

# Cold chain labelling

In cold chain applications, a constant low temperature must be maintained at every stage of the supply chain. This is especially critical during the production and delivery of temperature-sensitive drugs. Avery Dennison cold chain solutions range from product labels, such as bloodbag labels, through to our smart temperature-tracking label, TT sensor Plus and our latest development, vacuum insulation panels (VIPs), provide a sustainable solution for temperature-controlled packaging.

## Reliable labels that perform in freezing temperatures

More than one million human tissue samples are collected, stored and transported each year – at temperatures as low as -196°C. Our comprehensive low temperature portfolio is designed for bottles, test-tubes, vials and other containers used in hospitals, clinics and research labs. It enables many printing technologies, across applications ranging from blood bags to cryogenic and laboratory packaging.

## Blood bags

Blood and plasma bags in refrigerators and freezers must meet particular labelling challenges, including reliable performance at low-temperatures and with chemical exposure. Our materials comply with FDA and European food regulations, and have been approved according to DIN ISO 3826 for “Plastic Collapsible Containers for Human Blood and Blood Components”.

## Application areas

- Blood bag and plasma bag labelling
- Human and animal health: blood fractioning, stem cells, serum
- Hospital, clinic and laboratory labelling
- Deep freeze applications
- Re-labelling with opaque labels

## Key features

- Compliance with FDA and European food regulations (under ISO 3826)\*
- Cryogenic performance (down to -196°C)
- Steam autoclave sterilisation (up to +121°C)
- Good chemical resistance
- UV flexo, thermal transfer, direct thermal and UV inkjet
- Application temperature as low as -50°C with new C2050P adhesive

\* Excluding C0196 and C2050P



Low  
MOQ



Quick  
Quote



Fast  
Delivery

## Product information

| Code   | Product description                        | MOQ<br>(SQM) | Lead time<br>(Ex works) | Serve Temperature<br>Range | Minimum Application<br>Temperature | Face<br>material |      | Printability            |                               |                             |                        |                     |
|--|--|--------------|-------------------------|----------------------------|------------------------------------|------------------|------|-------------------------|-------------------------------|-----------------------------|------------------------|---------------------|
|  |  |              |                         |                            |                                    | Paper            | Film | Autoclave Sterilization | Thermal Transfer Printability | Direct Thermal Printability | UV Inkjet Printability | Chemical Resistance |
| <b>Cryogenic Applications</b>  |  |              |                         |                            |                                    |                  |      |                         |                               |                             |                        |                     |
| AZ452  | PP Top White S2196-BG40WH                  | 1000         | 7 days                  | -196 to +120 °C            | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| BB624  | PP Light Top Clear S2196-BG40WH            | 1000         | 7 days                  | -196 to +120 °C            | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| BG470  | PP95 Matt White S2196-BG40WH               | 1000         | 7 days                  | -196 to +120 °C            | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AH403  | 2.3M PP Top White C0196-40BG               | 800          | 60 days                 | -196 to +120 °C            | -28 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| BP341  | Primax Plus C2050P-BG40WH FSC              | 1000         | 14 days                 | -196 to +120 °C            | -50 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| <b>Laboratory and Hospital Applications</b>                              |  |              |                         |                            |                                    |                  |      |                         |                               |                             |                        |                     |
| BK372  | PE85 Top Matt White S692NP-BG40WH FSC      | 1000         | 7 days                  | -20 to +80 °C              | +5 °C                              | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AX308  | PET50 PT Clear S692NP-BG40WH               | 1000         | 7 days                  | -20 to +80 °C              | +5 °C                              | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| BF237  | PP Light Top Clear S717P-BG45WH            | 1000         | 14 days                 | -50 to +121 °C             | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| BD522  | PP Light Top White S717P-BG45WH            | 1000         | 14 days                 | -50 to +121 °C             | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AY924  | PP Top White Rev MET S692NP-BG40WH         | 1000         | 7 days                  | -20 to +80 °C              | +5 °C                              | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AY612  | Thermal60 Top K8 S2000NP-BG40BR            | 1000         | 14 days                 | -20 to +60 °C              | 0 °C                               | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| BK658  | Transfer Superior S2000NP-BG40BR           | 2000         | 2 days                  | -20 to +80 °C              | 0 °C                               | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| BJ265  | Transfer Vellum FSC S2000NP INC-BG40BR     | 1000         | 7 days                  | -20 to +80 °C              | 0 °C                               | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| <b>Primary Blood Bag Applications (Industrial production)</b>            |  |              |                         |                            |                                    |                  |      |                         |                               |                             |                        |                     |
| AA134  | PE105 Matt White AL171-BG40WH              | 2520         | 21 days                 | -80 to +140 °C             | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AA437  | MC Wet Strength-AL171-BG40WH               | 1000         | 7 days                  | -80 to +140 °C             | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AD980  | Transfer PP AL171-BG40WH                   | 1000         | 14 days                 | -80 to +140 °C             | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| EC211  | PVC8128 PPS N MI465-BG40BR                 | 1500         | 60 days                 | -80 to +120 °C             | +10 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| <b>Secondary Blood Bag Applications (Healthcare, manual application)</b> |  |              |                         |                            |                                    |                  |      |                         |                               |                             |                        |                     |
| AQ596  | PP NG Top White S2060NP-BG45WH             | 1000         | 7 days                  | -40 to +70 °C              | 0 °C                               | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AN038  | Transfer PEHD S2060NP-BG40BR               | 1000         | 7 days                  | -40 to +70 °C              | 0 °C                               | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AQ665  | PB PP NG Top White 2XS2060NP-BG40BR/WH     | 1000         | 7 days                  | -40 to +70 °C              | 0 °C                               | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AZ612  | Transfer PP75 Matt White S692NP-BG40WH FSC | 1000         | 7 days                  | -20 to +80 °C              | 5 °C                               | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| AO525  | Transfer PE HD C2020P-BG40WH               | 1000         | 14 days                 | -50 to +80 °C              | -20 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |
| BJ476  | Transfer PE HD C2020P INC-BG40WH FSC       | 1000         | 14 days                 | -50 to +80 °C              | -20 °C                             | ✓                | ✓    | ✓                       | ✓                             | ✓                           | ✓                      | ✓                   |

