

*DURABIO*

**Distribution seit 2015**



**Durabio**

Bio  
basierendes,  
Transparentes  
Polymer

**mcpp**<sup>TM</sup>  
Power to Perform

**NEW**

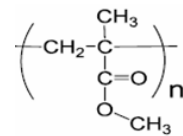


**Durabio**

**Produkteinteilung**

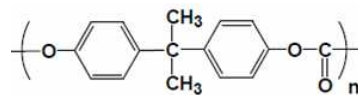
**Transparente  
Polymere**

**PMMA**



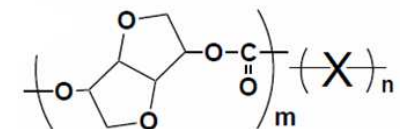
**Transparenz**

**PC**

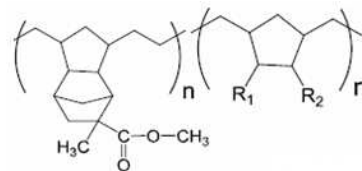


**Mechanik  
Temperatur**

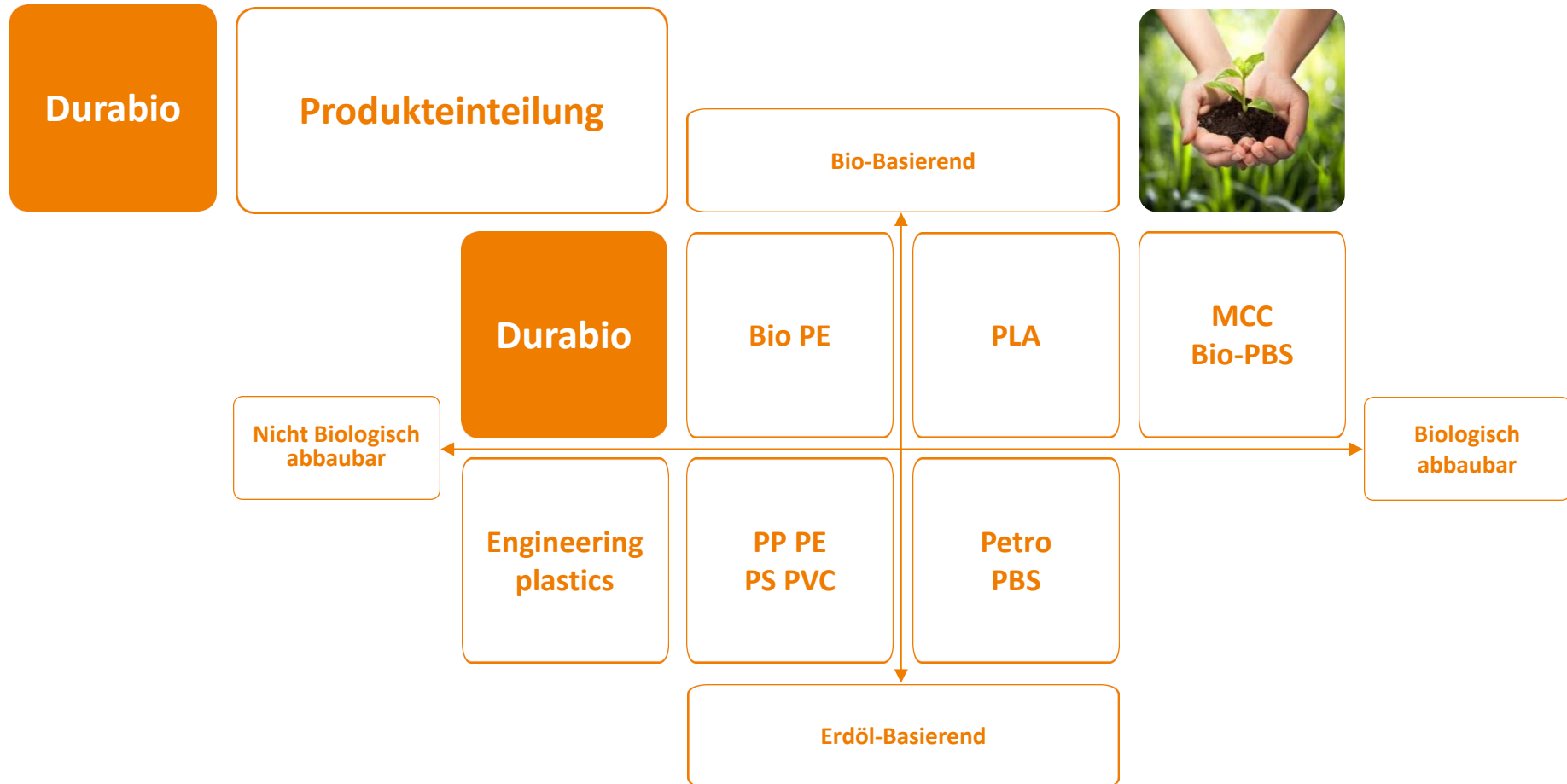
**BIO-based  
DURABIO**



**COP/COC**

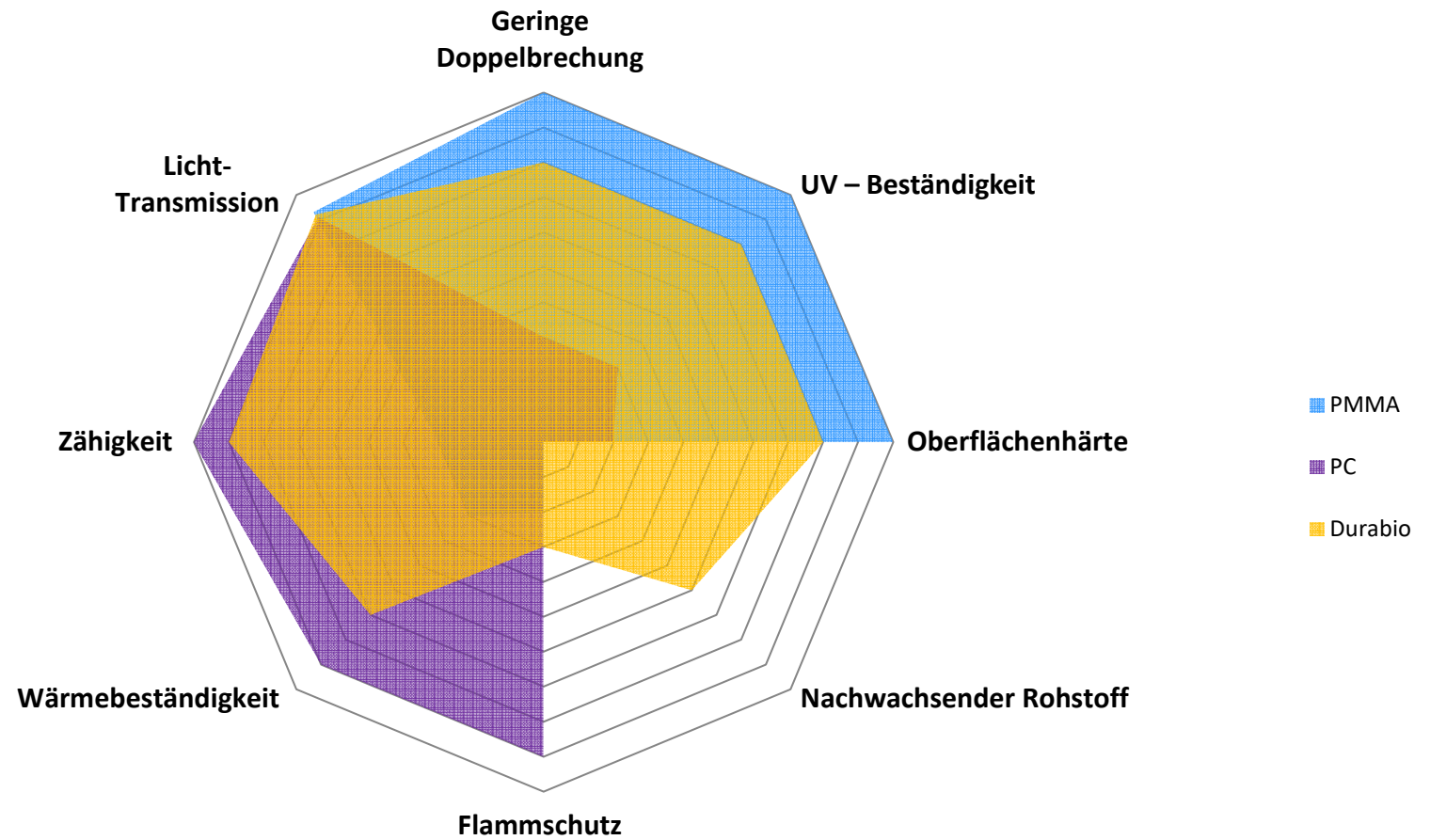


**Optik**



**Durabio**

**Eigenschaften**



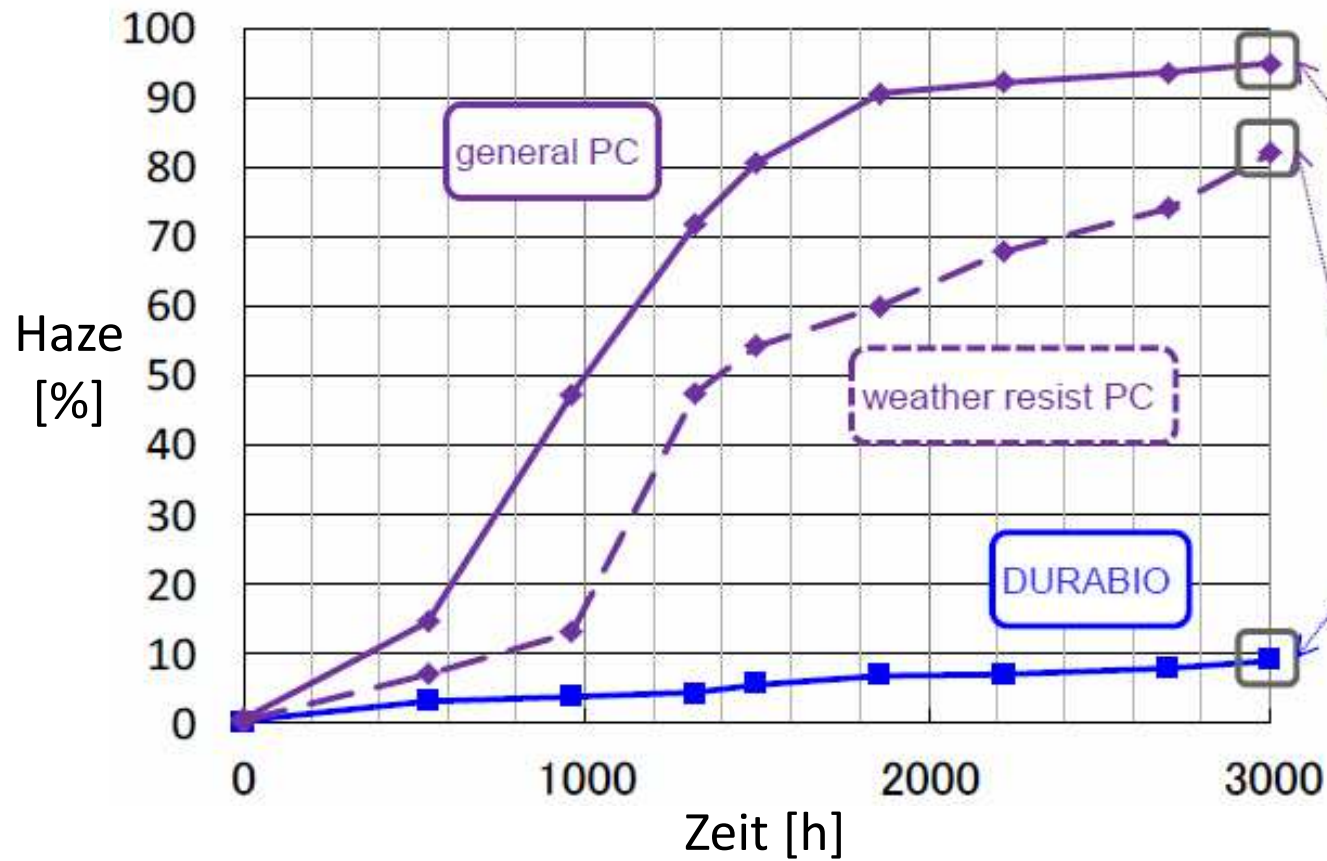
