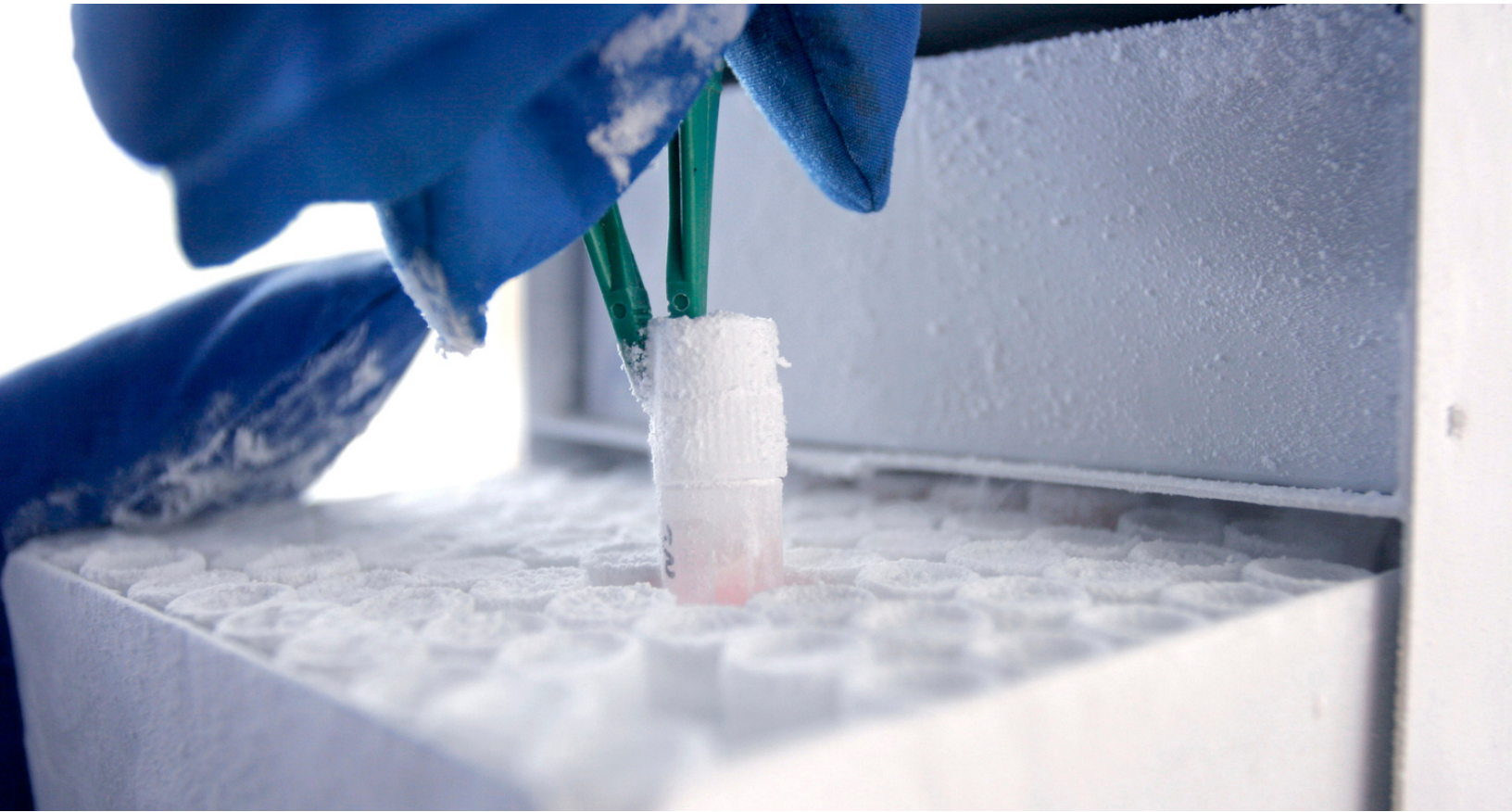


CM5611

Cold Storage Permanent Thermal Transfer Label
Product Data Sheet



DESCRIPTION

CM5611 is a Matte or gloss white polypropylene film, top coated for thermal transfer printing, with a removable pressure-sensitive acrylic adhesive. Designed for use in critically controlled environments and cold storage applications.

