

# Mowiflex™ as a water soluble support material for additive manufacturing

## Mowiflex™

Mowiflex™ is an inherently biodegradable\* water soluble thermoplastic material based on polyvinyl alcohol. Excellent cold water solubility combined with low moisture absorption from the atmosphere render it the perfect support material for FFF (fused filament fabrication) based 3D printing processes. The application of Mowiflex™ as water soluble support material enables printing of complex structures even those containing moving parts in one piece and high quality. After printing is complete, the support structures are easily dissolved in water which can then be disposed of conveniently through normal waste water systems due to the inherently biodegradable\* nature of polyvinyl alcohol.



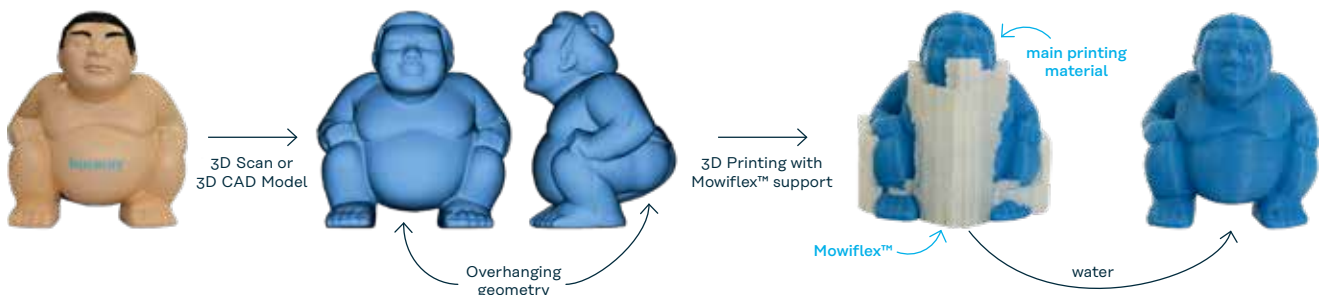
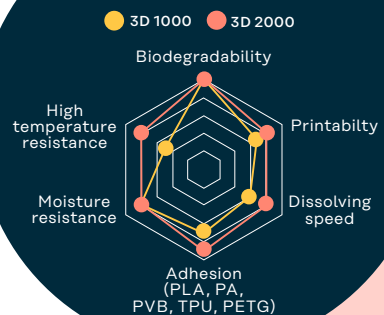
## Customer benefits:

- inherently biodegradable
- low moisture absorption
- print complex parts
- no organic solvents needed
- high filament stiffness
- adhesion to various materials



\*Mowiflex™ 3D 1000 and 3D 2000 are certified according to TÜV AUSTRIA OK biodegradable water. For disposal of large quantities of Mowiflex™ solution please follow local regulations.

## Mowiflex™ properties



# Adding value to your products – worldwide

Kuraray Poval™, Exceval™, Elvanol™ and Mowiflex™ are the trademarks for polyvinyl alcohols made by Kuraray. Their key characteristics — outstanding film-forming properties and high binding strength — add real value to your products. Our polymers are water-soluble, highly reactive, crosslinkable and foamable. They have high pigment binding capacity, protective colloid characteristics and thickening effects. The physical and chemical properties of Kuraray Poval™ make it ideal for a wide variety of applications, ranging from adhesives through paper and ceramics to packaging films. Many of our polymers are food contact-approved and thus suitable for food applications. Ecologically Kuraray Poval™ is advantageous due to its biodegradability and the fact that combustion does not generate residues. It is available in various particle sizes from granules to fine powders.

Kuraray produces its wide range of Kuraray Poval™ grades in Japan, Singapore, Germany and the USA. Kuraray's global production and service network make us your partner of choice for innovative high-quality PVOH resins.

Kuraray – Here to Innovate.

**kuraray**

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## Kuraray Poval™ product portfolio

Please contact your local Kuraray office to discuss the right Kuraray product for your needs.

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