**Durabio**

**UV  
Beständigkeit**

Sunshine  
weather  
meter S80

Leistung  
50V / 60A

Temperatur  
63°C

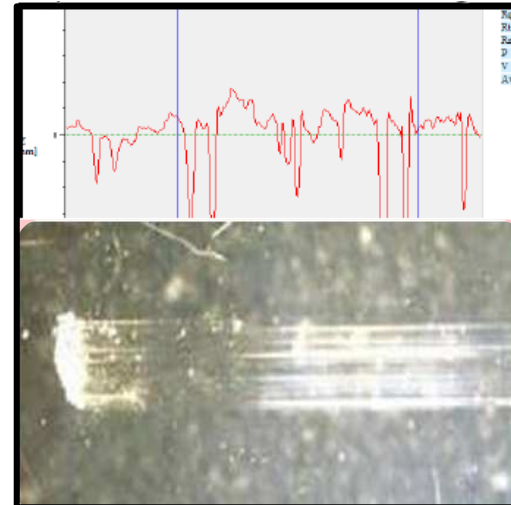
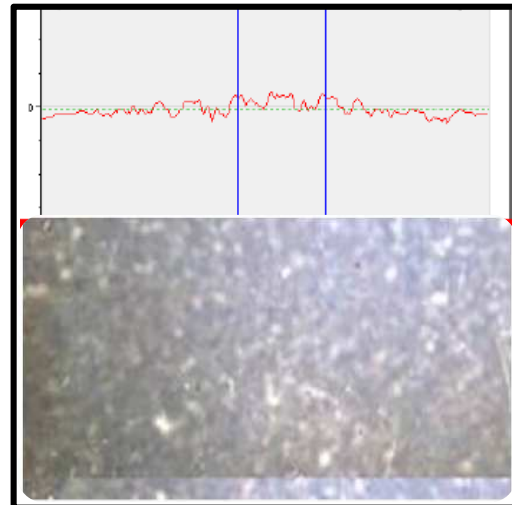


