



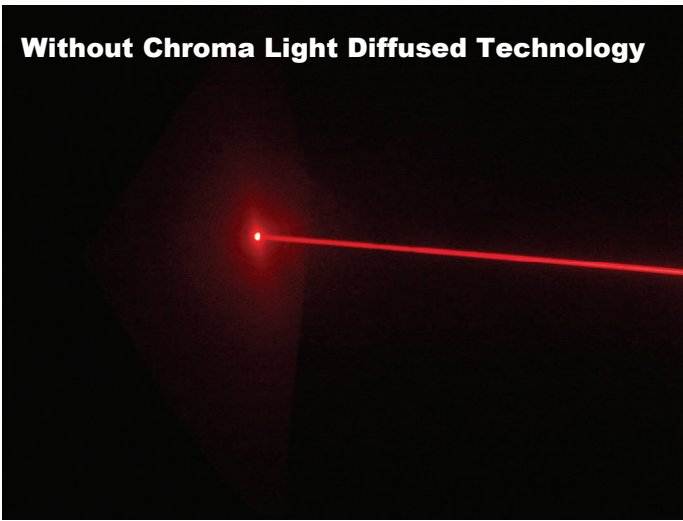
*Excellence in Color*

# Chroma Light Diffused

## Eliminate “hot spots” of backlit LED Applications and transmits more light.

- Scatters light eliminating hot spots of LED light sources.
- Improves light output at night and daylight contrast.
- Allows maximum transmission of light.
- Reduces the number of LED's required, resulting in cost savings.
- Eliminates the need for electroforms in the tooling.

### Without Chroma Light Diffused Technology



### Overview

The benefits of LED light sources offer many advantages including long life and low energy consumption, reduced cost, and safer (lower heat) operation. Traditionally these light sources produce a concentrated beam of light called a “hot spot”. Chroma provides solutions to eliminate the “hot spot” while at the same time scattering the light and allowing more transmitted light through the part.

### Performance

Light transmission (%LT) can be adjusted by additive addition to meet your requirements at different specimen thicknesses. Scatters light eliminating hot spots of LED light sources and allowing maximum transmission of light.

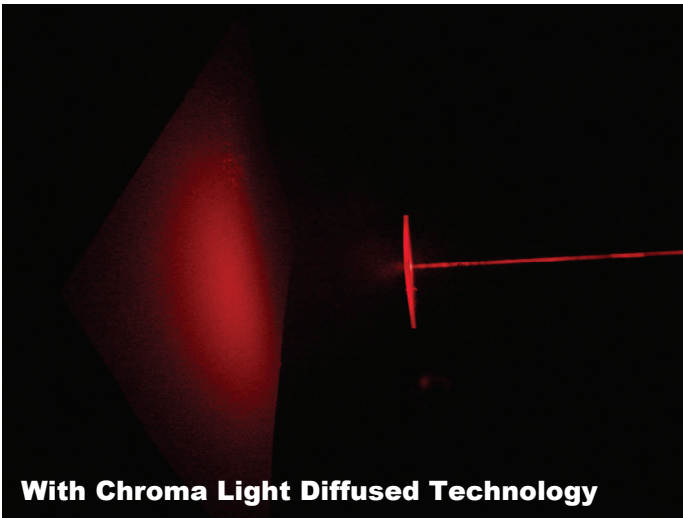
### Use Requirements

Chroma Light Diffused additives can be supplied as a color concentrate or a precompounded product. Can be made for use in acrylic, polycarbonate, and polyester resins.

### Product Trials

Transparent colors in combination with the light diffusing technology are available for a variety of applications including buttons, knobs, lens colors, key pad applications, channel lettering, extruded sheet, extruded tubes used on buildings, crowns for plastic light bulbs, and any other backlit application. Color can also be formulated that compliment the wavelength of light from either a blue, green, red, or white LED.

### With Chroma Light Diffused Technology



### The Challenge

Challenge Chroma to demonstrate how our commitment to **EXCELLENCE IN COLOR** can make a meaningful contribution to the success of your business.

#### Chroma Corporation

ISO 9001:2000 Registered

3900 W Dayton Street, McHenry, IL 60050

Main: 815-385-8100 ~ Customer Support: 877-385-8777 ~ Fax: 815-385-1518

[www.chromacolors.com](http://www.chromacolors.com)

# Technical Specifications

## Chroma Light Diffused

### Product Trials

Molded chips at 1.5%, 3%, 4.5%, 7.5%, 10% and 15% with product **Chroma light diffused concentrate ZC90330**. Data on %Light Transmission at different additive levels with polycarbonate ZC90330

<b>% ZC90330 POLYCARBONATE</b>	<b>% LT at Thickness (Mils) @ 35</b>	<b>% LT at Thickness (Mils) @ 55</b>	<b>% LT at Thickness (Mils) @ 100</b>
100% natural PC	94.9	94.5	93.7
1.5%	93.8	93.2	91.9
3%	93.4	92.5	88.8
4.5%	93.2	91.8	85.2
7.5%	92.2	87.3	72.1
10%	92.1	86.5	69.8
15%	89.2	79.8	62.8

Molded chips at 1.5%, 2%, 3%, 4.5%, and 5% with product **RC90331 Light Diffuser Acrylic Master batch**. Data on %Light Transmission at different additive levels with Acrylic RC90331 MB:

<b>% RC90331 ACRYLIC</b>	<b>% LT at Thickness (Mils) @ 35</b>	<b>% LT at Thickness (Mils) @ 55</b>	<b>% LT at Thickness (Mils) @ 100</b>
100% natural Acrylic	96.4	96.1	95.8
1.5%	94.9	94.0	91.9
2%	94.6	93.7	90.9
3%	94.3	92.8	87.3
4.5%	93.5	90.9	81.3
5%	93.4	90.5	80.9

If your looking to transmit and disperse light more evenly, we have the answers. To obtain further information on any of our products and services, please contact us at our toll free number **877.385.8777** or visit our website at [www.chromacolors.com](http://www.chromacolors.com).



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