Product Information

Intended Use:	Identification of glass microscope slides
Facestock Material:	PET Film
Adhesive Type:	Permanent Solvent Based
Media Thickness:	5.0 mil ± 10%
Support Liner Thickness:	2.5 mil ± 10%
Finish:	Matte
Suggested Printing Method:	Thermal Transfer
Recommended Ribbon:	XAR-Class
Lower Temperature Resistance:	-80°C (-112°F)
Upper Temperature Resistance:	+120°C (+248°F)
Minimum Application Temperature:	-20°C (-4°F)
Storage Instructions:	Between 15°C and 25°C (59°F to 77°F) at 50% RH, in original packaging
Product Warranty:	Refer to our Terms and Conditions found on https://www.labtag.com/resources/terms-and-conditions/

GA International Internal Product Testing Results

Adhesion Score Legend

5 Excellent Adhesion
The label remains strongly attached; no lifting or flagging is observed.

4 Very Good Adhesion
The label is securely attached; partial lifting or flagging (up to 10% of the label) may be observed.

3 Good Adhesion
The label maintains moderate attachment; partial lifting or flagging (10-20% of the label) may be observed.

2 Weak Adhesion
The label remains weakly attached; partial lifting or flagging (20- 50% of the label) may be observed.

1 Poor Adhesion
The label remains poorly attached, partial lifting or flagging (>50% of the label) may be observed.

Printout Quality Legend

5 Excellent
Printout is unaffected and is perfectly readable/scannable

4 Very Good
Printout is lightly affected and is readable/scannable

3 Good
Printout is moderately affected but is readable/scannable

2 Low
Printout is easily smudged or removed; printout is not readable/scannable

1 Poor
The printout is instantly erased

Xylene Resistance Immersion End Point Determination

Surface	Adhesion Score*(1-5 scale)								Printout Quality Score (after 16h, 1-5 scale)
	15 min	30 min	1h	2h	4h	6h	8h	16h	
Microscope slide	4	4	4	3	3	3	3	2	5

The labels were printed using a thermal-transfer printer and XAR-class ribbon at a speed setting of 50.8 mm/s, with the darkness set to 30, and featuring code 128 barcodes. These labels were then applied to the printed portion of the microscope slides at room temperature (+21°C/+70°F) in triplicate. The slides were placed in an oven at 70° °C for 15 minutes, after which they were immersed in xylene for duration of 15 minutes, 30 minutes, 1hour, 2hours, 4hours, 6hours, 8hours and 16hours. The labels were evaluated for any changes in adhesion and printout quality.

*To ensure optimal adhesive performance, labels were attached to the frosted or colored portions of the slide and excessive contact with the adhesive prior to affixing was avoided.

H & E Staining

Surface	Adhesion Score (1-5 scale)	Printout Quality Score (1-5 scale)	Stain Absorption (after completion of protocol)
Microscope slide	4	5	No

The labels were printed using a thermal-transfer printer and XAR-class ribbon at a speed setting of 50.8 mm/s, with the darkness set to 30, and featuring code 128 barcodes. These labels were then applied on the printed portion of the microscope slides at room temperature (+21°C/+70°F) in triplicate. The basic staining protocol used includes dewaxing, dehydration, staining with hematoxylin and eosin, dehydration, and clearing.

Antigen Retrieval			
Surface	**Adhesion Score (1-5 scale)**	**Adhesion Score* (1-5 scale)**	**Printout Quality Score (1-5 scale)**
	pH: 6	**pH: 8.5**	
Microscope slide	4	4	5

The labels were printed using a thermal-transfer printer and XAR-class ribbon at a speed setting of 50.8 mm/s, with the darkness set to 30, and featuring code 128 barcodes. These labels were then applied on the printed portion of the microscope slides at room temperature (+21°C/+70°F) in triplicate. The applied protocol includes 1. Dewaxing using heating and xylene immersion, 2. Dehydration using EtOH, 3. Heating in high or low pH buffer using a pressure cooker, and 4. Washing with SDS solution.

*To ensure optimal adhesive performance, labels were attached to the frosted or colored portions of the slide and excessive contact with the adhesive prior to affixing was avoided.

Chemical Resistance			
Chemicals	**Adhesion Score* (1-5 scale) 1 hour immersion**	**Adhesion Score* (1-5 scale) 6 hours immersion**	**Printout Quality Score (1-5 scale)**
	Microscope slide	**Microscope slide**	
70% ethanol	5	5	5
100% ethanol	4	3	5
100% Isopropanol	4	4	5
Acetone	3	N/A	5
Toluene	3	3	5
MEK	3	N/A	5
Pro-Par	4	4	5
Clarify™	5	5	5
Histo-Clear™	4	4	5
DMSO	5	4	5

The labels were printed using a thermal-transfer printer and XAR-class ribbon at a speed setting of 50.8 mm/s, with the darkness set to 30, and featuring code 128 barcodes. These labels were then applied to the printed portion of the microscope slides at room temperature (+21°C/+70°F) in triplicate, followed by immersion in various chemicals for 1 hour or 6 hours. The labels were evaluated for any changes in adhesion and printout quality after exposure to the chemicals.

*To ensure optimal adhesive performance, labels were attached to the frosted or colored portions of the slide and excessive contact with the adhesive prior to affixing was avoided.

Low Temperature Testing				
Application Temperature	**Storage Temperature**	**Container/Surface**	**Adhesion Score (1-5 scale)**	**Printout Quality Score (1-5 scale)**
Room Temperature	-80°C freezer for 24 hrs	Microscope slide	4	5

The labels were printed using a thermal-transfer printer and XAR-class ribbon at a speed setting of 50.8 mm/s, with the darkness set to 30, and featuring code 128 barcodes. These labels were then applied to the printed portion of the microscope slides at room temperature (+21°C/+70°F) in triplicate, followed by storage in -80°C freezer for 24 hours. The labeled surfaces were examined immediately upon removal from the storage condition. The adhesion of the labels was evaluated by physically challenging the label to determine the amount of effort needed to remove the label. The printout durability was determined by rubbing the printout with a cotton swab for 5 seconds and recording the legibility of the printed information and the scannability of the barcode.

High Temperature Testing				
Application Temperature	**Storage Temperature**	**Container/Surface**	**Adhesion Score (1-5 scale)**	**Printout Quality Score (1-5 scale)**
Room Temperature	+120°C, 30 min dry heat oven*	Microscope slide	5	5

The labels were printed using a thermal-transfer printer and XAR-class ribbon at a speed setting of 50.8 mm/s, with the darkness set to 30, and featuring code 128 barcodes. These labels were then applied to the printed portion of the microscope slides at room temperature (+21°C/+70°F) in triplicate, then heated at +120°C in oven for 30 minutes. The labeled surfaces were examined immediately upon removal from the storage condition. The adhesion of the labels was evaluated by physically challenging the label to determine the amount of effort needed to remove the label. The printout durability was determined by rubbing the printout with a cotton swab for 5 seconds and recording the legibility of the printed information and the scannability of the barcode. *The 30-minute duration for the dry heat resistance test was selected for this experiment. This duration is not indicative of the maximum limit and further testing is recommended to determine the full extent of heat resistance.

Last Update: December 17, 2025