**Durabio**

**Oberfläche**

**Oberflächen  
Struktur**

**Kratz-  
beständig**



**Durabio**

**Bleistift  
Test  
F**

**PC**

**Bleistift  
Test  
3B**



**Durabio**

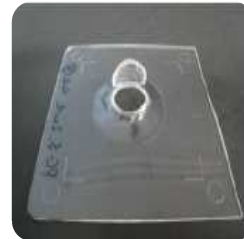
**Zähigkeit**

**Durabio**



**Durchstoß  
Energie  
77 Joule**

**PC**



**Durchstoß  
Energie  
89 Joule**

**Duktiles  
Bruch-  
verhalten**

**Muster  
100x100mm**

**Prüfräte  
4,4 m/s**



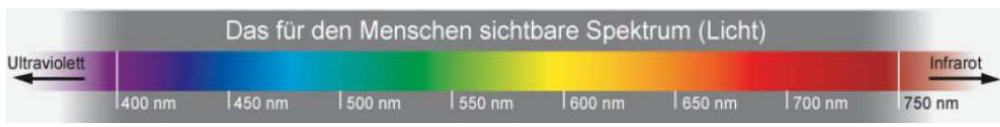
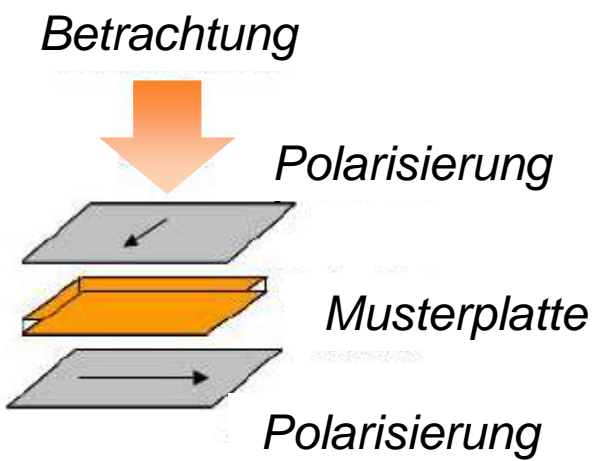
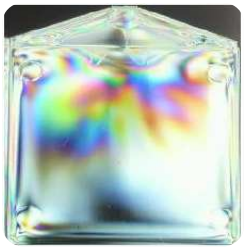
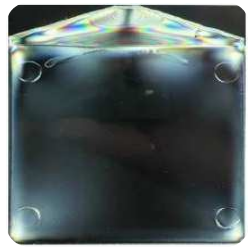
**Durabio**

**Optische Eigenschaften**

**Geringe  
Eigen-  
spannungen**

**Durabio**

**PC**



Durabio	Optische Eigenschaften		
Brechungsindex	1,5	1,58	1,49
Transmission [%]	92	90	93
	Durabio	PC	PMMA



