

A Material Difference

Mediprene®

Solvent Bondable Medical TPEs



 **HEXPOL®**
TPE

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Introduction

The Mediprene range of TPE materials for medical applications includes a selection of solvent bondable grades. These are designed to be used in combination with solvents such as cyclohexanone and tetrahydrofurane (THF). Mediprene TPE materials are PVC, silicone and latex free, making them allergen free and a viable alternative to PVC based compounds.

In the range, compounds suitable for extrusion as well as injection moulding are included to fill the need for both solvent bondable tubing and injection moulded parts, e.g. connectors.

The right TPE formulation is the key to a safe and successful medical product. When a standard formulation does not meet the needs of a unique application, we will apply our expertise in formulating a custom solution. In this guide we show typical properties for our most common grades, these tables do not list all available properties and materials.

Please use this guide as an introduction to the Mediprene solvent bondable series and [contact us](#) to discuss your specific requirements.

Special Features

- Can be bonded with solvents such as cyclohexanone or tetrahydrofurane (THF)
- Suitable for injection moulding and extrusion
- Transparent
- Good kink resistance
- Sterilizable with gamma, ethylene oxide (EtO) and steam
- Production site accredited to ISO13485
- Following the VDI 2017 guideline on Medical Grade Plastics

Regulatory Compliance

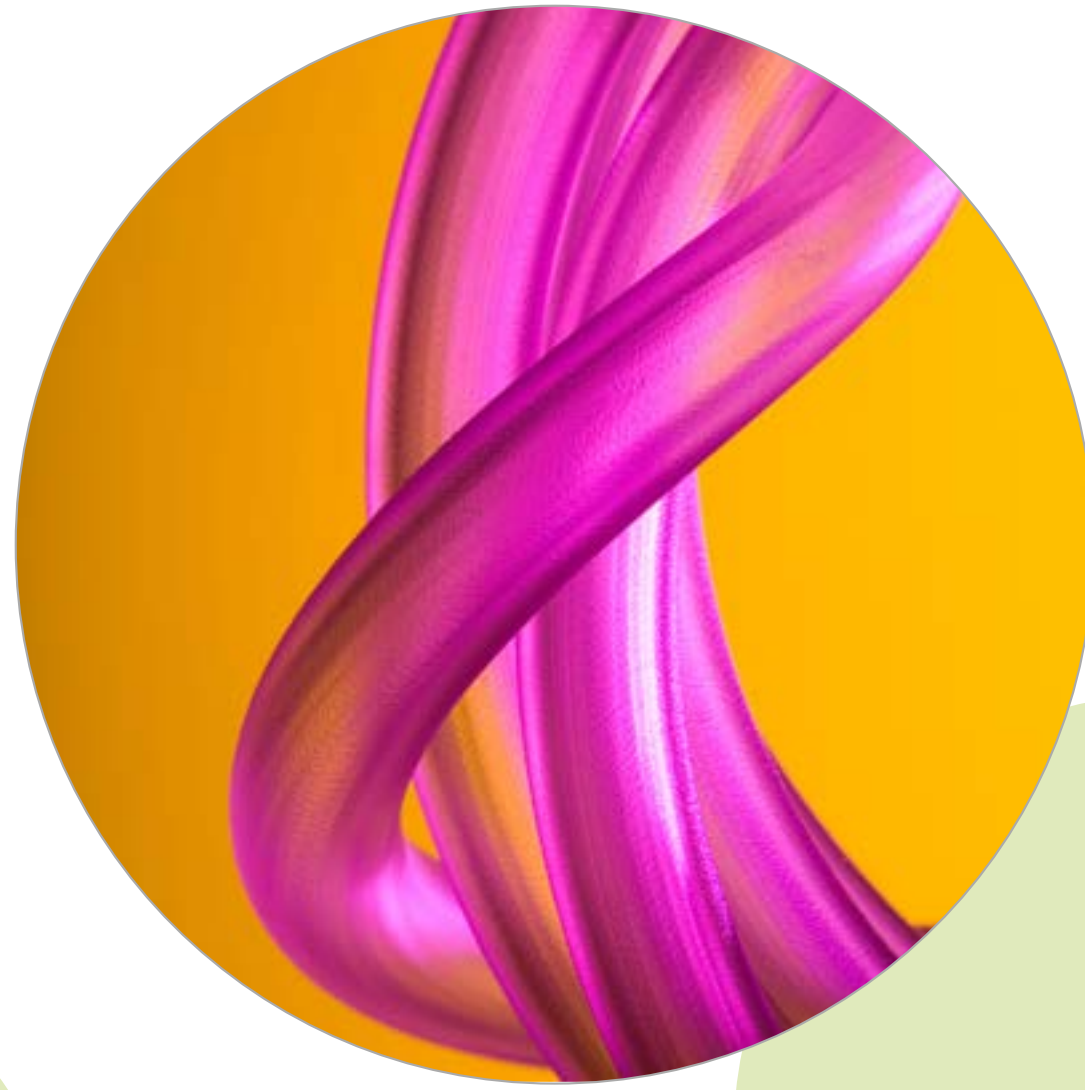
All Mediprene Solvent Bondable series TPEs fulfil a strict raw material selection policy. The raw materials are food contact compliant (FDA 21 CFR and Commission Regulation (EU) No 10/2011) and have a proven level of biocompatibility:

