

D3O® FORMABLE ELASTOMERS



D3O uses a combination of patented, patent-pending and proprietary technologies to make rate sensitive, soft, flexible materials with high shock absorbing properties.

Our extensive material portfolio is compatible with many different production processes, with each material grade formulated and tuned to deliver specific performance properties.

Our current materials portfolio falls into four groups: Set Foams (Sf), Formable Foams (Ff), Set Elastomers (Se) and Formable Elastomers (Fe).

With similar impact protection and shock absorption capabilities to **D3O® Set Elastomer** offering, the **D3O® Formable Elastomer** range has been developed to be compatible with injection moulding or similar processes.

D3O® Formable Elastomers

Code name	Synonym	Density	Hardness range	5 J Impact	10 J Impact	Tensile strength	EaB	Tear strength	Abrasion resistance
FE001	IM LITE	980	82A	2.9	4.4	7.7	>500	27.4	10.6
FE002	D3O® TPE	1120	58A	3.6	8.4	5.4	>600	8.8	20.4
FE003	D3O® powered by DuPont™ Hytrel®	1150	39D	4	5.9	13 (in-flow) / 20 (cross-flow)	>500	37 (in-flow) / 55 (cross-flow)	4.9**
FE004	D3O® TPE 2	1110	78A	3	5.4	9.8	>600	22.2	15.8
FE005	D3O® TPE 3	1030	67A	3.2	6.7	4.3	>500	9.1	21.7
FE006	D3O® Crystalex	1110	83A	7.7	11.3	13.3	>240	14.3	-
FE007	D3O® with 5G Signal Plus™ Technology	1060	84	3.7	5.6	6.5	>220	11.6	3.9
FE008	D3O® Bio	1220	92.5	4.6	6.6	20.7	>490	8.3	2
Method reference*		ISO 845: 2009	DTS004	DTS059	DTS059	EN ISO 37-2	EN ISO 37-2	ASTM D624	ISO 5470
Units		kg/m3	Shore A/D	kN	kN	MPa	%	N/mm	mg/100 cycles

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For full details including material properties and product tolerances, please request SOQ document from D3O representative. The information provided is not intended to and does not create any warranties, expressed or implied, including any warranty of merchantability of fitness for a particular purpose. In accordance with the Company's policy of continuous improvement, D3O reserves the right to apply such improvements to its products and materials without notice. This data sheet shall not be reproduced or amended without the written consent of Design Blue Limited.

*Values shown represent typical product characteristics.

**Molten material remains on wheel