Dryflex® CS

TPEs with optimised compression set

HEXPOL TPE

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INTRODUCTION

Dryflex CS is a range of thermoplastic elastomer (TPE) compounds, based on SEBS. The range has been engineered to deliver optimised compression set performance. The raw materials used to manufacture Dryflex CS compounds are compliant with food contact regulations. The compounds also offer excellent organoleptic performance. Typical applications include gaskets, flexible connectors, food packaging, valves and seals.

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 our Dryflex CS range and contact us to discuss your specific requirements.

KEY PROPERTIES

- Low compression set
- Hardness range from 40 to 90 Shore A
- Raw materials are compliant with major food contact regulations (food contact statements are available on request)
- Easy to colour
- Transparent grades available
- Service temperature range from -40 to 100°C
- Adhesion to PP and PE
- 100% Recyclable
- Low odour
- Excellent mechanical properties
- Suitable for extrusion and injection moulding

TYPICAL DRYFLEX CS GRADES

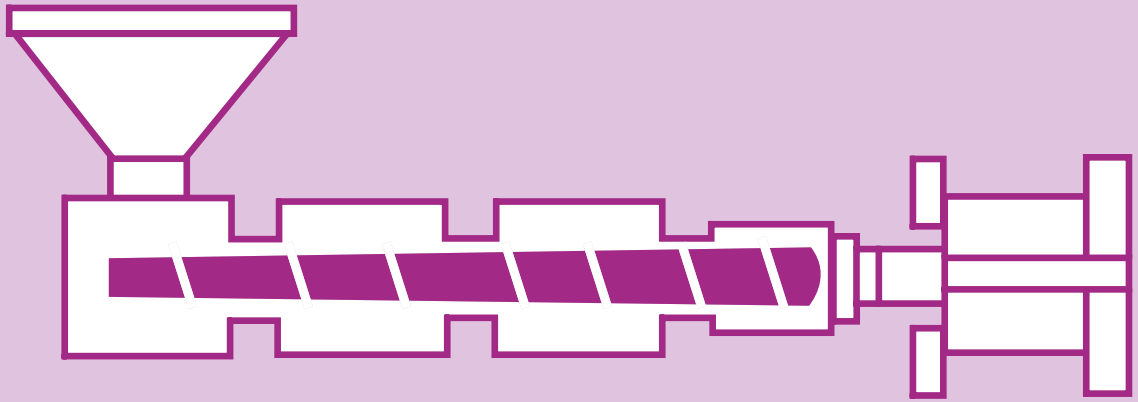
Grade	Hardness [1] ISO 868 Shore A	Density ISO 2781 g/cm3	Tensile Strength [2] ISO 37 Type 1 MPa	Elongation at Break [2] ISO 37 Type 1 %	Tear Strength [2] ISO 34-1 Method C N/mm	CS 23°C / 72h ISO 815-1 Type B %	CS 70°C / 22h ISO 815-1 Type B %	CS 100°C / 22h ISO 815-1 Type B %
Dryflex CS 40A001N	40	0.89	4.6	>850	13	21	33	40
Dryflex CS 50A001N	50	0.89	5.3	>800	15	23	34	41
Dryflex CS 60A001N	60	0.89	8.2	>850	20	24	35	41
Dryflex CS 70A001N	70	0.89	14	>900	25	27	37	45
Dryflex CS 80A001N	80	0.89	16	>850	31	32	48	55
Dryflex CS 90A001N	90	0.89	25	>900	46	39	59	65

[1] After 15 seconds
[2] Across the flow direction

PROCESSING

EXTRUSION GUIDELINES

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

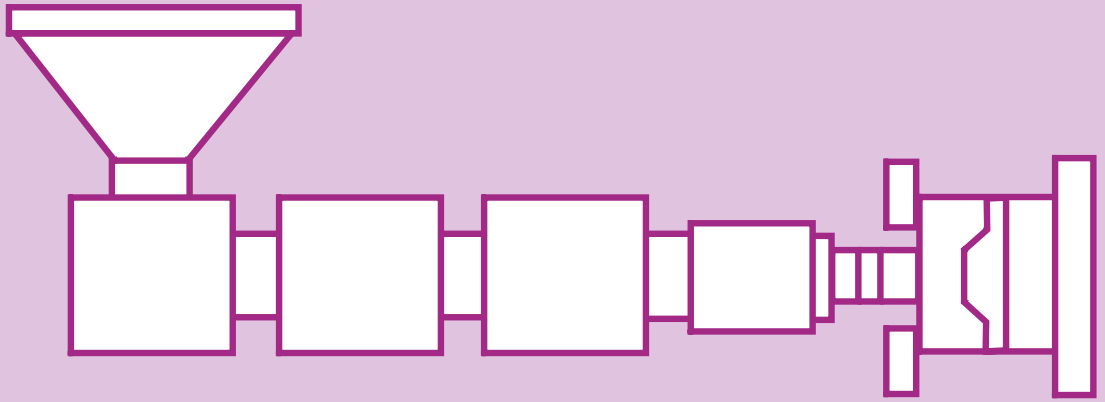


Recommended start-up temperatures °C	150 - 160	160 - 170	170 - 180	180 - 190	180 - 200

PROCESSING

INJECTION MOULDING GUIDELINES

Injection Speed:	Medium - Fast
Injection Pressure:	Medium - Fast
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	190 - 200	200 - 210	210 - 220	220 - 230	15 - 50

PROCESSING

Dryflex CS 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.

Care must be taken to allow sufficient cooling of the section prior to demoulding in order to prevent permanent distortion of the article. Venting of extrusion lines may be used as a method of preventing the build up of volatiles during continuous processing.

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

Further TPE processing & problem solving information is available to download from our website

CONTACT US

If you can’t see what you’re looking for or have any questions, please get in touch. Click the button to find your local contact from our global network of plants, offices and distribution partners.

Or, simply send us an email to info@hexpolTPE.com

GLOBAL CONTACTS →

PRODUCT WEBPAGE →

ABOUT HEXPOL TPE

HEXPOL TPE is a global compounding group specialising in Thermoplastic Elastomers (TPE) for key industries such as consumer, medical, packaging, automotive and construction. We have a core belief in being the easiest company to do business with. That's why we invest in our operations, teams and technologies to offer our customers the most reliable, relevant and cost-effective TPE compounds, backed by highly responsive support, technical know-how and application expertise. Our teams work together, across boundaries, applying the knowledge, experience and talents we have all around the world to meet the needs of our customers.

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