

A silver car is shown from a side profile, with a blue diagonal banner overlaid across the middle. The banner contains the text 'AUTOMOTIVE COMPOUNDS' in white, bold, uppercase letters.

AUTOMOTIVE COMPOUNDS

The logo for LUXUS LTD is located in the bottom right corner. It features the word 'LUXUS' in a large, teal, sans-serif font, with 'LTD' in a smaller, blue, sans-serif font below it. The logo is enclosed in a teal, stylized frame that resembles a trapezoid with a diagonal line. Below the logo is a teal banner with the tagline 'Bringing new enhanced life to plastics' in white text.

LUXUS
LTD

Bringing new enhanced life to plastics





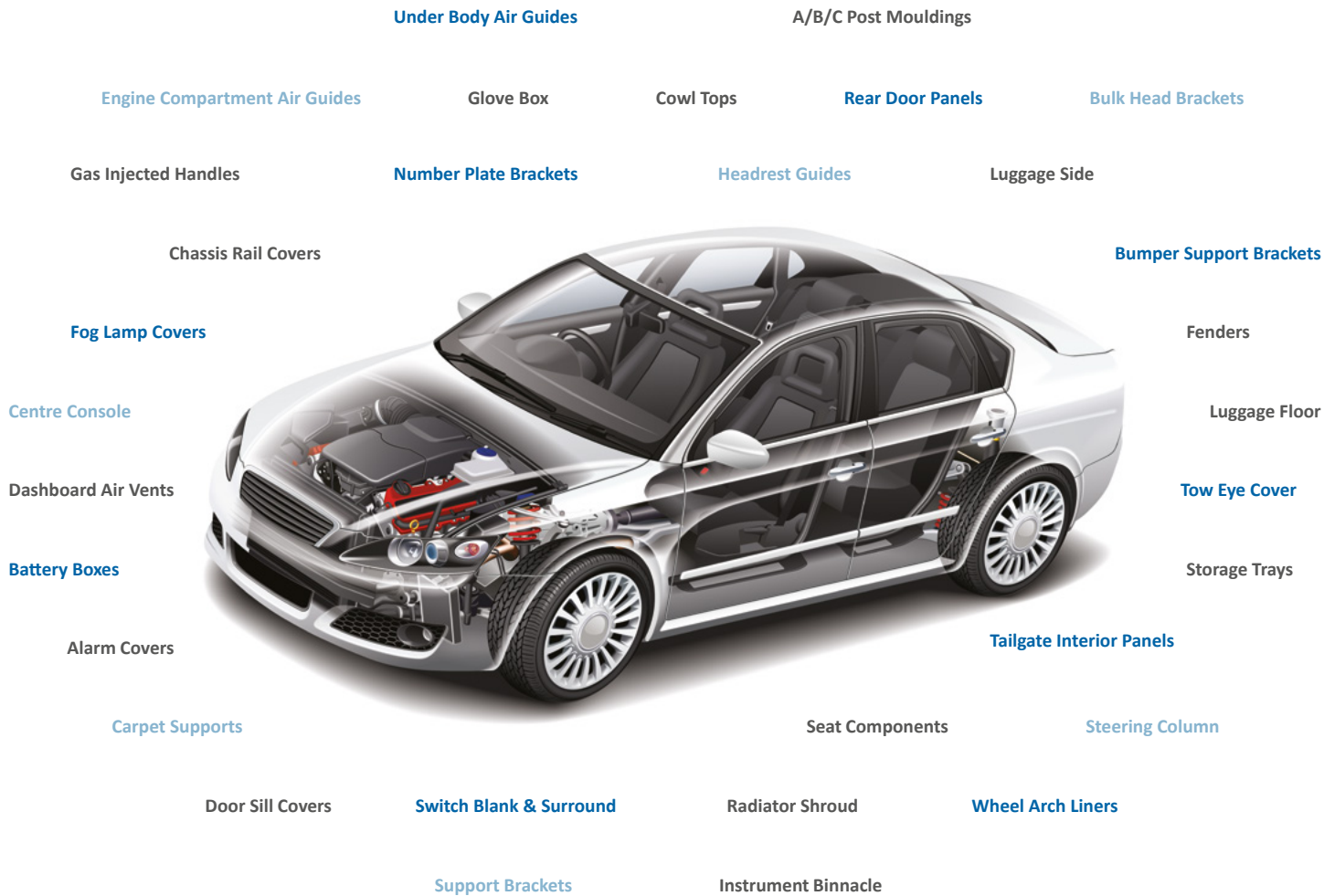
Luxus is a **Tier 1 approved** supplier with a proven track record, having delivered high quality plastics to the automotive industry for over 20 years.

As a knowledge-based technical compounder, Luxus has a detailed understanding of the changing needs of the automotive sector. We work with our clients to **optimise materials** and deliver high-performance polymers that satisfy **countless automotive applications**.

