

Technical Information

Tag Marker Ink – LB9.3

● General Information

Our tag ink is a form of permanent ink used for marking polyurethane and polystyrene plastic surfaces. It varies from commonly available permanent inks in that it penetrates the surface it is used on, resulting in a truly permanent, weatherproof and light-fast mark.

It was specially designed for marking tags used to identify cattle and other livestock but is also appropriate for marking polyurethane and polystyrene in any situation that needs protection against water and sunlight such as garden labels.

- Etches into the surface
- Weather-proof
- Lightfast
- Water-proof

● Available Colours

Standard	
● Black	● Red

● Typical Physical Properties

Ink	Viscosity (20°C) (cP)	Density (20°C) (g.cm ⁻³)	Surface Tension (mNm/m)	pH
● Black	9.36	0.91	27	5.6
● Red	5.25	0.97	27	5.5

cP = centipoise

g.cm⁻³ = grams per cubic centimetre

mNm/m = milli Newton metre per metre

● Light Fastness

Ink	Outside Exposure / Light Fastness (3 months exposure to direct sunlight)
● Black	5
● Red	5

5 = Excellent

4 = Very good

3 = Good

2 = Poor

1 = Very Poor

0 = Failure

Test Method Summary – Test pieces placed outside at a south facing site in direct sunlight, arranged horizontally for maximum rain impact

● Rub Resistance

Metals

Ink	Steel	Mild Steel	Aluminium	Brass	Galvanized
● Black	3	5	5	5	5
● Red	5	5	5	5	5

Plastics

Ink	Polyethylene Terephthalate (PET)	Low Density Polyethylene (LDPE)	High Density Polyethylene (HDPE)
● Black	5	5	5
● Red	5	5	5

Ink	Polyurethane (PU)	Polypropylene (PP)	Polystyrene (PS)
● Black	5	3	5
● Red	5	3	5

Other

Ink	Glass
● Black	5
● Red	5

5 = Excellent 4 = Very good 3 = Good 2 = Poor 1 = Very Poor 0 = Failure

Test Method Summary – a comparative test where the test surface is repeatedly rubbed with a dry fingertip

● Tape Resistance

Metals

Ink	Steel	Mild Steel	Aluminium	Brass	Galvanized
● Black	0	5	0	1	5
● Red	3	5	0	3	5

Plastics

Ink	Polyethylene Terephthalate (PET)	Low Density Polyethylene (LDPE)	High Density Polyethylene (HDPE)
● Black	3	5	5
● Red	3	5	5

Ink	Polyurethane (PU)	Polypropylene (PP)	Polystyrene (PS)
● Black	5	2	5
● Red	4	2	5

Other

Ink	Glass
● Black	5
● Red	5

5 = Excellent 4 = Very good 3 = Good 2 = Poor 1 = Very Poor 0 = Failure

Test Method Summary – the tape is applied to the test surface and light pressure is applied with the finger to remove air bubbles. After a period of 10 minutes the tape is removed at an angle of 90°

- **Marker Storage Advice**

For optimum performance, markers should ideally be stored capped securely.

- **Component Selection Advice**

Component	Details
Nib	Polyester or acrylic
Barrel	Polypropylene (PP)
Head/Tail Caps	Polypropylene (PP)

We strongly recommend you test your components for compatibility with our inks.