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# DIC Engineering Plastics (DIC EP)

## DIC-PPS FZ-8600 for Lamp Reflectors

# DIC-PPS for Lamp Reflectors



Grade : FZ-8600 BLACK

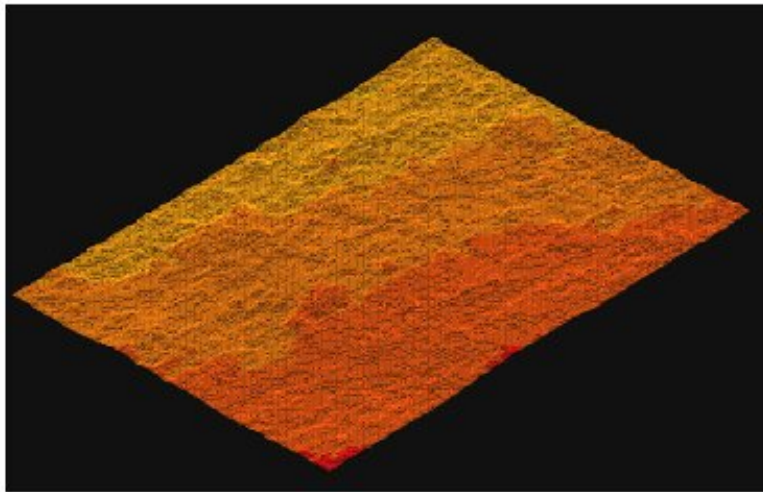
## Introduction to FZ-8600 BLACK

- 1) Heat resistance: 260 °C  
(Deflection Temp. under Load of 1.82MPa)
- 2) Excellent surface smoothness
- 3) High mechanical strength
- 4) Low out-gas

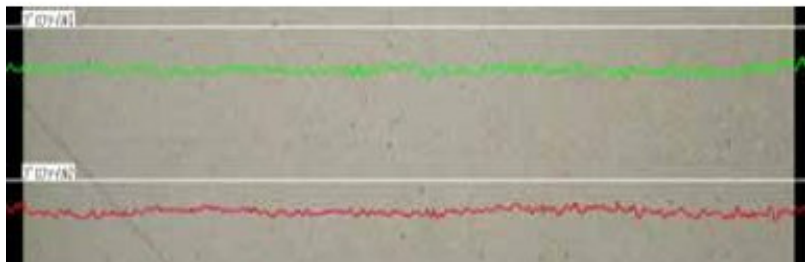
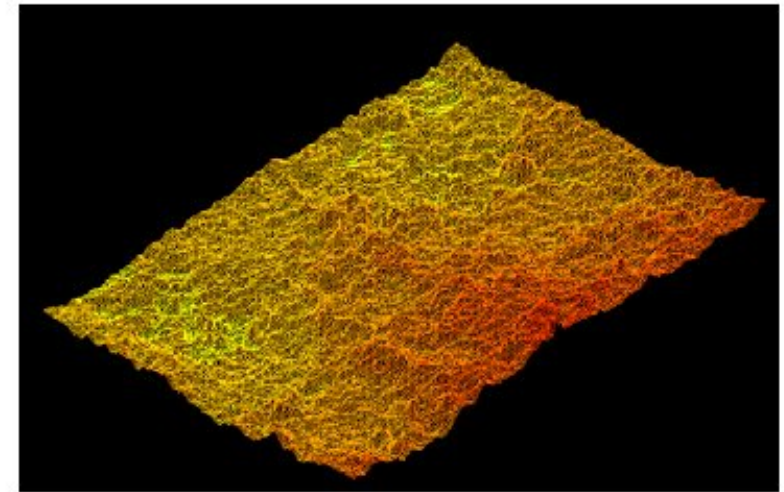