**Durabio**

**Chemische  
Beständigkeit**



**Methanol**

**Ethanol**

**Isopropyl  
Alkohol**

**Methyl  
isobutyl  
ketone**

**Hexane**



**Aceton**

**Methyl ethyl  
ketone**

**Cyclo-  
hexanone**

**Cyclo-  
pentanone**



**Porpylen-  
glycol**



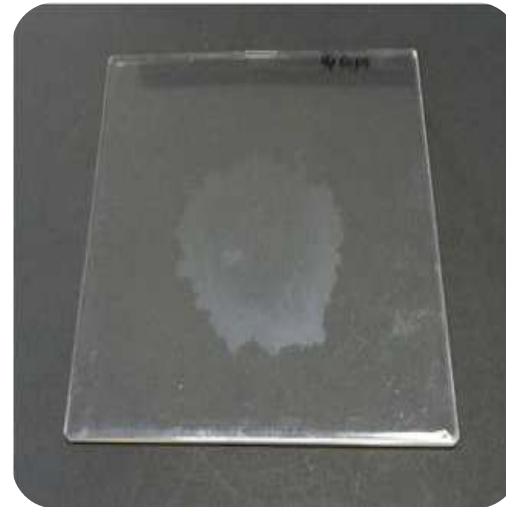
**Durabio**

**Chemische  
Beständigkeit**

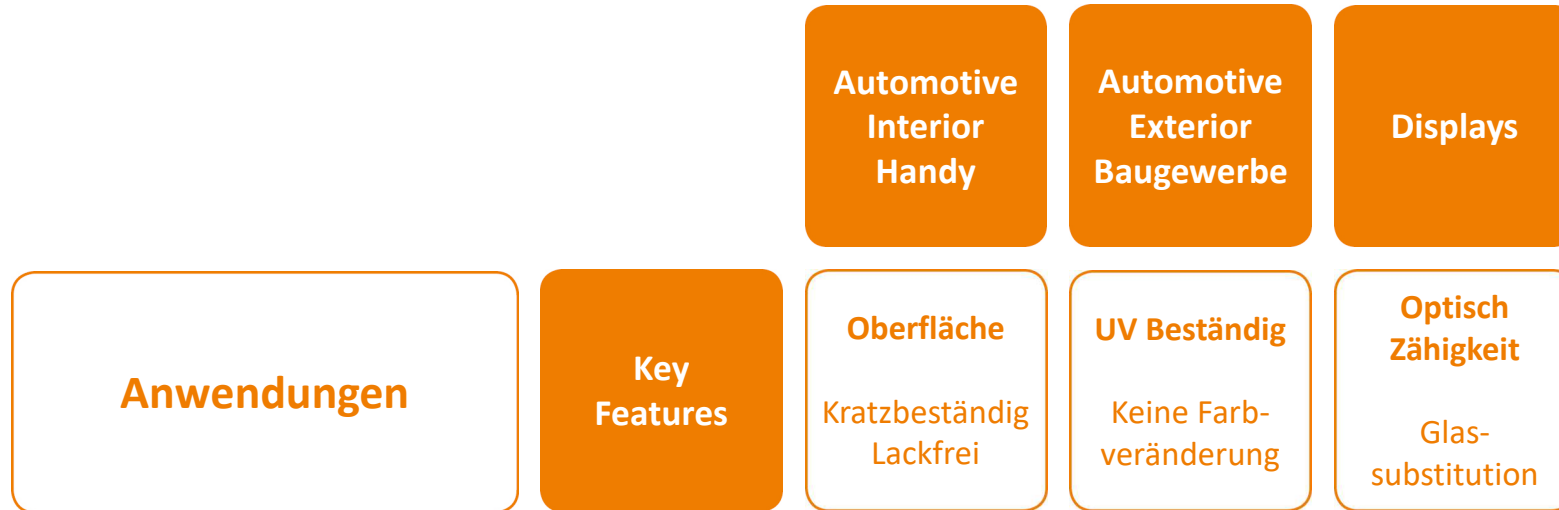
**Sonnen-  
creme**



**Durabio**



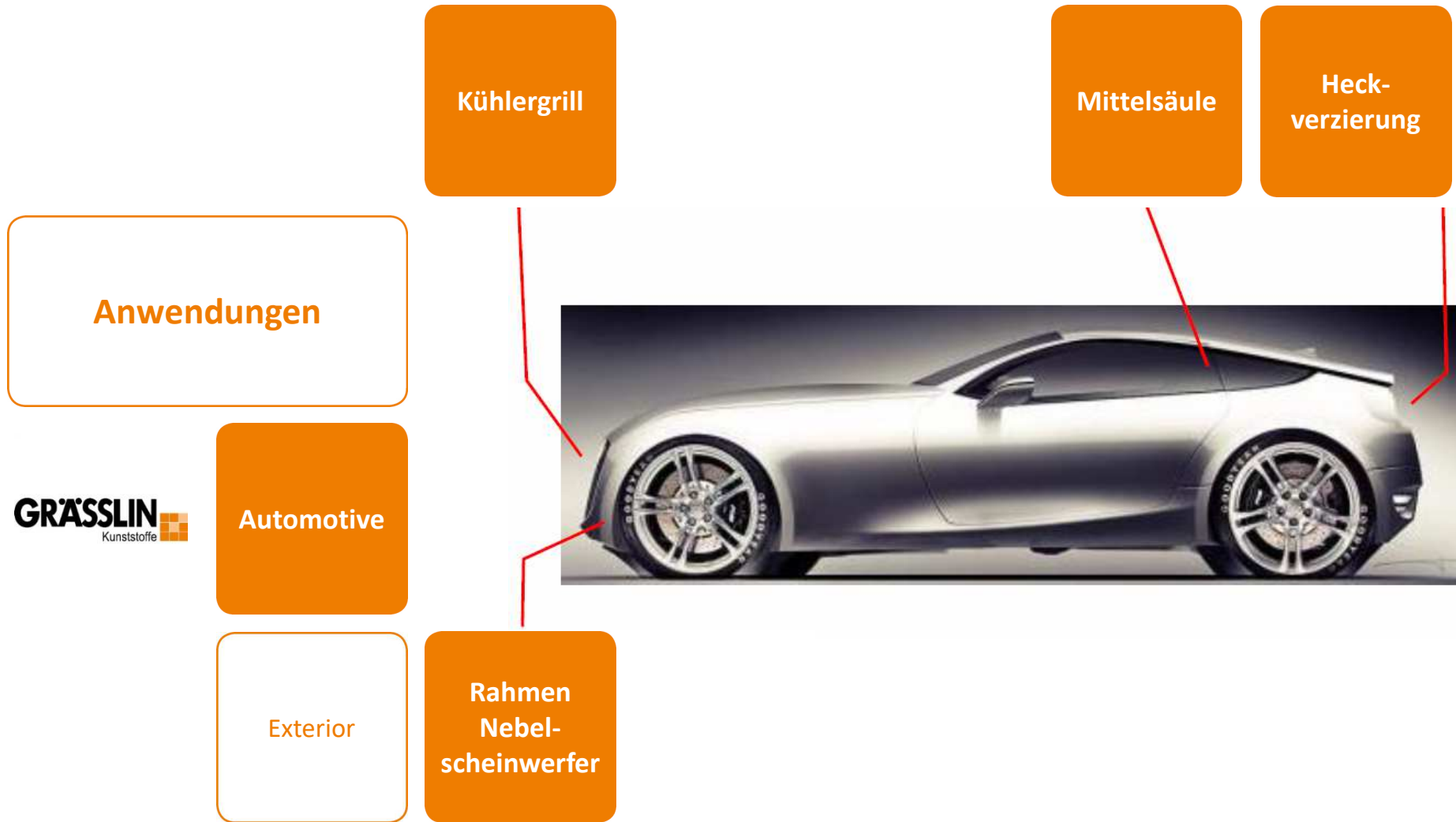
**PC**

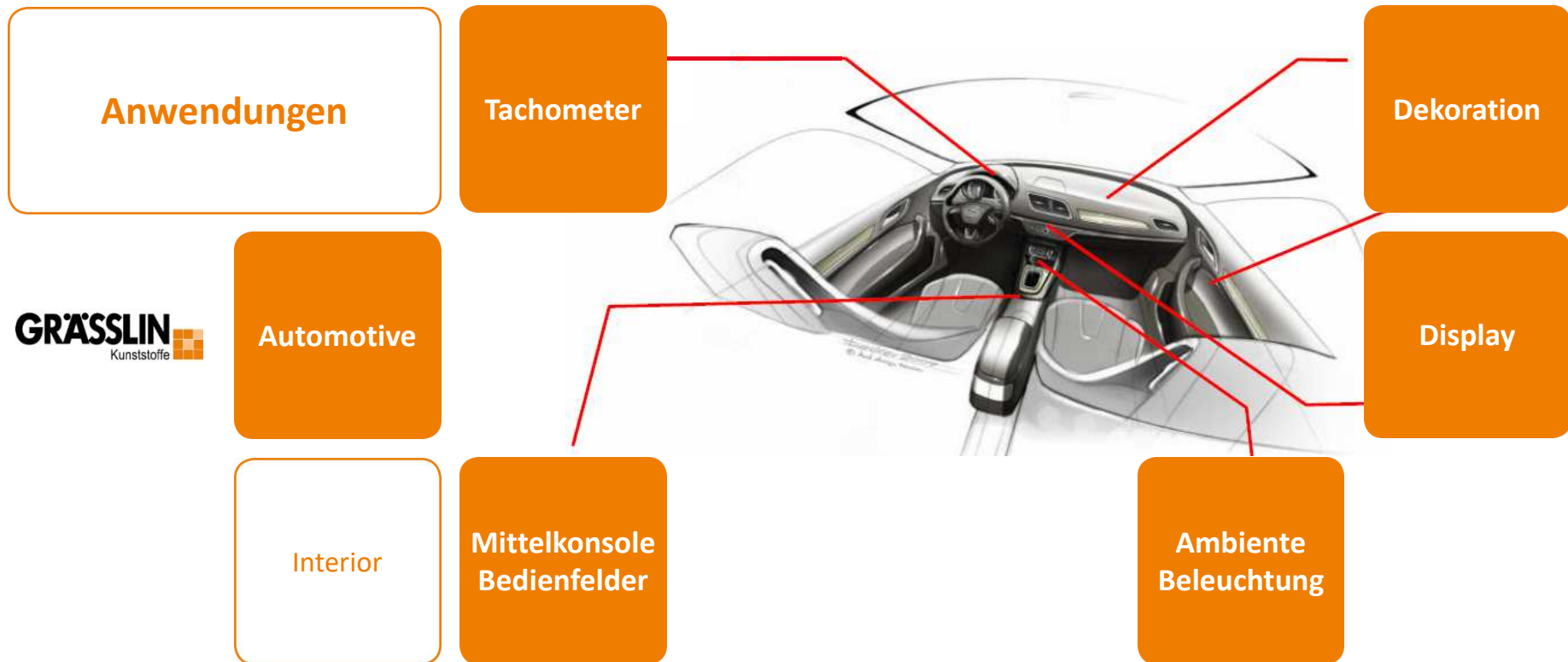


**Automotive**

Exterior  
Interior











**DURABIO**

**Verarbeitung**

		Temperature/°C
Cylinder temperature	Under hopper	~50
	Hopper side	220~260
	Center	220~260
	Nozzle side	220~260
	Nozzle	220~260
Mold temperature		60~80

Dryer	Temperature/°C		Time/hrs
	D5380	D7340	
