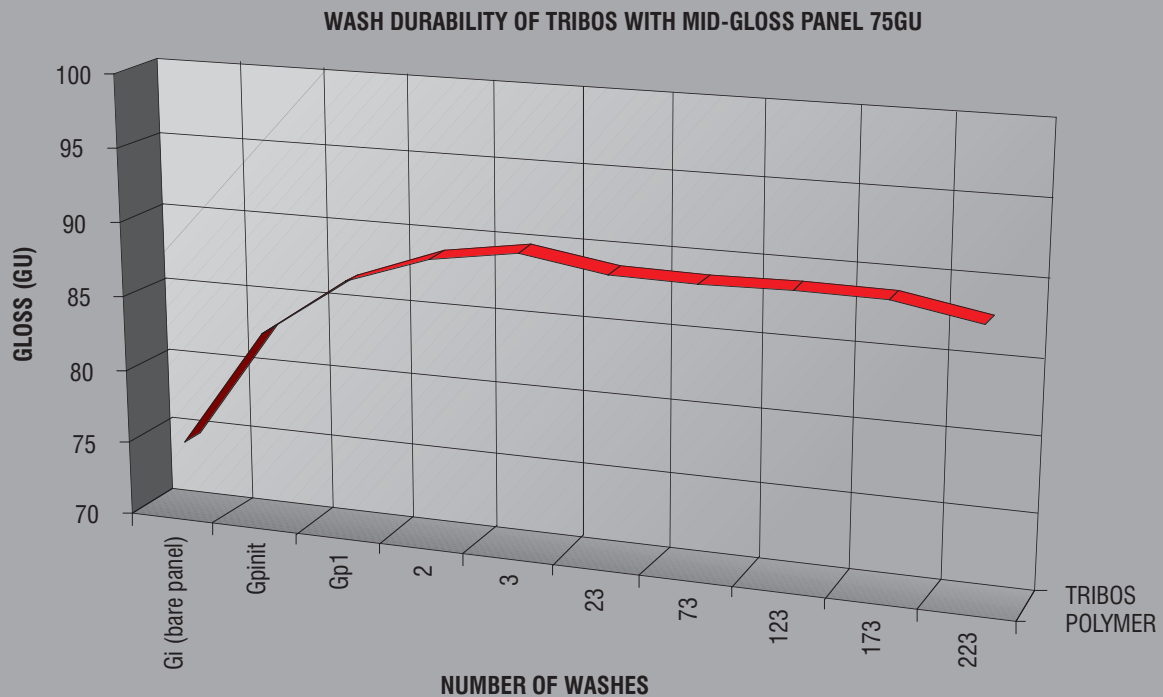


# TRIBOS

TECHNICAL TEST DATA

# WASH DURABILITY AND GLOSS RETENTION



- Tribos Polymer Wash durability is in excess of 200 washes on white Gel-coat.
- This test, conducted on a gel-coat panel.
- Panel is prepared to a mid-gloss of 75GU, so that gloss is due to polymer, not surface finish.
- Panel is treated with polymer and allowed to cure for 24 hours at 25 deg C.
- Before washing gloss is measured (Gpint).
- The panel is washed with a med-hard synthetic sponge in a 35degC 1% SDS soln. Each wash is two strokes (one up, one down). Panel is rinsed dry with reverse osmosis purified water, as the coating is water repellent. Gloss is then measured, and the wash is repeated.
- The best gloss was achieved following 3 washes, and retained in excess of 200 washes.

## DEPTH OF COLOUR & GLOSS ON DARK COLOURS

Tribos polymer increases the depth of colour and gloss of substrates, particularly those of dark colours. Take for example these colour shifts measured with an X-Rite colour spectrometer in CIELAB colour.

