

NOTES ON THE SPECIFICATION FOR ROADMARKING PAINT

1. INTRODUCTION

The NZTA P22 and P30 specifications require that the paint used in roadmarking must be on the current NZTA list of approved paints. This list is attached as Appendix A of these notes.

2. REQUIREMENTS

To be included on the list of approved paints the material must comply with the NZTA M7 Specification.

A paint may be removed from the approved list at any time at the discretion of the Operations Manager, NZTA National Office. Reasons for a paint being removed from the list can include but are not limited to:

- Supply of paint which is inferior to the sample tested against NZTA M7 for compliance.
- Expiry of the stated period for the paint to remain on the approved list.
- Undisclosed changes to the formulation.
- Undisclosed changes to the raw materials.

For these reasons contract documents must not imply that any paint will continue to remain on the approved list.

3. PAINT CLASSIFICATION

Paints included on the approval list are classified under three broad categories. These are:

- (i) Ability to withstand trafficking:
 - Class A; or
 - Class B; or
 - Class C.
- (ii) Dry film thickness for the M7 test:
 - 180 microns; or
 - 220 microns; or
 - 300 microns.
- (iii) Type of markings:
 - All markings; or
 - Non-reflectorisised markings **only**; or
 - Reflectorisised markings **only**.

APPENDIX A

The following table lists the products currently approved for each category. The current list of paints that may be used on State Highways in accordance with NZTA P22 and NZTA P30 is:

Roadmarking Paints Approved for Use on State Highways							
Classification		A (1,000,000 vehicle passes)		B (1,500,000 vehicle passes)		C (2,000,000 vehicle passes)	
Paint Dry Film Thickness	Approved Use	Manufacturer	Brand Name	Manufacturer	Brand Name	Manufacturer	Brand Name
180 microns	All Markings	Damar	Highway Aqua 98 - white	Linaro (Damar)	Linaro CR60 white ¹	Linaro (Damar)	Linaro Ultrax CL white ¹
			Highway Aqua 98 - yellow	Wattyl	Wattyl Streamline Ultra Chlorinated Rubber- white		Linaqua QL90 white
			Highway CR Super B - white		Wattyl Streamline Ultra H/S Alkyd - white	Dulux	Roadmaster Waterborne WB2 - white
			Highway CR Super B - yellow	Dulux	Roadmaster Chlorinated Rubber CR12 - white	Caplin Group	Caplin Group Guideline [®] - white ⁸

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Paint Dry Film Thickness	Approved Use	Manufacturer	Brand Name	Manufacturer	Brand Name	Manufacturer	Brand Name
			Highway CRA Intermix - white ⁶				
180 microns	All Markings	Damar	Highway Alkyd Super - white				
			High Performance Aqua 98 - white				
		Dulux	Roadmaster Special A2 High Solids Alkyd - white				
			Roadmaster Chlorinated Rubber CR12 - white				
		Linaro (Damar)	Linaqua QL 90 - yellow				
		Wattyl	Streamline Ultra Chlorinated Rubber - yellow				

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Paint Dry Film Thickness	Approved Use	Manufacturer	Brand Name	Manufacturer	Brand Name	Manufacturer	Brand Name
			Streamline Alkyd Extra - white				
180 microns	Non - Reflectorised Markings (only)	Damar	Highway Alkyd 98 - white	Damar	Highway Aqua 98 - white		
180 microns	Non - Reflectorised Markings (only)		Highway Alkyd HP 98 - yellow		High Performance Aqua 98 - white		
			Highway CR 98 - white		Highway Alkyd HP 98 - white		
		Dulux	Roadmaster Special A2 High Solids Alkyd - white				
			Roadmaster High Solid Alkyd A2 - yellow				
		Linaro/Resene (Damar)	Alkyd HS 100- white ¹				

