



KKALPALON PC XX NATURAL C-003E-RK
POLYCARBONATE BASED LIGHT DIFFUSER COMPOUND

Technical Data Sheet

KKALPALON PC XX NATURAL C-003E-RK is a polycarbonate (PC) based extrusion grade light diffuser compound. It consists of thermally stable, superior grade proprietary light diffuser additive package homogenously 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-003E-RK is usable directly for extrusion of LED diffuser components, particularly, the LED tube light diffuser components

COMPOUNDING

- Carefully chosen imported PC grades melt blended homogeneously in twin screw compounding system, with the added high performance additive package ensuring the required flow of material
- 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-003E-RK is used directly for extrusion 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 for many standard extrusion processed LED diffuser components

TECHNICAL SPECIFICATION

Properties	Test method	Unit	Typical value
Physical Properties			
Melt Flow Index @ 300° C / 1.2 kg	ASTM D-1238	gm / 10min	7 ± 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	70 ± 5
Tensile Strength at yield	ASTM D-638	Kg/cm ²	650 ± 50
Flexural strength	ASTM D-790	Kg/cm ²	950 ± 100
Flexural Modulus	ASTM D-790	Kg/cm ²	23500 ± 1000

EXTRUSION PROCESS PARAMETERS

Pre-Drying		
Temperature	°C	100 - 110
Time	Hours	2 - 3

Process Temperatures		
Melt temperature	°C	280 - 320
Screw Speed	RPM	Low - medium

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

Form : Pellets

Package : 25 kg bags

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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, Chikhall 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

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