

Cleanroom 1 Label

Direct Thermal PMA1781E

DATA SHEET

Description

PMA1781E is a non-silicone direct thermal transfer cleanroom label which comes with matte white BOPP based 100% synthetic film with thermal imaging top coating. A special top coat surface provides ultralow ionic extraction level reducing cross-contamination concerns in cleanroom applications. A dark color image appears when exposed to heat.



Physical Properties

Label Composition	BOPP
Film Thickness	4.0 mil ± 10%
Adhesive Composition	Low outgassing Acrylic-based
Adhesive Thickness	0.9 mil - 1.0 mil ± 0.1
Avg. Peel Adhesive (72 hour dwell)	23 - 33 oz/in
Release Liner	Non-silicone coated Polyester
Release Liner Thickness	1.5 mil ± 5%
Release Force	10- 30 grams
Min. Application Temp.	59°F (15°C)
Service Temp.	23°F to 158°F (-5°C to 70°C)
Storage Stability	Two years stored at 70°F (21°C) and 50% RH
Packaging	Cleaned and double bagged in Class 10 cleanroom. Wound in 3" OR 1" cleaned PE core

Cleanliness Properties

Extractable Silicone (FTIR) - Adhesive side - Release side	Not Detectable Not Detectable
Total outgassing (GCMS)	≤ 250 ng/ cm ²
Ionic Extractable Label (IC) - Total Anion	≤ 12.0 µg/cm ²

Adhesive Application Guide

Polycarbonate •	ABS •	Cleanroom Paper
Polyester •	Rubber •	Carton Box
Polyethylene •	Glass •	
Polypropylene •	Metal •	