

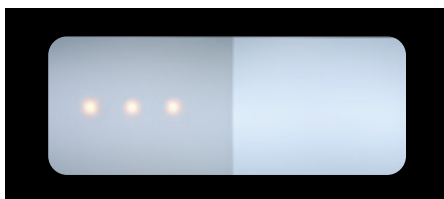


# MOCOM

## ❖ Alcom® LD Light Diffusion The lighting champion

**Alcom® Light Diffusion products ensure homogeneous and efficient light distribution by avoiding annoying hot spots and are the result of decades of experience and development.**

**This technology, which has not only proven itself in the automotive industry for years and is known under the name Alcom® Light Diffusion, opens up fascinating possibilities in the field of lighting technology.**



left: standard material, right: Alcom®

Alcom® LD manages to avoid the hotspots shown in the picture and thus ensures optimal light distribution. In addition, these products enable the harmonization of operating elements in a day- and night design and ensure that illuminated symbols are illuminated regardless of the viewing angle.

Individual color variants, Light Diffusion and transmission rates are also possible. Within the Light Diffusion segment (LD, LD2, LDX, LDM) \*, numerous products are already available for a wide range of lighting technology applications.

We are also happy to develop individual products for your requirements.

\* LD, LD2 = Mainly injection molding applications, LDX = Extrusion applications, LDM = Extrusion with matt surfaces

### Alcom® Light Diffusion: the advantages at a glance

- Homogeneous, virtually loss-free light scattering
- Excellent luminous efficiency
- Avoids hot spots
- Sharp contours for illuminated symbols, irrespective of viewing angle
- UL-listed or measured
- based on UL
- Flame characteristics according to FMVSS 302 / DIN 75200
- Comprehensive polymer variations for injection moulding and extrusion
- Corporate color / individual color match variations

| Polymer /<br>Product<br>series           | Material name                                            | Processing | Color               | Total<br>Transmission<br>T(Y) (d=1.0 mm,<br>A, 2°)<br>ISO 13468 | Haze<br>T(Y)<br>(d=1.0 mm, Ill.<br>A, 2°)<br>ISO 13468 | Half Power<br>Angle<br>T(Y)<br>(d=1.0 mm,<br>A, 2°) | Sample applications                                    |
|------------------------------------------|----------------------------------------------------------|------------|---------------------|-----------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|
| PC<br>Light<br>Diffusion                 | Alcom® LD2 PC 1000 UV 15003 CC1003-15                    | IM         | with scatterer      | 67 %                                                            | 95 %                                                   | 40 °                                                | Lamp cover                                             |
|                                          | Alcom® LD2 PC 1000 UV 15003 CC1005-15                    | IM         | with scatterer      | 80 %                                                            | 93 %                                                   | 2 °                                                 | Lamp cover                                             |
|                                          | Alcom® LD2 PC 1000 UV 16059 CC1059-16                    | IM         | with scatterer      | 82 %                                                            | 95 %                                                   | 22 °                                                | Light diffusing panel,<br>light diffuser<br>e.g. BMW   |
|                                          | Alcom® LD2 PC 1000 UV 15061 CC1104-15                    | IM         | with scatterer      | 79 %                                                            | 94 %                                                   | 5 °                                                 | Light diffusing panel,<br>light diffuser               |
|                                          | Alcom® PC 740/4.2 WT1159-10LD2                           | IM         | white               | 20 %                                                            | 95 %                                                   | 57 °                                                | Operating element,<br>function display<br>e.g. DAIMLER |
|                                          | Alcom® LD2 PC 1000 UV 14019 WT1030-14                    | IM         | white               | 20 %                                                            | 96 %                                                   | 56 °                                                | Operating element,<br>function display<br>e.g. FORD    |
|                                          | Alcom® PC 740/4.2 UV WT1090-08LD2                        | IM         | white               | 23 %                                                            | 95 %                                                   | 58 °                                                | Operating element,<br>function display<br>e.g. FORD    |
|                                          | Alcom® PC 740/4 UV WT1081-08LD2                          | IM         | white               | 39 %                                                            | 96 %                                                   | 54 °                                                | Operating element,<br>function display                 |
|                                          | Alcom® PC 740/4 UV WT1082-08LD2                          | IM         | white               | 54 %                                                            | 95 %                                                   | 51 °                                                | Operating element,<br>function display                 |
|                                          | Alcom® PC 740/4 UV WT1220-05LD                           | IM         | white               | 57 %                                                            | 95 %                                                   | 52 °                                                | Operating element,<br>function display<br>e.g. AUDI    |
|                                          | Alcom® PC 740/4 UV WT1368-04LD                           | IM         | white               | 74 %                                                            | 96 %                                                   | 18 °                                                | Operating element,<br>function display<br>e.g. BENTLEY |
|                                          | Alcom® PC 740/171 GY1127-05LD                            | IM         | grey                | 20 %                                                            | 95 %                                                   | 50 °                                                | Operating element,<br>function display<br>e.g. OPEL    |
|                                          | Alcom® PC 740/4 UV GY1156-04LD                           | IM         | grey                | 29 %                                                            | 95 %                                                   | 38 °                                                | Operating element,<br>function display                 |
|                                          | Alcom® PC 740/4 GY1320-04LD                              | IM         | grey                | 37 %                                                            | 95 %                                                   | 37 °                                                | Operating element,<br>function display<br>e.g. MINI    |
|                                          | Alcom® PC 740/4 RD1123-05LD                              | IM         | red                 | 31 %                                                            | 91 %                                                   | 2 °                                                 | Lamp cover,<br>operating element<br>e.g. TESLA         |
|                                          | Alcom® PC 740/4 RD1451-06LD                              | IM         | red                 | 5,5 %                                                           | 95 %                                                   | 34 °                                                | Climate control unit<br>e.g. BMW                       |
|                                          | Alcom® PC 740/4 BL1435-07LD                              | IM         | blue                | 1 %                                                             | 95 %                                                   | 56 °                                                | Climate control unit<br>e.g. BMW                       |
| PC Extrusion<br>Light<br>Diffusion       | Alcom® LDX PC 1000 UV 14062 WT1140-14                    | EX         | white               | 70 %                                                            | 95 %                                                   | 9 °                                                 | Profile, pipes and sheets                              |
|                                          | Alcom® PC 730/3.1 UV WT1283-09LDM                        | EX         | white, matt surface | 58 %<br>(3 mm)                                                  | 95 %<br>(3 mm)                                         | 34 °<br>(3 mm)                                      | Profile, pipes and sheets                              |
| Light<br>Diffusion<br>master-<br>batches | Alperform® PC LD 0208-15,<br>5 % dosed in PC transparent | IM         | whitish             | 60 %*                                                           | 95 %*                                                  | 47 °*                                               | Lamp cover,<br>functional display                      |

Explanation: IM = Injection molding / EX = Extrusion

\* Reference value, exact value depends on Polycarbonate grade and color picture.

Additional products and information are available on request.

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