We engineer polymers to meet the **sustainability, cost and technical goals** being sought by automakers today. Our materials portfolio is broad; including engineered, glass-filled and mineral-filled polymers and the option for **bespoke solutions** to meet your needs.

Our materials do not offer a trade-off or compromise. For example, we have developed lightweight and improved CO₂ options without any concession in mechanical performance. With the support of our technical department, we enable companies to **push the design boundaries** and their choice of materials.

Our Technical Centre operates 24/7 and undertakes **rigorous testing** and analysis, with stringent quality control procedures employed throughout our business. This allows us to deliver **exceptional, repeatable quality** to meet exacting automotive standards.



ENGINEERING GRADES

MATERIAL	GRADE	MFI	IZOD	DENSITY	TENSILE STRESS	FILLER	NOTES
ABS	E1	7 – 20	5	1.1	29	–	–
PC	E2	10 – 35	16	1.2	49	–	–
PC/ABS	E3	3 – 12	25	1.2	45 – 51	–	–
PC/ABS	E4	6	25	1.2	45	–	–
PEHD	E6	<4.5	3.5	0.945	16	–	–
PEHD	E7	0.1 – 0.4	N/A	0.96	13	–	–
PBT	E8	16	6	1.36	60	GF	–
PBT	E9	12	6	1.43	75	GF	–
PBT	E10	10	6	1.51	90	GF	–
PA	E11	10	4.5	1.3	75	GF	30% GF
PA	E12	10	8	1.2	100	GF	15% GF
PA	E13	9	12	1.1	49	–	–
PP	E14	8	8	0.892	72	GF	5% Glass Sphere
PP	E15	8	5.5	0.877	55	GF	10% Glass Sphere
PP	E16	8	5	0.856	50	GF	15% Glass Sphere

Table shows typical values of Luxus automotive compounds

A SURFACE INTERIOR PP GRADES

APPLICATION	GRADE	MFI	IZOD	DENSITY	FLEXURAL MODULUS	FILLER	NOTES
A Surface	A1	20 – 25	7	0.935	950	–	UV Stabilised
A Surface	A2	20 – 25	7	0.935	900	–	UV Stabilised
A Surface	A3	22 – 29	7	0.93	1000	–	UV Stabilised
A Surface	A4	22 – 29	7	0.93	1000	–	UV Stabilised
A Surface	A5	24 – 29	7	0.93	1400	–	UV Stabilised
A Surface	A6	14 – 16	7	1	1300	TF	UV Stabilised
A Surface	A7	18 – 26	12	1	1350	TF	UV Stabilised
A Surface	A8	22 – 28	5	1.05	1400	TF	UV Stabilised
A Surface	A9	22 – 28	5	1.07	1350	TF	UV Stabilised
A Surface	A10	22 – 28	5	1.07	1500	TF	UV Stabilised
A Surface	A11	22 – 28	5	1.05	1500	TF	UV Stabilised
A Surface	A12	22 – 28	5	1.05	1500	TF	UV Stabilised
A Surface	A13	25 – 29	4.5	1	1350	TF	UV Stabilised
A Surface	A14	25 – 29	4.5	1	1600	TF	UV Stabilised
A Surface	A15	31 – 36	6.5	1.07	1500	TF	UV Stabilised
A Surface	A16	31 – 36	5	1.07	1500	TF	UV Stabilised

Table shows typical values of Luxus automotive compounds

NON - VISIBLE PP GRADES

APPLICATION	GRADE	MFI	IZOD	DENSITY	TENSILE STRESS	FILLER	NOTES
Under Bonnet	B1	9 – 13	7	0.98	18 – 24	–	General Purpose
Under Bonnet	B2	9 – 13	7	0.935	18 – 24	–	Heat Stabilised
Under Bonnet	B3	9 – 13	8	0.945	18 – 24	–	Heat Stabilised
Under Bonnet	B4	10 – 20	10	0.98	18 – 22	–	Heat Stabilised
Under Bonnet	B5	10 – 20	40	0.935	15 – 20	–	High Impact
Interior Non Visible	B6	9 – 18	10	1.1	17 – 21	TF	Good Impact
Under Bonnet	B7	17 – 22	18	1.05	15 – 19	TF	High Impact
Under Bonnet	B8	18 – 22	4.5	1	20 – 24	TF	General Purpose
Under Bonnet	B9	18 – 22	4.5	1	20 – 24	TF	Heat Stabilised
Under Bonnet	B10	20 – 25	2.2	1.2	24 – 31	TF	40% TF
Under Bonnet	B11	5 – 15	5	1.15	44 – 69	GF	UV Stabilised
Under Bonnet	B12	7 – 15	6	1.15	60 – 69	GF	Reinforced 30%GF
Under Bonnet	B13	7 – 15	5.5	1.1	45 – 69	GF	Reinforced 20%GF

Table shows typical values of Luxus automotive compounds





Hycolene compounds provide the characteristics of mineral filled materials at a density delivering reduced weight relative to conventional PP compounds.

