

FORMABLE ELASTOMERS



Delta Three Oscar[™] uses rate sensitive, soft and flexible D3O[®] materials for shock absorption and impact protection applications.

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 six groups: Set Foams (Sf), Formable Foams (Ff), Recycled Foams (Rf), Set Elastomers (Se), Formable Elastomers (Fe) and Impact Additives (iA).

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

Formable Elastomers

Synonym	Density	Hardness	5 J Impact	10 J Impact	Tensile Strength	Elongation at Break	Tear Strength	Abrasion Resistance	Permittivity @ 10.2 GHz	Transparency
IM LITE	980	82.0	2.9	4.4	7.7	>500	27.4	10.6	-	-
D30® TPE	1120.0	58.0	3.6	8.4	5.4	>600	8.8	20.4	-	-
D3O® powered by DuPont™ Hytrel®	1150	39	4.0	5.9	13 (in-flow) / 20 (cross-flow)	>500	37 (in-flow) / 55 (cross- flow)	4.9**	-	-
D30 [®] TPE 3	1030.0	67.0	3.2	6.7	4.3	>500	9.1	21.7	-	-
D3O [®] Crystalex™	1110.0	83.0	7.7	11.3	13.3	>240	14.3	-	-	84.0
D3O [®] with 5G Signal Plus™ Technology	1060.0	84.0	3.7	5.6	6.5	>220	11.6	3.9	2.5	-
D30 [®] Bio	1223.0	92.5	4.6	6.6	20.7	>500	8.4	0.3	-	
D3O® Tactical™	1110.0	78.0	3.0	5.4	9.8	>600	22.2	15.8	-	-
Method reference*	ISO 845:2009	ASTM D2240 - 05 (2010)	DTS059	DTS059	EN ISO 37-2	EN ISO 37-2	ASTM D624	ISO 5470	21(15):2673-2676	DTS086
	kg/m ³	Shore A	kN	kN	MPa	%	N/mm	mg/100 cycles	GHz	%

**Molten material remains on wheel

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*Values shown represent typical product characteristics.

Values shown represent typical product characteristics. For full details including material properties and product tolerances, please request SOQ document from Delta Three Oscar 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, Delta Three Oscar 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.