

# 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

Material Name	*Density (kg/m3)*	*Hardness (Shore A)*	*5J Impact (kJ)*	*10J Impact (kJ)*	*Tensile Strength at Break (MPa)*	*Tensile Elongation at Break (%)*	*Tear Strength (N/mm)*	*Abrasion Resistance (mg/100 cycles)*	*Transparency (%)*	*Plant-based content (%)*	Suitable for solid colours	Suitable for clear colours
Method reference*	ISO 845:2009	*ASTM D2240 - 05 (2010) *	DTS011	DTS011	ISO 37:2017 Type 1	ISO 37:2017 Type 1	ASTM D624 Type T	ISO 5470-1	DTS086			
Test Condition		3s			500mm/min	500mm/min	50mm/min	H18, 9.8N				
D3O®	1115.0	60.5	3.7	8.3	3.6	522.9	6.9	15.9	-	-	✓	-
D3O® Crystalex™	1120.0	82.7	4.6	6.9	10.4	248.9	17.6	9.3	88.0		✓	✓
D3O® Bio	1223.0	92.5	4.6	6.6	20.7	499.3	8.4	0.3	-	45.0	✓	
D3O® Tactical™	1110.0	78.8	3.0	5.3	9.8	650.0	22.2	20.4	-	-	✓	-

\*\*Molten material remains on wheel

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\*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.

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