ISO 1133

## Mowital® G grades range

Viscosity in solution (10% ethanol) [mPas] <sup>1</sup>	30 - 260
MFR (2,16 kg/190 °C) [g/10 min]	1 - 20
Tg [ °C] <sup>2</sup>	70 - 72
Softening temperature [ °C] <sup>3</sup>	140 - 210
Water content [%]	< 0,5
E-modulus [N/mm <sup>2</sup> ] <sup>4</sup>	2500 - 2800
Yield stress [N/mm <sup>2</sup> ] <sup>4</sup>	35 - 75
Elongation [%] <sup>4</sup>	0,5 - 5
Charpy Impact (not notched) [KJ/m <sup>2</sup> ] <sup>5</sup>	105 - 110
Charpy Impact (notched) [KJ/m <sup>2</sup> ] <sup>5</sup>	1 - 5
Vicat B [ °C] <sup>6</sup>	65 - 75
Shore D <sup>7</sup>	80 - 85

1) Viscosity in ethanol at 20 °C

2) DSC, according to ISO 11357-1

3) Ring and ball method, DIN EN ISO 4625

4) According to DIN EN ISO 527

5) According to DIN EN ISO 179

6) According to DIN EN ISO 306

7) According to DIN 53505



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