



TPE

A Material Difference

**Dryflex<sup>®</sup> DW**

TPE Materials for  
Drinking Water Application

 **HEXPOL<sup>®</sup>**  
**TPE**

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# Introduction

When our water supply goes on its journey to our taps, we don't want its quality to be impaired by unwanted odours, colours or flavours.

We have developed Dryflex DW, a special range of Thermoplastic Elastomers (TPE) especially for applications that come into contact, either directly or indirectly, with drinking water. This can include both domestic and commercial applications such as plumbing seals, pipe fittings and showerheads.

We carefully select the raw materials we use to ensure they are compliant with food contact and water hygiene standards. Dryflex DW TPEs are designed to meet the requirements for the Germany drinking water regulations KTW.

## **Firstly, a Word About Customisation...**

In this guide we show typical properties for our most common grades, these tables are not exhaustive and by no means list all available properties and materials. Our aim is to supply a material that precisely matches application requirements and where an existing grade cannot satisfy the specific demands of your application, we have the proven expertise to customise a material that will.

Please use this guide as an introduction to the Dryflex DW range of TPEs and [contact us](#) to discuss your specific requirements.

# Key Properties

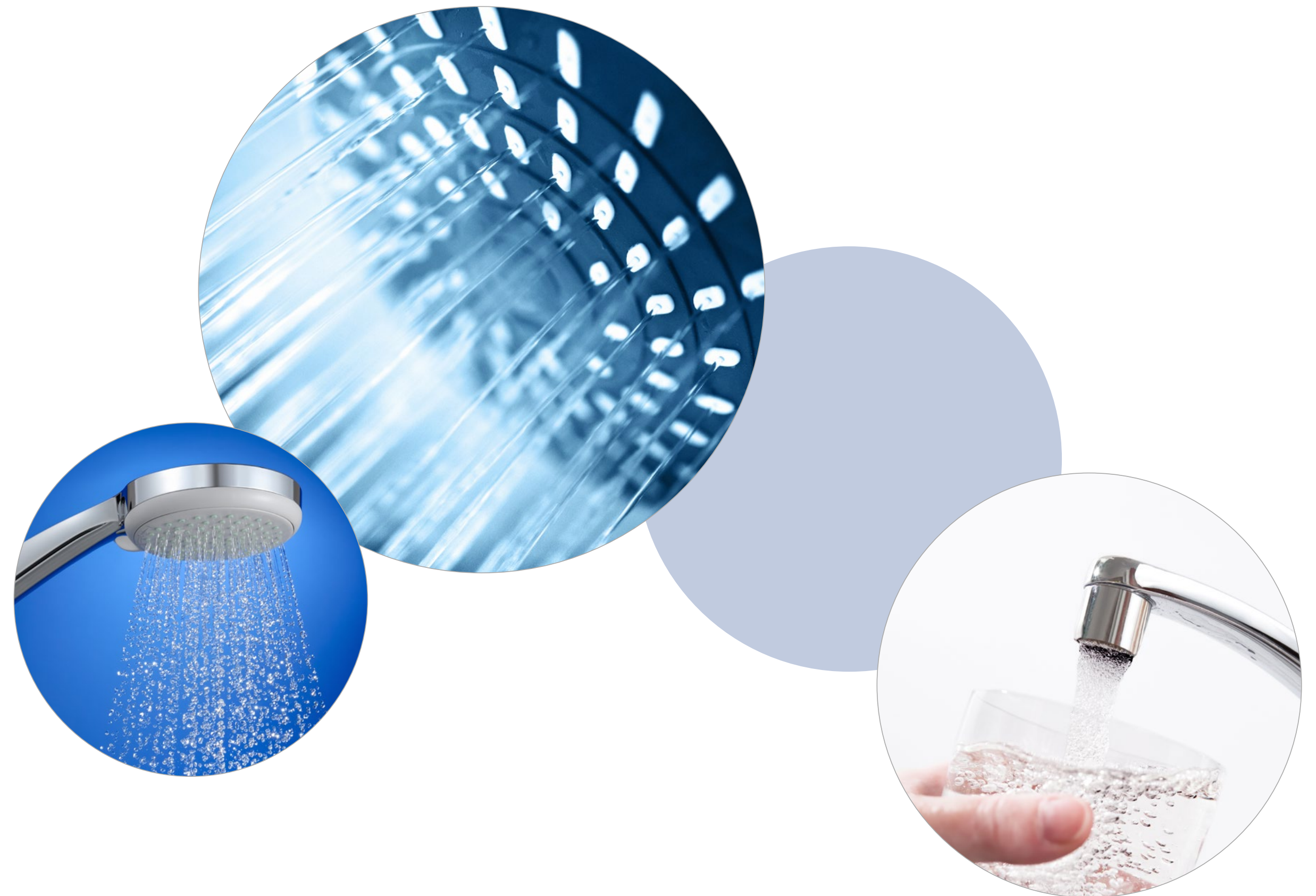
- Dryflex DW TPEs designed to meet the requirements of KTW guidelines for cold and warm water (23°C / 60°C)
- Raw materials compliant with food contact regulation (EU) No 10/2011
- Hardness range from 50 to 90 Shore A
- Easy to process via injection moulding or extrusion
- Available in natural and black, as well as custom colours with compliance certificate
- Improved flow behaviour
- PVC replacement for hoses
- Adhesion to PP and PE for multi-component applications



