# I-Fusion L1
## Diffusor

### Advantages

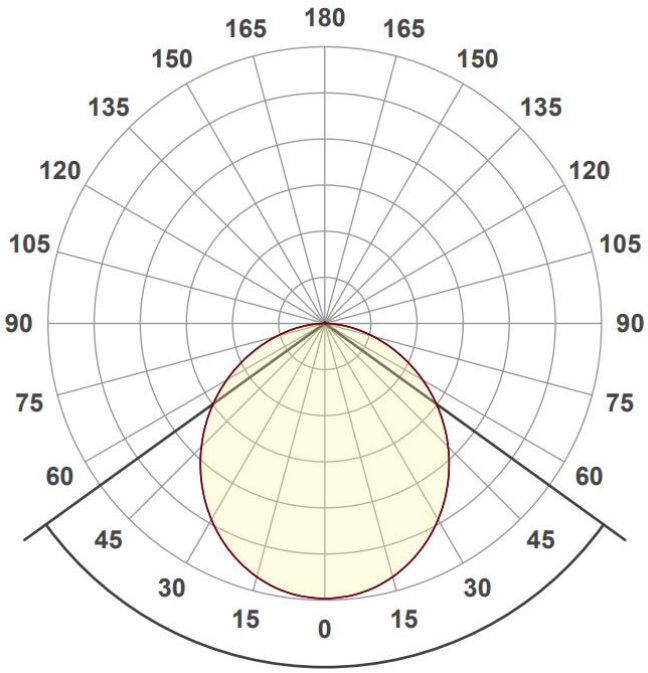
- Excellent thickness uniformity
- High haze
- Good optical transmittance
- Cost-efficient solution

**I-Fusion L1** is a high-performing and cost-efficient solution. It diffuses light efficiently, uniformly and allows for even brightness all over the LCD backlit unit and LED lighting system.

The thickness and length of the diffusor, which comes in continuous rolls, make it suitable for long applications. Additionally, the anti-static treatment prevents dirt depreciation and make it easy to handle.

### Product data

| | |
|---|---|
| Material | **PET** |
| Standard dimensions | **1250mm x continous roll** |
| Thickness | **0,21mm** |
| Haze | **95,3%** |
| Transmittance | **73%** |
| Temperature range | **-20°C to +85°C** |




Measured light distribution curve, PET I-Fusion L1 ■ C0/C180 ■ C90/C270

*Datasheet is made on behalf of producer's information. Ingemann Components A/S cannot guarantee the authenticity of the data.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## Technical specifications

| Properties | 209±3% µm |
|---|---|
| **Physical** | |
| Density | 1,38g/cm3 |
| Pencil Hardness | 4H for front side, H for backside |
| **Optical** | |
| Transmittance | 73±3% |
| Haze | 95,3±3% |
| **Mechanical** | |
| Tensile strength | 150MPa |
| **Thermal** | |
| Long term temperature | -20°C to 85°C |
| **Surface** | Structured on one side and glossy on the other |
| **UV stable** | Yes |
| **Dirt depreciation** | Anti-static treament |
| **Chemical resistance, PET** | See next page |
| **Thermal expansion** | V2 |
| **Glow wire test IEC 60695-2-12** | None |
| **Fire rating** | None |

## Chemical resistances - PET

| Chemical resistances at 20°C | | | |
|---|---|---|---|
| Acetone | - | Ethyl acetate | - |
| Ammonia | - | Glycerin | + |
| Amyl alcohol | o | Fuel oil | + |
| Benzene, free from aromatics | - | Hexane | + |
| Benzole | N/A | Isopropanol | N/A |
| Boric acid | N/A | Coffee | + |
| Butanol | + | Caustic potash solution | N/A |
| Chlorinated hydro-carbon | N/A | Ketone | - |
| Chloroform | - | Methylene chloride | - |
| Chlorinated water/air | N/A | Lactic acid 10% | N/A |
| Dibutyl phthalate | + | Mineral oil | + |
| Dioctyl phathalate | N/A | Caustic soda | N/A |
| Glacial acetic acid | N/A | Nitrocellulose lacquer | N/A |
| Acetic essence | - | Oxalic acid | + |
| Aqueous acetic acid | - | Wax | + |
| Ethanol | + | Hydrogen peroxide | + |
| Acidity of wine | + | Hydrocholric acid conc. 35% | - |
| Xylene | + | Sodium carbonate | + |
| Paraffin | + | Salad vinegar | + |
| Petroleum ether | + | Stearic acid | + |
| Phosphoric acid 10% | o | Tea | + |
| Sulphuric acid 10% | o | Turpentine | + |
| Nitric acid 10% | o | Toluene | + |
| Hydrochlorid 10% | o | Potassium Hydoxide | - |

| | |
|---|---|
| + | Resistant |
| o | Limited resistance |
| - | Not resistant |
| N/A | Not available |