

Cold Temperature



When planning a labelling application involving cold temperatures, care is needed to ensure that labels adhere successfully during application, and also that they remain in place during the entire product lifecycle. The range of different application conditions that need to be considered includes the minimum application temperature, the service temperature, the surface to be labelled, and any add-on functionality or compliance needed (e.g., wash-off, compostable labels).

The choice of cold-use adhesive is critically important for cold-temperature labelling. The application may involve anything from food in the freezer or chiller cabinet, to pharma plasma or blood bag labelling, through to outdoor labels in severe weather conditions (e.g., container labelling, drum labelling, oil can labelling). The best adhesive will depend on the precise circumstances.

A product can be labelled in ambient (room temperature) conditions and then stored in a freezer, or vice versa. It is therefore critical to look at minimum application temperature and also service temperature.

- Minimum application temperature is the lowest temperature recommended during labelling.
- Service temperature is the range of recommended temperatures for storing a label that has already been applied to a surface. The label will remain on the packaging and function correctly while kept within this temperature range.

Most of our adhesives are designed for application in ambient (+5°C) conditions. We also offer a range of adhesives for more challenging conditions: deep-freeze (down to -20°C) and chilled (between 0 to +8°C, including the challenging +4°C point). The service temperature for adhesives generally lies within the range -40°C to +80°C.

Application	Adhesive	Min. app. temp.	Service temp.	Coating technology	4°C	-5°C	-10°C	-15°C	-20°C
General purpose	C2075N	-20°C	-50°C to 90°C	Rubber Based Hotmelt	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	S2045/ S2045N	0°C	-40°C to 70°C	Rubber Based Hotmelt	●●●●				
	S2400	0°C	-40°C to 70°C	Rubber Based Hotmelt	●●●●				
	S2000/NG	0°C	-20°C to 50°C	Emulsion Acrylic	●●●				
Wine	S451	-5°C	-40°C to 80°C	Rubber Based Hotmelt	●●●●	●●●●			
Industrial/very rough surface labelling	S2345	-5°C	-40°C to 70°C	Rubber Based Hotmelt	●●●●●	●●●●●	●●		
Tyre labelling	TS79	0°C	-40°C to 70°C	Rubber Based Hotmelt	●●●●●	●●			
Deep freeze/ cryogenic	C2020P	-20°C	-50°C to 80°C	Emulsion Acrylic	●●●	●●	●●	●●	●●
	C0196	-29°C	-70°C to 90°C	Solvent Acrylic	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●




(●) provide directional indication of adhesive performance and should not be interpreted as a product footprint data. We recommend testing a complete label construction for your specific application upfront, to ensure the desired level of adhesion during labelling.

Product information

	Code	Description	MOQ (m ²)	Width (mm)	Location
General purpose applications for paper labels	• AN589ZAF	SEMIGLOSS 80 FSC C2075N COLD BG40B	1000	1000	Local
	• BU294	THERMAL 200HD PLUS NP FSC C2075N COLD BG40B	500	1000	Local
	• AL89350-F	SEMIGLOSS 80 FSC S2045N BG40W IMP	1000	EXACT	Local
	• ALY89350-F	SEMIGLOSS 80 FSC S2045N BG40B IMP	1000	EXACT	Local
	• PTF6845	SEMIGLOSS 80 S2045 PET23	1000	1000	Local
	• ALE8845	FASLITHO S2045 BG40W IMP	1000	1000	Local
	• LLYF3831	FASMATT VELLUM S2045 CK40Y NI	1500	1500	Local
	• ALYG6845F	DIRECT THERMAL TC FSC S2045N BG40B IMP	1000	EXACT	Local
	• ALY55845	ECONOMY THERMAL 74 S2045N BG40B IMP	1500	1500	Local
	• ALYA8845	FASTRANSFER ULTRA S2045 BG40B IMP	1000	1000	Local
	• ALYB4845	FASTRANSFER STANDARD S2045N BG40B IMP	1000	1000	Local
• BC679	TRANSFER VELLUM FSC S2000NG BG40B	1000	1000	Local	
General purpose applications for film labels	• AF733ZA	PP60 TOP WHITE CAVITATED C2075 COLD BG40B	500	1000	Local
	• AL09010	PP60 TOP WHITE CAVITATED S2045 BG40W IMP	1000	EXACT	Local
	• ALYF1843	PP60 TOP WHITE CAVITATED S2345 HT BG40B IMP	1500	1500	Local
	• ALYF0601	PP50 TOP CLEAR S2045 BG40B IMP	1000	1000	Local

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