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Paint Dry Film Thickness	Approved Use	Manufacturer	Brand Name	Manufacturer	Brand Name	Manufacturer	Brand Name
		Wattyl	Streamline High Solids Alkyd - white ¹				
			Streamline CR - white ¹				
180 microns	Reflectorised Markings (only)	Linaro (Damar)	CR 50 - white	Dulux	Dulux Roadmaster Chlorinated Rubber CR12 - white	Dulux	Dulux Roadmaster Chlorinated Rubber CR12 - white
		Wattyl	Streamline Superdurable - white	Damar	Highway CRA - white		
			Streamline Superdurable - yellow				
		Dulux	Roadmaster Chlorinated Rubber CR9 - yellow ³				

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Paint Dry Film Thickness	Approved Use	Manufacturer	Brand Name	Manufacturer	Brand Name	Manufacturer	Brand Name
220 microns	All Markings	Dulux	Roadmaster Waterborne WB2 - white	Damar	Highway Aqua 98 - white	Linaro (Damar)	Linaqua QL 90 - yellow
		Linaro (Damar)	CR 50 - white ¹	Wattyl	Streamline Acrylic Aquabead - white ²		Linaqua QL90 - white
		Wattyl	Streamline Acrylic Aquabead - yellow			Dulux	Roadmaster Waterborne WB2 - White
		Damar	Beadlock - yellow ⁸			Damar	Beadlock - white ⁸
							Highway BST White
Non-Reflectorisied Markings (only)	Linaro/Resene (Damar)	Alkyd HS100 - white ¹	Linaro (Damar)	CR 50 - white ¹			

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Paint Dry Film Thickness	Approved Use	Manufacturer	Brand Name	Manufacturer	Brand Name	Manufacturer	Brand Name
				Wattyl	Streamline Acrylic Aquabead – yellow		
220 microns	Non-Reflectorised Markings (only)	Wattyl	Streamline High Solids Alkyd – white ¹	Dulux	Roadmaster Waterborne WB2 – white		
			Streamline CR – white ¹				
	Reflectorised Markings (only)	Damar	Highway CR 98 – white				
			Highway CRB – white				

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Paint Dry Film Thickness	Approved Use	Manufacturer	Brand Name	Manufacturer	Brand Name	Manufacturer	Brand Name
300 microns	All Markings	Dulux	Roadmaster Waterborne WB2 - white			Linaro (Damar)	Linaqua QL 90 - white ⁷
							Linaqua QL 90 - yellow ⁶
						Damar	Bascolin 1 / 1 white ⁹
300 microns	All Markings						Bascolin 1 / 1 yellow ⁹
	Reflectorised Markings (only)	Damar	Highway CRA Intermix - white ⁶				
	Non Reflectorised markings (only)			Dulux	Roadmaster Waterborne WB2 - white		

- Note 1. No pick-up time of between 7 and 15 minutes.
- Note 2. This paint fails the 6 month storage test.
- Note 3. The no pick-up time is **greater** than 15 minutes.
- Note 4. The viscosity may increase significantly over time.
- Note 5. The non-volatile content may vary from the stated range.
- Note 6. These products approved are for use with large diameter (>1.0mm) and standard beads only, at a ratio of 1:1
- Note 7. This product was trailed at 278 microns dry film thickness.
- Note 8. These Products were trialed under TNZ M/7 Clause 4.2 Resistance to Trafficking during In-Situ Trial. In-situ trial test results are available on request from the manufacturer
- Note 9. This product is typically applied at 800 microns
- General: Paints may only be used on the State Highways for their “Approved Use” category, e.g. paints approved as Non Reflectorised may only be used for markings **not** required to be reflectorised.

The A, B and C Classification denotes the durability of the products. Class C paints have met the specified criteria at higher traffic volumes than Classes B and A. Consequently Class C paints have tested to be more durable than Classes B and A and similarly Class B more durable than Class A.

Paints approved as Class C may be used in Classes A & B for their “Approved Use”, e.g. paint xxx Class C300 Reflectorised Markings may be used for Class B300 & Class A300 for Reflectorised Markings only. For products that are approved for various uses under increased trafficking e.g. failed the reflectivity requirements with increased traffic, these products are shown in their respective categories.