

# POLYCARBONATE



## Diffuser LD5825PC

At Tosaf, we understand the challenges involved in the extrusion of PC sheets, and the importance of creating a stable process. We have therefore developed LD5825PC to deliver the ultimate combination of high thermal stability and high light diffusion properties. Excellent diffusion properties can be achieved using only a small percentage of the masterbatch (2%-4% @ 1.6mm), when blended with the polycarbonate during the extrusion or injection molding process. Consequently, it is the ideal economical solution for large scale projects with high light diffusion requirements, such as transparent roofing in shopping malls and sports stadiums.

### uses

Extrusion: sheets, panels, profiles and films.

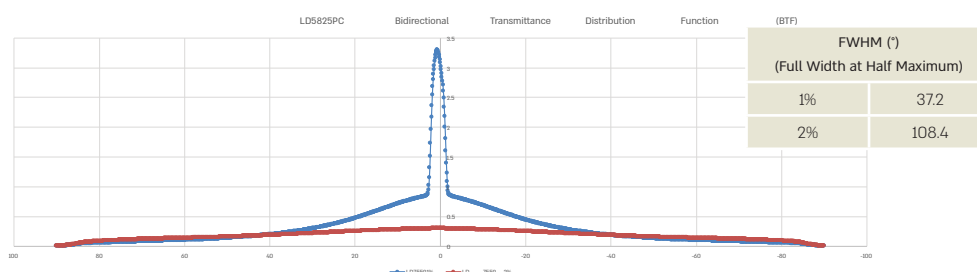
Injection molding: only with careful testing to ensure that the injection machine dispersion abilities are sufficient.

### Advantages

- High diffusion power
- Highly concentrated MB which enables low usage level and economical solution
- High thermal stability which results in a very stable extrusion process

### OPTICAL DATA

*LDR (%)	Light Transmission (%)	Haze (%)	Clarity
0.5	86.3	93	86.4
1	81.3	101	51.3
1.5	73.8	102	7.8
2	68.5	102	3.1
2.5	65.3	102	2.7
Clear PC	89.7	0.82	98.5



There is a growing global trend to integrate transparent plastic sheets instead of glass in building applications such as malls, swimming pools, train stations and DIY.

The most commonly used option is polycarbonate (PC) sheets, which are being produced in solid, multiwall or corrugated form. Each form of the PC sheets has its own production challenges. Polycarbonate is a transparent polymer, therefore its optical properties are of the utmost importance, along with optical manipulations where transparent colors, light diffuser and near-IR heat shielders are used. At Tosaf, we offer a comprehensive range of solutions for PC sheet producers.

### APPLICATIONS



Roof construction



Green houses



Range of PC film applications



LED light covers

### ADVANTAGES



High diffusion power  
Good trade-off between diffusion power and light transmission



Economical solution  
Highly concentrated MB which enables low usage level



High thermal stability  
For a very stable extrusion process