Photo. Head Lamps

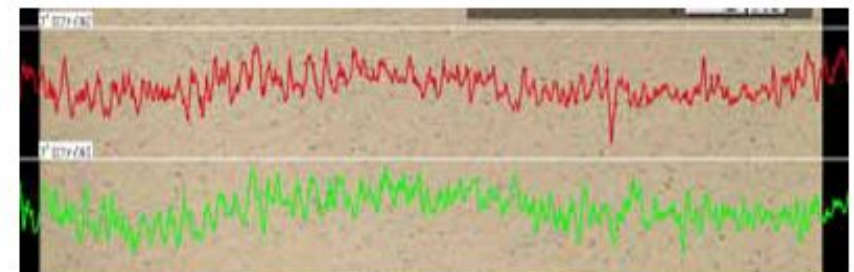
# Excellent Surface Smoothness



3D image



Smoothness



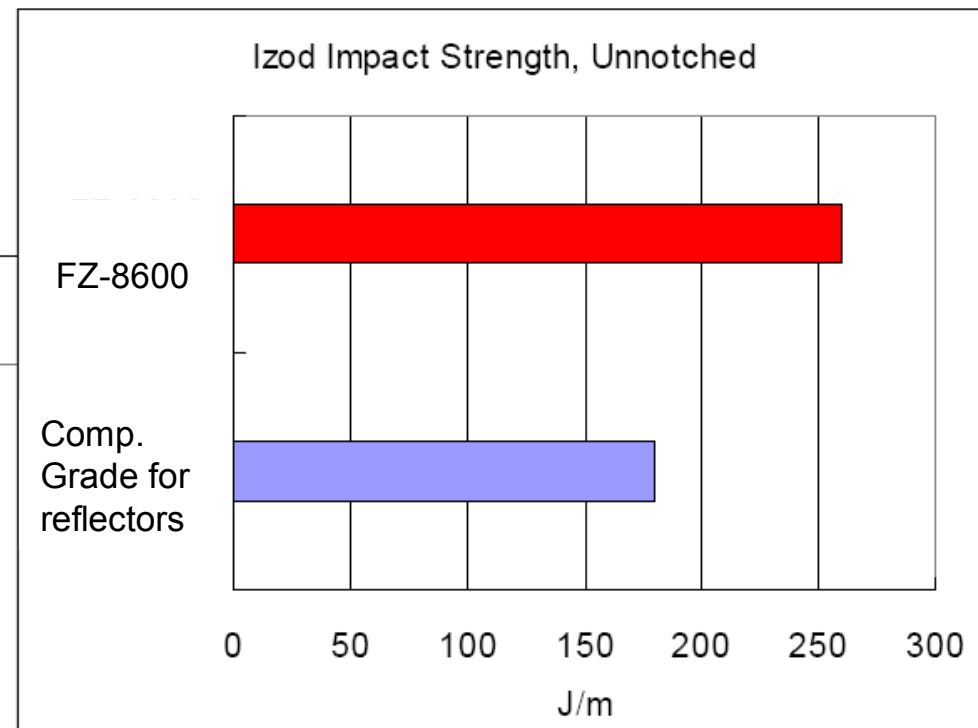
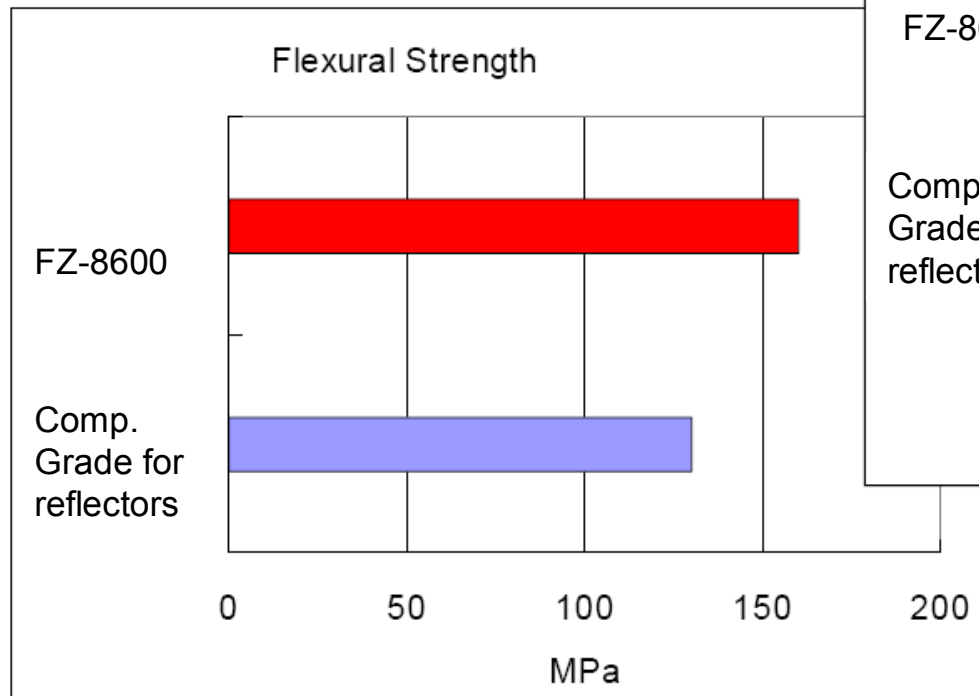
FZ-8600 Black

Ra=0,03 $\mu$ m

Comp. Grade used for reflectors

Ra=0,1 $\mu$ m

# High Mechanical Strength and Good Impact Properties



# General Properties of FZ-8600



Properties	<ASTM>	Units	FZ-8600 BLACK
<b>Physical</b>			
Specific gravity	D-792	-	1.90
Water absorption, 23°C/24h/in water	D-570	wt.%	0.02
Mold shrinkage, MD /TD <sup>a</sup>	D-955	%	0.40/1.00
<b>Mechanical</b>			
Tensile strength	D-638	MPa	100
Poisson's ratio	-	-	0.33
Flexural strength	D-790	MPa	160
Flexural modulus	D-790	MPa	12000
Flexural elongation at break	D-790	%	1.4
Izod impact strength, notched/unnotched	D-256	J/m	45/260
<b>Thermal</b>			
Deflection temp. under load, 1.82Mpa	D-648	°C	260
Co-eff. of thermal expansion, -30~100°C	D-648	m/mK	$1.8 \times 10^{-5}$
UL flammability, t≐0.8mm	UL-94	-	V-0 <sup>b</sup>
<b>Electrical</b>			
Dielectric strength, t=1.6mm	D-149	kv/mm	16
Arc resistance	D-495	sec.	160
Volume resistivity	D-257	Ohm·cm	$10^{16}$
<b>Processing Condition</b>			
Cylinder temperature	-	°C	300-340
Mold temperature	-	°C	120-150

a: MD; Mold direction

TD; Transverse direction

b: Own data



Thank you very much for your attention!

## Contact in Europe

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