# Typical Applications

Dryflex DW TPE compounds can be used in both domestic and commercial applications such as :

- Plumbing seals
- Pipe fittings
- Shower hoses
- Showerheads
- Membranes



# Processing

Dryflex DW TPEs can be processed without predrying when stored under normal conditions. If poor surface finish, bubbles, voids or streaks are seen on the finished article then material should be dried for 2 to 3 hours at 80°C. Cycle times will be governed by temperature and section thickness.

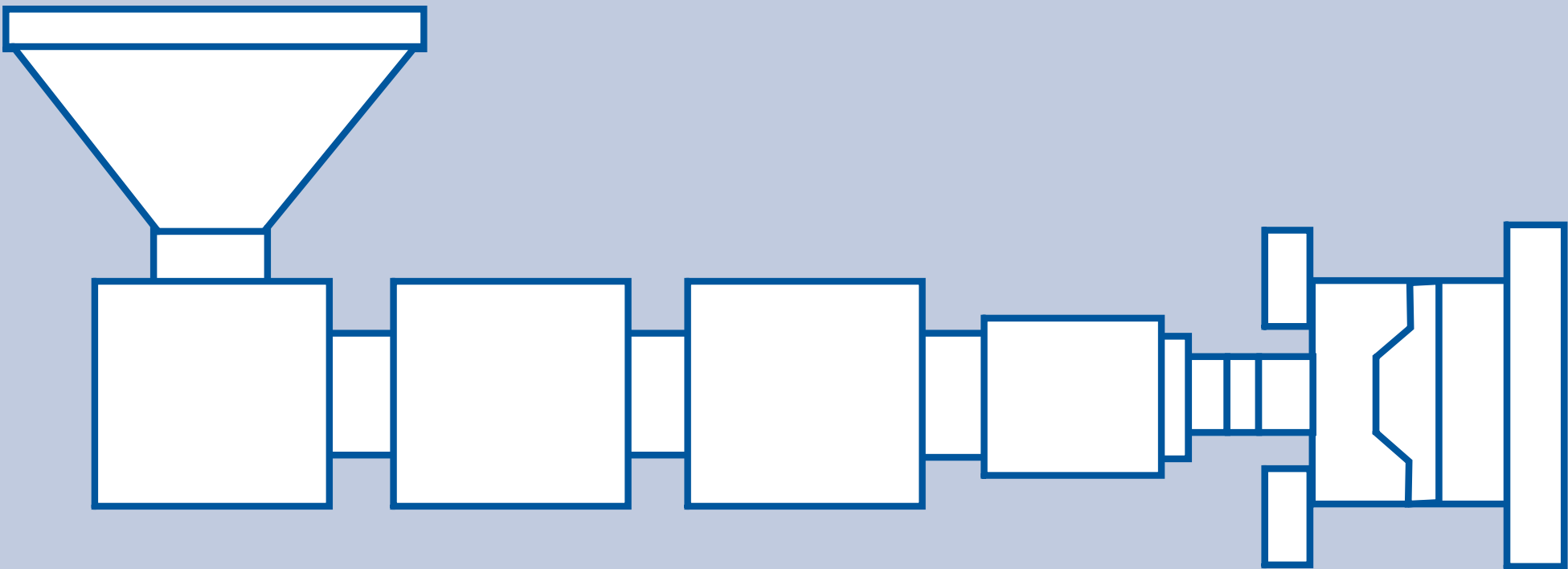
Temperatures should not exceed 240°C and the compound should only be at elevated temperatures for a short period of time. Care must be taken to allow sufficient cooling of the section prior to demoulding in order to prevent permanent distortion of the article.

This processing information is intended only as a guide. The actual parameters will depend on the machine used and the moulding being produced.