### DARK BLUE/BLACK

INITIAL GLOSS 72 GU			FINAL GLOSS (WITHOUT WASHING) 92 GU		
L*	A*	B*	L*	A*	B*
6.6	-0.2	-8	4.4	0	-7.8

*Gloss has increased, and black intensity has increased.*

### METALLIC BLACK

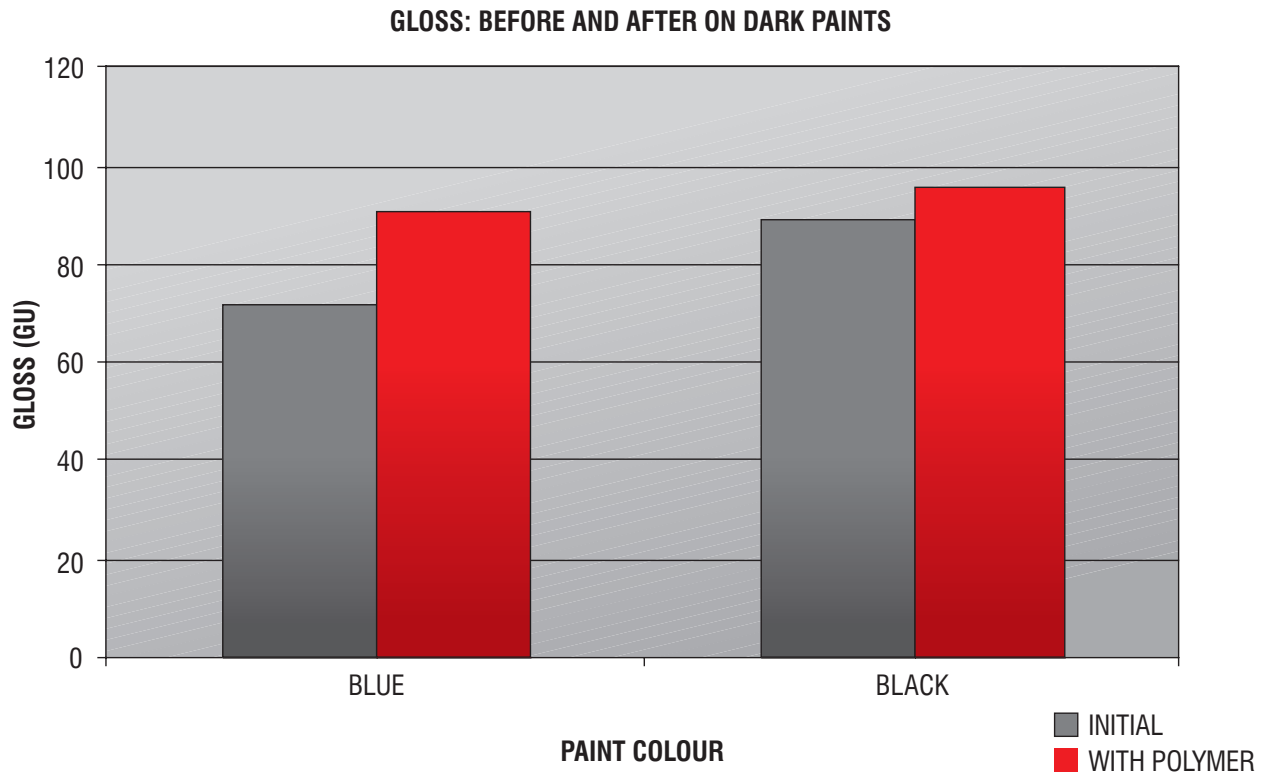
INITIAL GLOSS 89 GU			FINAL GLOSS (WITHOUT WASHING) 96 GU		
L*	A*	B*	L*	A*	B*
2.3	0.3	0	1.8	0.3	0.1

*Gloss has increased, and black intensity has increased*

Notes (from Wikipedia)

The three coordinates of CIELAB represent the lightness of the color ( $L^* = 0$  yields black and  $L^* = 100$  indicates diffuse white; specular white may be higher), its position between red/magenta and green ( $a^*$ , negative values indicate green while positive values indicate magenta) and its position between yellow and blue ( $b^*$ , negative values indicate blue and positive values indicate yellow).

## DEPTH OF COLOUR & GLOSS ON DARK COLOURS (CONT.)



## OTHER SUBJECTIVE BENEFITS

- Tribos polymer adds water repellency to the gel-coat or paint, preventing the buildup of water spots attracting dust.
- Tribos polymer improved the feel of a treated surface, giving a smooth silky, low-friction feel.
- Tribos polymer fills pores and cracks, excluding water and salt from penetrating the surface. This prevents the crystallization of salt within small pores and defects in the surface. These salt crystals are hard and sharp, and repeated wet/dry cycles can accelerate wear.
- Tribos Polymer also prevents acid rain etching the gel-coat. Some cheaper gel-coats use calcium carbonate as a solid filler. This material is soluble in acid rain, and its dissolution can cause pitting and dullness.

## UV PROTECTION

Tribos polymer includes a silicone bonded micronized titanium oxide UV filter. This material reflects UV to minimize solar degradation. This material is water repellent and resists wash off. The UV protection afforded is dependent on surface porosity and condition, so we do not release technical data.