



Ref. 926 — Pharmawhite Plus PP TC / RP Cryo / HD 70

Conformable white polypropylene film with top coating / water-based permanent acrylic adhesive / HD 70 glassine liner

DESCRIPTION

A product designed for the identification labelling of cryogenic containers of laboratory samples: polypropylene cryovials, tubes and storage boxes made of PP and cardboard, kept between -150 and -196 °C with liquid nitrogen. The information stays legible to identify biological samples throughout their cryogenic service life. The product withstands up to ten freeze-thaw cycles when the samples are thawed at room temperature, in warm water or in ice, and then returned to the freezer. It also offers good heat resistance and is suitable for steam sterilisation at 121 °C.

QUICK SUMMARY

Facestock: Conformable white PP with top coating, 51 g/m^2 Adhesive: RP Cryo permanent acrylic, water based Liner: Translucent white glassine HD 70, 62 g/m^2 Printing: Flexo, screen, offset and thermal transfer	Key points · Service temperature: -196 to $+121$ °C · Minimum labelling temperature: -10 °C · Up to 10 freeze-thaw cycles · Suitable for steam sterilisation at 121 °C · Shelf life: 24 months
--	--

KEY ADVANTAGES

- Cryogenic resistance, with a service temperature from -196 to 121 °C.
- Withstands up to ten freeze-thaw cycles, thawing at room temperature, in warm water or in ice.
- Suitable for steam sterilisation at 121 °C, thanks to its good heat resistance.
- Conformable white polypropylene facestock with top coating, which follows the curved surfaces of vials and tubes.
- RP Cryo water-based permanent acrylic adhesive, with a minimum labelling temperature of -10 °C.
- Reliable identification of biological samples throughout their service life in cryogenic storage.

RECOMMENDED APPLICATIONS

- Identification labelling of cryogenic containers of laboratory samples.
- Polypropylene cryovials and tubes.
- Cryogenic storage boxes made of PP and cardboard.
- Biological samples kept between -150 and -196 °C with liquid nitrogen.
- Applications requiring steam sterilisation at 121 °C.

PRINTABILITY

Suitable for flexo, screen and offset printing methods. Thermal transfer printing is possible with selected mixed and resin ribbons.



MATERIAL STRUCTURE

LAYER	CODE	DESCRIPTION
Facestock	Pharmawhite Plus PP TC	Conformable white polypropylene film with top coating. 51 g/m ² and 52 µm.
Adhesive	RP Cryo	Water-based permanent acrylic adhesive for cryogenic applications.
Liner	HD 70	Translucent white glassine paper. 62 g/m ² and 54 µm.

PHYSICAL PROPERTIES

PROPERTY	STANDARD	UNITS	VALUE	TOLERANCE
Substance (facestock)	ISO 536	g/m ²	51	—
Thickness (facestock)	ISO 534	µm	52	—
Substance (liner)	ISO 536	g/m ²	62	—
Thickness (liner)	ISO 534	µm	54	—
Tensile strength MD (liner)	ISO 1924	kN/m	7	—
Tensile strength CD (liner)	ISO 1924	kN/m	2.7	—
Transparency (liner)	DIN 53147	%	48	—
Total thickness	—	µm	128	—

ADHESIVE PROPERTIES

PROPERTY	STANDARD	UNITS	VALUE
Adhesive type	—	—	Permanent
Composition	—	—	Water-based acrylic
Initial adhesion (tack)	FTM 9	N	7
Minimum labelling temperature	—	°C	-10
Service temperature	—	°C	-196 / +121

STORAGE CONDITIONS

PROPERTY	STANDARD	UNITS	VALUE
Temperature	FINAT	°C	20–25
Relative humidity	FINAT	%	40–50
Shelf life (from manufacture)	—	months	24
Light and heat	—	—	Avoid higher temperatures and humidity



STORAGE AND SHELF LIFE

Twenty-four months from the date of manufacture, under the storage conditions defined by FINAT: 20 to 25 °C and 40–50 % relative humidity. Prolonged storage at higher temperatures or humidity levels shortens the shelf life of the material.

USAGE RECOMMENDATIONS

- Product performance must always be checked under the real conditions of the application.
- Observe the minimum labelling temperature of –10 °C at the moment of application.
- Do not exceed ten freeze-thaw cycles: beyond that number, performance may be affected.
- The user is solely responsible for determining the suitability of the product for the intended application and for complying with the legislation and testing requirements applicable to the finished article.

IMPORTANT NOTES

- Sales code: FEM/RPCR/28. EAN: 6415788236772.
- The values given are typical values based on the manufacturer's data and are subject to change without notice.
- Contact Lit-Off for information on certifications and supply formats, which are not stated in the source document.

This document is a technical data sheet for commercial use. For any advice on the suitability of the material, please contact us.