The Luxus PP Hycolene range has market leading scratch resistance and varying impact options. The Luxus compounding process includes delivery of colour specifications according to customer requirements. In addition, UV, heat stabilisation and other properties specific to our customer will be defined during the material validation process.

Target applications are A-surface visually critical mouldings where colour consistency and scratch resistance are key performance parameters.

APPLICATION	GRADE	MFI	IZOD	DENSITY	FLEXURAL MODULUS	FILLER	RECYCLED CONTENT
A Surface	H1	12 – 17	9	0.965	1400	MF	Optional
A Surface	H2	14 – 18	17	0.965	1100	MF	Optional
A Surface	H3	18 – 26	6	0.965	1600	MF	Optional

Table shows typical values of Hycolene compound

TECHNICAL SERVICES

Luxus is able to offer all the services detailed below and right.

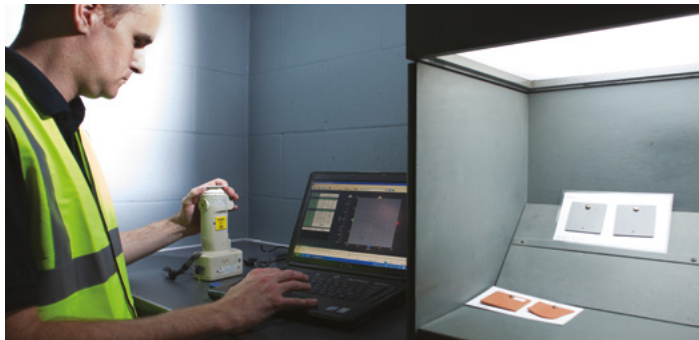
Please contact us with your requirements and we will put together a bespoke package for you.

MATERIAL COMPARISON REPORTS

To take 2, or more, thermoplastic materials, mould them under identical conditions on the same test equipment and issue a report.

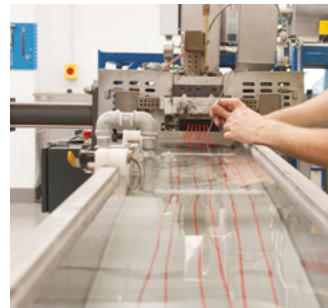
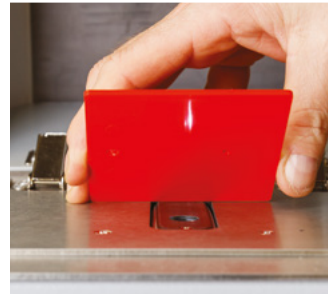
COLOUR MATCHING

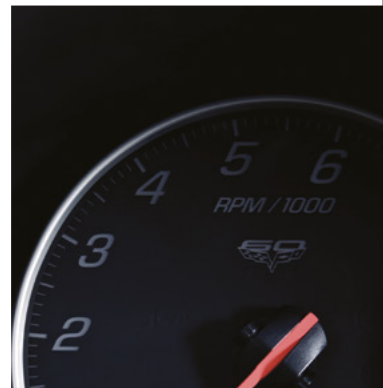
To produce a commercial colour match using a Minolta Spectrophotometer with the supply of colour plaques.



TEST DESCRIPTION	UNITS
Lab Extruder / Staff	Full Day
	Half Day
Production Extruder & Operators	Full Day
Identification of Materials	
<i>Fourier-transform Infrared Spectroscopy (FTIR)</i>	
<i>Differential Scanning Calorimetry (DSC)</i>	
<i>X-ray Fluorescence (XRF)</i>	
<i>Ash Content</i>	%
<i>Moisture Content</i>	%
<i>Oxidative Induction Times (OIT)</i>	Mins
<i>Heat Build Up (HBU)</i>	°C
<i>Total Solar Reflectance (TSR)</i>	
<i>'End of Life' Recyclability</i>	

TEST DESCRIPTION	UNITS	TEST METHOD
Flow Properties		
<i>Melt Flow Index (MFI)</i>	g/10mins	ISO 1133
<i>Melt Volume Rate (MVR)</i>	cm ³ /10mins	ISO 1133
Impact Properties		
<i>IZOD</i>	kJ/m ²	ISO 180:1993
<i>Charpy</i>	kJ/m ²	ISO 179
Tensile		
<i>Tensile Properties</i>	N	ISO/R 527
<i>Flexural Modulus</i>	N/mm ²	ISO 178
<i>Young's Modulus</i>	N/mm ²	ISO/R 527
Hardness		
<i>Shore A & D</i>		ISO 868
Density		
<i>Density</i>	g/cm ³	ISO 1183:2012
Thermal Analysis		
<i>Heat Distortion Temperature - Edge 0.45Mpa</i>	°C	ISO 75
<i>Heat Distortion Temperature - Edge 1.8Mpa</i>	°C	ISO 75
<i>Vicat - 1kg</i>	°C	ISO 306
<i>Vicat - 5kg</i>	°C	ISO 306
Scratch Resistance Testing		
<i>Erichsen Cross Hatch</i>		





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