Hot-air dryer	80	100	5~7
Vacuum dryer	80	90	5~7

**DURABIO**
**Datenblatt**

## Grade D7340

Mechanical Properties	Norm	Test Conditions	Unit	value
Density	-	-	g/cm <sup>3</sup>	1.37
Tensile modulus	ISO 527-1, -2	50mm/min	Mpa	2700
Yield stress	ISO 527-1, -2	50mm/min	Mpa	70
Yield strain	ISO 527-1, -2	50mm/min	%	5
Tensile stress at break	ISO 527-1, -2	50mm/min	Mpa	50
Flexural modulus	ISO 178	2 mm/min	Mpa	2800
Charpy impact strength notched	ISO 179-1eU	23° C, x mm	kJ/m <sup>2</sup>	9
Charpy impact strength unnotched	ISO 179-1eU	23° C, x mm	kJ/m <sup>2</sup>	NB
Pencil Hardness	-	-	-	F
Rockwell Hardness; R scale	ISO 2039-2	-	-	127

Thermal and rheological properties	Norm	Test Conditions	Unit	value
Melt flow rate	ISO1133	230° C/2,16kg	g/10min	11
Processing melt temp.	-	recommended	° C	240 ±10
Glass transition temperature	ISO 11357-1,-2	10° C/min	° C	120
Heat Deflection Temperature	ISO 75-1,-2	1,80 MPa	° C	106
Heat Deflection Temperature	ISO 75-1,-2	0,45MPa	° C	118

Optical and electrical properties	Norm	Test Conditions	Unit	value
Luminous transmittance (clear transparent)	ISO 13468-2	3 mm	%	92
Refractive index	-	-	-	1.50

**DURABIO**

**Anwendungen**

**AQUOS CRYSTAL 2  
Smartphone**

Schlagzähigkeit  
Chemikalienbeständigkeit /  
Spannungsrisssbeständigkeit  
Kratzfestigkeit  
Optische Eigenschaften



**DURABIO**

**Anwendungen**

**Tachometer  
Renault Clio**

**Keine Lackierung  
notwendig**

**Klavierlack  
Kratzfestigkeit  
Schlagzähigkeit  
UV Beständigkeit**







**Vielen Dank für Ihre  
Aufmerksamkeit**



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