[More Processing & Problem Solving Information >](#)

# Processing : Injection Moulding Guidelines

- Injection Speed: Low - Medium
- Back Pressure: Low - Medium
- Holding Pressure: Sufficient to pack the mould
- Cooling: Can be demoulded when parts have cooled sufficiently

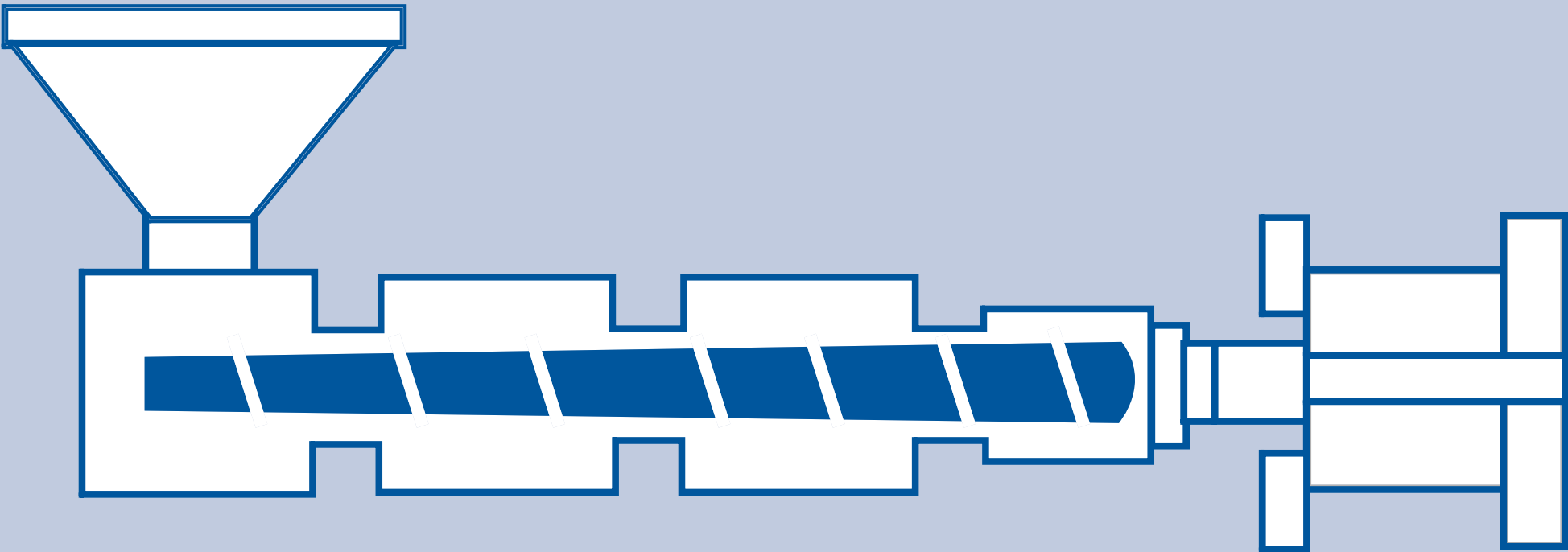


Recommended start-up temperatures °C

170 - 190    180 - 200    190 - 210    200 - 210    15 - 60

# Processing : Extrusion Guidelines

L/D Ratio:	20:1 to 25:1
Compression Ratio:	2.5 to 3.0
Breaker Plate/Screen:	Both should be used
Draw Down:	5 to 10%
Cooling:	Cold water bath




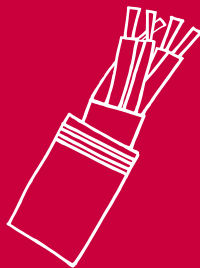











Recommended start-up temperatures °C	150 - 160	160 - 170	170 - 180	180 - 190	180 - 200
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# More Dryflex TPE Ranges

Click for more information

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<div>Dryflex® Circular</div> <div></div>	<div>Dryflex® Flam</div> <div></div>	<div>Dryflex® Green</div> <div></div>	<div>Dryflex® HiF</div> <div></div>	<div>Dryflex® Interior</div> <div><div>VOC</div><div></div></div>
<div>Dryflex® PS</div> <div></div>	<div>Dryflex® SE</div> <div></div>	<div>Dryflex® T</div> <div></div>	<div>Dryflex® Touch</div> <div></div>	<div>Dryflex® TPV</div> <div>TPV</div>

# ABOUT US



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**110,000+**  
**T/P.A. CAPACITY**

Across our Sweden, UK, German, China & North America operations. [Our companies](#)

**55+**  
**YEARS HISTORY**

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

**52,822+**  
**FORMULATIONS**

A comprehensive portfolio in TPE, TPS, TPO, TPU, TPV, soft PVC & Biobased technologies. Learn more about [Our products](#)

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