

LuminEssence™

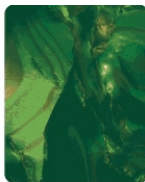
Fabrication & Specification Guide

LuminEssence™ Product Features

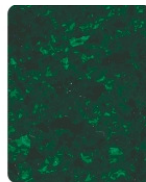
- The rich patterns and glossy finish work well to complement a variety of signage applications.
- LuminEssence™ is well-suited for projects using direct lighting sources such as halogen lighting fixtures to give a brilliant illuminating effect.
- A perfect solution for accenting a sign layout, point of purchase display or interior space.
- Comes in 21 distinct color combinations and three different patterns (Reflection, Marble and Crystalline).



LE412994
Peridot
Reflection



LE412984
Peridot
Marble



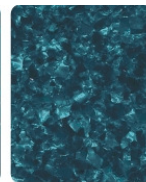
LE412974
Peridot
Crystalline



LE412964
Rainforest
Reflection



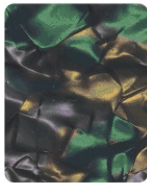
LE412944
Aquamarine
Marble



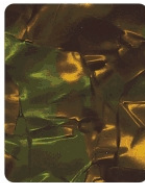
LE412954
Aquamarine
Crystalline



LE412564
Sapphire
Reflection



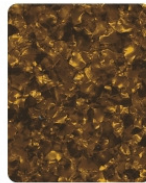
LE412874
Juniper
Reflection



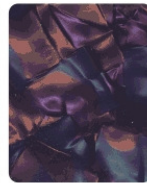
LE412614
Amber
Reflection



LE412634
Amber
Marble



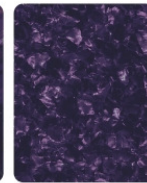
LE412624
Amber
Crystalline



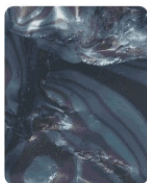
LE412584
Amethyst
Reflection



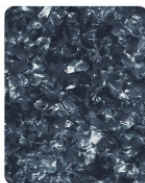
LE412554
Amethyst
Marble



LE412594
Amethyst
Crystalline



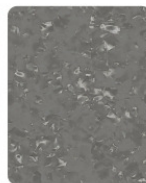
LE412424
Tanzanite
Marble



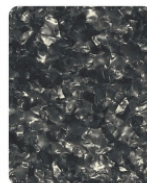
LE412384
Tanzanite
Crystalline



LE412414
Obsidian
Marble



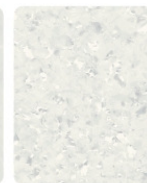
LE412332
Agate
Crystalline



LE412434
Onyx
Crystalline



LE412242
Opal
Marble



LE412212
Opal
Crystalline



CLEARPATH
SIGNAGE SYSTEMS.

General Product Specifications

Material: Single-ply PVC sheet material

Gauge: .027" (.68mm)

Sheet Size: 24.25" x 48.25" (616 mm x 1,225.6 mm)

Construction

The Lumin*Essence*™ product line is constructed using a PVC cap and core. Different patterns are applied between the cap and the core to produce the desired color/pattern combination for that particular product. A different color core may be used to achieve the desired effect for the pattern.

Cutting:

Lumin*Essence*™ can be cut using tools normally found in workshops such as guillotines, shears and circular or band saws. It can also be cut using a router or engraver if specific shapes are needed. **DO NOT laser cut the material.**

Printing:

All types of Lumin*Essence*™ can be easily printed using normal solvent based inks.

Forming:

Lumin*Essence*™ is easily thermoformed even with a single mold. Conditions vary according to thickness and complexity of shape. Ideal temperatures are between 248° - 338° F (120° - 170° C) Lumin*Essence*™ can also be vacuum formed.

Laminating:

The bonding temperature of Lumin*Essence*™ is 260° F (121° C).

Welding:

Flexible Lumin*Essence*™ is especially suited to high frequency/sonic welding. Alternatively, it can be hot air welded at 266° - 230° F (130° - 160° C).

Gluing:

Lumin*Essence*™ can be adhered to a substrate using adhesive such as 3M 9502/467 MP adhesive for vector cutting on rotary engraver systems, routing systems or similar applications. Strong adhesives, such as Super Glue, should be avoided due to the possibility of a chemical reaction.



Mechanical Engraving Recommendations

The use of LuminEssence™ as an engravable product by itself, specifically without a substrate, is not recommended. Adhering LuminEssence™ to the surface of a substrate to then be engraved through to the substrate will yield better results.

If engraving LuminEssence™ using a substrate backing, a depth of at least .030" is recommended for engraving through to the substrate. When engraving this deep, consideration should be given to the width of the bit being used. This is especially imperative when engraving fine lettering and fine detail. Engraving systems should be set to a slightly delayed plunge into the material, and the X & Y speeds reduced. Vacuum systems eliminate the need for chip removal. Leaving the masking on the sheet should not interfere with the engraving process and will eliminate the possibility of nose cone rub. No clean up passes should be needed to achieve clean cut-outs. As always, two passes will ensure the cleanest results.

(Not recommended for engraving stock.)

WARNING: Not recommended for use in laser engraving systems. The process of cutting with CO₂ laser systems produces hydrochloric acid, which can be harmful to people, the environment and machinery.

Cleaning

Most general purpose cleaners should work well to clean LuminEssence™ material. Some of these general cleaners include: Rubbing alcohol, Goo Gone®, Windex®, Pledge®, Novus® Plastic Clean and Veidec® Soft Clean.

ClearPath recommends testing a small area of the material before using the following cleaners: Gel-Gloss® and Sprayon® General Purpose Cleaner, as these slightly damage the glossy surface finish on LuminEssence™ material.

DO NOT USE Acetone to clean LuminEssence™ material, as it noticeably damages the surface finish.

