



KKALPALON PC XX NATURAL C-002
POLYCARBONATE BASED LIGHT DIFFUSER COMPOUND

Technical Data Sheet

KKALPALON PC XX NATURAL C-002 is a polycarbonate (PC) based light diffuser compound. It consists of thermally stable, superior grade proprietary light diffuser additive package homogeneously dispersed in polycarbonate matrix. The rheology of the compound allows easy processing at the process temperatures used for PC, all the while retaining its properties and colour in the final application.

CATEGORY

- Thermoplastic polycarbonate-based polymer composite
- KKALPALON PC XX NATURAL C-002 is usable directly for injection moulding of LED diffuser components

COMPOUNDING

- Carefully chosen imported PC grades melt blended homogeneously in twin screw compounding system
- Light diffuser additive package is introduced at appropriate compounding stage controlled by state-of-the-art loss-in-weight feeders,
- The complete compound protected by special additives for maintaining properties and to resist colour changes during further process

APPLICATION

- KKALPALON PC XX NATURAL C-002 is used directly for injection moulding of LED diffuser components
- Variations of this grade are available with different diffuser levels and MFI to suit the demands of various designs used in LED segment

ADVANTAGES

- Thermally stable light diffuser additives
- Homogenous dispersion of additives
- Works with many standard LED diffuser components

Rev 12/23

TECHNICAL SPECIFICATION

Properties	Test method	Unit	Typical value
Physical Properties			
Melt Flow Index @ 300° C/ 1.2 kgf	ASTM D-1238	gm / 10min	25 ± 2
Specific Gravity	ASTM D-792	-	1.2 ± 0.02
Thermal Properties			
Heat Deflection Temperature (1.8 Mpa / 3.2mm)	ASTM D-648	°C	125 ± 5
Flammability			
Flammability @ 3.2mm thickness	DPIL Std based on UL-94	-	V2
Glow Wire Index	IEC-60695-2-12	°C	≥ 650
Mechanical Properties			
Notched Izod impact strength	ASTM D-256	Kg.cm/cm	65 ± 5
Tensile Strength at yield	ASTM D-638	Kg/cm ²	700 ± 100
Flexural strength	ASTM D-790	Kg/cm ²	950 ± 100
Flexural Modulus	ASTM D-790	Kg/cm ²	24000 ± 1000

IM PROCESS PARAMETERS

Pre-Drying		
Temperature	°C	100 - 110
Time	Hours	2 - 3
Process Temperatures (Guide lines only; Customer to optimize as per component requirements)		
Feed	°C	105 - 115
Zone-1	°C	250 – 260
Zone-2	°C	255 – 265
Zone-3	°C	260 – 270
Nozzle	°C	255 - 265
Mould	°C	85 - 95

Storage : The material shall be kept in a cool and dry place.

Form : Pellets

Package : 25 kg bags

DISCLAIMER:

The above Technical Data Sheet presents information and data, true and accurate to the best of our knowledge. No warranty expressed or implied can be made regarding performance or otherwise.

Ddev Plastiks Industries Limited

Surangl Works : Survey No. - 320/1/1/2/2, Village – Surangl, Chkhall Road, Silvassa – 396240
(Dadra and Nagar Haveli and Daman and Diu), Tel : +91 9909006402

Dadra Works : Survey No – 24/3, Village : Demn , Demni Road, Dadra, Silvassa - 396193, Tel : +91 9909006426

Daman Works : 168/151-158, Dabhel Industrial Co-operative Society Ltd., Dabhel, Daman - 396210, Tel: +91 9909006407

E-mail : ddndnh_gst@ddevgroup.in, www.ddevgroup.in

CIN : U24290WB2020PLC241791

Rev 12/23