APPLICATIONS FEATURES

- High tack and peel adhesive
- Frost and moisture-resistant
- Can be applied to frozen surfaces
- Ultra-low outgassing adhesive
- IPA resistant inks ribbons
- Non-shedding and cleanroom compatible
- Tear, crinkle, and scratch resistance
- Conforms around tight cylinder shapes
- Available in gloss

CM5611

Cold Storage Permanent Thermal Transfer Label Product Data Sheet

Face Stock Description

Physical Data		
Property	Unit	Value
Average Thickness	mils	2.6 ± 0.5%
Surface Tension	dyne/cm	38

Optical Data		
Property	Unit	Value
Gloss (45°)	Gardner	>65 (gloss); 35-40 (matte)
Opacity	%	>85
Whiteness Index	%	>85

Thermal Data		
Property	Unit	Value
Shrinkage (120 °C, 5 min.)	%	2.0 - 4.0

Adhesive Description

Performance Data		
Property	Unit	Value
Coat Weight	mils	1.0 ± 0.5%
Loop Tack - Stainless Steel	oz./in.	54.4
Peel (180°) - Stainless Steel (20 °C) Peel (180°) - Stainless Steel (-18 °C)	oz.in.	27.2 (24 hr.) 40.0 (72 hr.)
Minimum Application Temp.	°C	2
Temperature Service Range	°C	-80 °C - 70 °C

Liner Description

Performance Data		
Property	Unit	Value
Liner Thickness	mils	1.5
Liner type		Clear PET

Label Storage

Storage Data		
Property	Unit	Value
Shelf-life	months	24
Storage condition	Temperature/Relative Humidity	20 °C at ≤50% RH

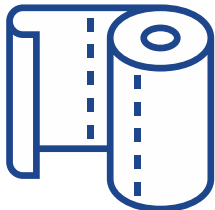
The above data represent product averages, allowing for industry-accepted variances. This construction should be tested in the end-use conditions to ensure it meets the specific application's requirements. Suitability for any given application is the responsibility of the user. **No MSDS is required per CF.1910.1200**

CM5611

Cold Storage Permanent Thermal Transfer Label Label Application Instructions

Applying pressure-sensitive cleanroom labels requires precision and attention to detail to maintain the cleanliness of the environment. Here's a step-by-step guide on how to properly use and apply pressure-sensitive cleanroom labels:

Materials Needed:



Pressure-sensitive cleanroom labels.



Cleanroom wipes or lint-free cloth



IPA or approved cleaning solution



Tweezers (Optional, for small labels)

Instructions:

1. Preparation:

- Before you begin, ensure that your hands are clean and dry. Consider wearing appropriate cleanroom attire, including gloves and a cleanroom gown.
- Set up a clean and organized workspace within the cleanroom environment.

2. Cleaning the Surface:

- Identify the surface where you intend to place the pressure-sensitive label.
- If the surface is not clean, gently wipe it using a cleanroom-compatible lint-free cloth or cleanroom wipe dampened with isopropyl alcohol or the recommended cleaning solution. This step is crucial to ensure proper adhesion of the label and prevent contamination.
- If your surface is frozen, wipe away any large ice crystals, which will impact adequate adhesion.

3. Peeling the Label:

- Carefully peel the pressure-sensitive cleanroom label from its backing material. Avoid touching the adhesive side of the label with your fingers to prevent transferring oils, dirt, or particles onto the adhesive surface.

4. Applying the Label:

- Hold the label using clean tweezers if necessary, especially for small labels, to avoid touching the adhesive side.
- Align the label precisely over the intended placement area. Gently lower the label onto the surface, starting from one edge and gradually pressing it down to the other edge.
- Avoid applying excessive pressure, as it might trap air bubbles or compromise the label's and the surface's cleanliness.

5. Smoothing and Adhering:

- Use a cleanroom wipe or lint-free cloth to smooth out the label from the center outward gently. This helps ensure proper adhesion and minimizes the risk of trapped air or wrinkles.

6. Final Checks:

- Inspect the label for any signs of wrinkles, misalignment, or air bubbles. If you notice any issues, gently lift the label using tweezers and reapply it, starting from step 3.
- Confirm the label is securely adhered to the surface without lifting edges or peeling corners.

7. Record Keeping (if applicable):

- In certain cleanroom environments, it might be necessary to document the label application process. This could include information such as the label's unique identifier, date of application, and the person responsible for the application.