

# Technical Data Sheet

## Clarion Material Code Z1

### Primary Use

The Clarion Z1 material is our Premium Weatherable Polyester label/sign material using 3M structured acrylic adhesive for hand applied lay-flat label applications that go on smoothly and stay that way. Large size labels are easier to apply. Even when labels are used on injection-molded plastic parts, bubbles that form from plastic outgassing can be smoothed to regain a neat appearance for the label. The use of the 3M premium UV resistant, weatherable overlaminates provides excellent clarity and exceptional protection where UV resistance and long term outdoor durability are required.

### Base Materials

Printed on 3M .002 premium white polyester

### Overlaminates

3M .003 ultra-clear weatherable UV resistant

### Adhesive Backing

3M Premium Structured Acrylic

### Standard Sizes

Standard label sizes available as well as almost any custom size

### Outdoor Durability

Excellent

### Water Resistance

Excellent

### Chemical Resistance

Excellent

### Storage Stability

Stable. Optimum storage conditions: 72°F @ 50% relative humidity

### Temperature Resistance

Rated -40°F to 175°F

### Installation Temperature

50°F or higher

### Specification Compliance

- Clarion standard safety colors meet *ANSI Z535.1-2022 Standard for Safety Colors requirements.*
- Meets applicable product safety standards as required by Nationally Recognized Testing Laboratories and under OSHA law 29 CFR 1910.399.

EXAMPLE



©Clarion, All Rights Reserved





- The 3M white polyester base component is **UL**<sup>®</sup> recognized (File MH16411), CSA accepted (File 99316) and meets British Standard BS-5609.
- The 3M weatherable overlamine is **UL**<sup>®</sup> recognized (File MH11410) and CSA accepted (File 99316)

#### **Regulatory Compliance**

- **EU RoHS Compliant** (EU Directive 2015/863/EU)  
Yes
- **China RoHS Compliant** (Does not exceed MCV in SJ/T 11364-2014)  
Yes
- **EU REACH Compliant** (Per the SVHC Candidate list effective January, 2023)  
Yes

#### **Expected Life**

Indoor: Long term

Outdoor: 5 years plus (expected outdoor life may vary due to climatic conditions)

#### **Shelf Life:**

This material will retain its performance and properties for forty-eight (48) months (4 years) from date of manufacture if properly stored at room temperature conditions of 72°F (22°C) and 50% relative humidity. (All Clarion safety labels are shipped in high quality 4 mil. zip-locked sealed bags for improved storage.)

#### **Product Information**

This technical product information is based upon information provided to Clarion by its suppliers of the raw materials we use to manufacture our products. As such Clarion makes no independent representations or warranties, expressed or implied, and assumes no liability in connection with the use of this information.

#### **Warranty**

Clarion products are sold with the understanding that the buyers will test them in actual use and determine for themselves whether or not the materials meet their intended use requirements. Clarion warrants to the buyers that its products are free from defects in material and workmanship, but limits its obligation under this warranty to replacement of the product shown to Clarion's satisfaction to have been defective at the time Clarion sold it. This warranty does not extend to any persons obtaining the product from buyers. This warranty is in lieu of any other warranty, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and of any other obligations or liability on Clarion's part. Under no circumstances will Clarion be liable for any loss, damage, expense, or consequential damages of any kind arising in connection with the use, or inability to use, Clarion's products.