- Representative grades of the styrenic block copolymer have passed USP Class VI
- The paraffinic oil, if present, is a medicinal white oil, complying with the European Pharmacopoeia for liquid paraffin and USP for mineral oils
- The plastic component has passed the USP Class VI tests

Note: Mediprene grades are not to be used in any devices or materials intended for implantation in the human body.

Typical applications

- Tubing
- Connectors
- IV set components



Mediprene Solvent Bondable Range

| Grade | Hardness ¹ ASTM D2240 Shore A or D | Colour | Density ASTM D792 g/cm ³ | Tensile Strength ASTM D638 MPa | Stress at 100% Strain ASTM D638 MPa | Stress at 300% Strain ASTM D638 MPa | Elongation at Break ASTM D638 % | Tear Strength ASTM D624 N/mm | MFR ASTM D1238 g/10 mm | Designed for extrusion (Extr) or injection moulding (Im) |
|------------------|---|-------------|---|--------------------------------------|--|--|--|------------------------------------|------------------------------|---|
| Mediprene 880266 | 47 A | Translucent | 0.94 | 15 | 0.8 | 2.2 | 650 | 75 | 6 ³ | Extr |
| Mediprene 880253 | 48 A | Translucent | 0.95 | 8 | 1.0 | 2.0 | 850 | 50 | 15 ² | Im |
| Mediprene 880203 | 68 A | Translucent | 0.95 | 9 | 2.0 | 4.0 | 650 | 60 | 13 ² | Im |
| Mediprene 880211 | 77 A | Transparent | 0.99 | 25 | 2.2 | 3.3 | 800 | 66 | 12 ³ | Extr |
| Mediprene 880202 | 80 A | Transparent | 0.96 | 9 | 3.0 | 7.0 | 450 | 75 | 10 ² | Im |
| Mediprene 880210 | 80 A | Transparent | 0.98 | 23 | 3.0 | 6.0 | 650 | 94 | 3 ² | Extr |
| Mediprene 880201 | 90 A | Transparent | 0.98 | 10 | 4.0 | 8.0 | 400 | 80 | 25 ³ | Im |
| Mediprene 880200 | 48 D | Transparent | 0.98 | 16 | 6.5 | 10 | 500 | 70 | 14 ³ | Im |

¹ 4mm, after 15 seconds ² 190°C/2.16kg ³ 190°C/5kg

More Mediprene TPE Ranges

Click for more information

Mediprene® 500M
Standard Series



Mediprene® 500M
Plunger Seal Series



Mediprene® 500M
Transparent Series



Mediprene® A

2K

Mediprene®




Mediprene® OF



Mediprene® BM



Mass Balance



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We've a proud history in flexible polymer compounding & were among the 1st to produce TPEs in Europe. [About us](#)

34,795+
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