

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Aliphatic polyurethane
<b>Description</b>	Fast cure, high gloss, aliphatic polyurethane which is ideal for use where a polyurethane finish is specified and where rapid drying is desirable. It will provide good gloss and colour retention as well as resistance to moderate to severe corrosive environments for: <ul style="list-style-type: none"> <li>• Structural Steel</li> <li>• Shop application</li> <li>• Chemical processing industry</li> <li>• Pulp and paper industry</li> <li>• Dairy industry</li> <li>• Bridges and storage tanks</li> <li>• Fishing vessels</li> <li>• Off-shore structures</li> <li>• Shoreside facilities</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>• Fast dry to handling - increased throughput</li> <li>• Rapid dry to recoat</li> <li>• Good gloss retention and colour retention</li> <li>• Good chemical resistance</li> <li>• Good abrasion resistance</li> <li>• Excellent durability due to high flexibility and toughness</li> <li>• Good retention of cosmetic properties due to high UV resistance</li> <li>• Good resistance to marring, chipping, and scratching</li> <li>• Wide colour selection</li> <li>• Excellent aged recoatability</li> <li>• Approved for use in food &amp; dairy processing plants (refer to "Approvals NZ/AU" section)</li> </ul>
<b>Colour</b>	White, Black, Golden Yellow, and tintable to an extensive range of Resene, RAL, British Standards and AS 2700 colours. Custom (fleet) colours are also available on request
<b>Finish</b>	Full gloss
<b>Primer</b>	Refer to Substrates & Surface Preparation.
<b>Dry Film Thickness</b>	50 - 75 microns 83 microns wet to obtain 50 microns dry 125 microns wet to obtain 75 microns dry
<b>Solids Content</b>	By volume 51% ± 1%
<b>Theoretical Coverage Rate</b>	10.2 m <sup>2</sup> /L at 50 microns 6.8 m <sup>2</sup> /L at 75 microns Allow for loss in mixing and application.
<b>VOC Values</b>	<b>As Supplied</b> : 430 g/L
<b>Dry Temp. Resistance</b>	120°C Dry Colour may change as temperature approaches 120°C
<b>Limitations</b>	Due to fast cure characteristics problems may be encountered in automotive applications.

## SUBSTRATES & SURFACE PREPARATION

<b>General</b>	All surfaces must be sound and free of oil, grease, dirt, loose and flaking paint, moisture, and other foreign substances prior to application of E~Line 949. Clean and/or degrease with either a suitable non-ionic detergent (such as Altex P40 Cleaner), or solvent wipe with Altex C50 Surface Cleaner.
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## SUBSTRATES & SURFACE PREPARATION

<b>Steel</b>	<p>Prime with specific primers such as Carboguard 504, 636 XT, 640, Altra~Zinc 605 or Carbozinc 858. May be applied to other Carboline products - refer to Altex Technical Services for more further advice.</p> <p>For an optimum finish, apply over sanded and prepared AY&amp;B Epoxy Barrier Undercoat.</p>
<b>Previously Painted Surfaces</b>	<p>Clean with Altex P40 Prepainting Cleaner, or solvent wipe with Altex C50 Surface Cleaner in accordance with SSPC-SP 1 (AS 1627.1) solvent cleaning. Remove loose and peeling paint. Sand all surfaces to achieve a matte surface with a clearly discernible surface profile. Feather all edges to ensure all loose material is removed. Prime bare areas with one of the primers specified above.</p> <p>Generally, it is advisable to apply a full coat of one of the recommended Carboguard primers prior to finish coating with E~Line 949.</p>

## MIXING & THINNING

<b>Mixing</b>	<p>Power mix the base portion first to obtain a smooth, homogeneous condition. After mixing the base portion add the converter slowly with continued agitation. During the summer, no induction time is required for E~Line 949, in winter conditions allow 15 – 30 minutes induction time.</p>
<b>Thinning</b>	<p>Thinning is generally required. For spraying, thin up to 20% with Altex Thinning Solvent #25 added to the mixed components after induction. For brushing and rolling, use Altex Thinning Solvent #22</p> <p>Note: Excessive thinning can cause low film thickness, sagging and other film defects.</p> <p>Use of thinners other than those supplied or recommended by Altex Coatings may adversely affect product performance and void product warranty, whether expressed or implied.</p>
<b>Ratio</b>	<p>8:1 by volume</p>
<b>Pot Life</b>	<p>3 hours at 25°C (unthinned), 6 hours (5% thinning). Higher temperatures will reduce the working life of the coating; lower temperatures will increase it.</p>

## APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

<b>Spray Application (General)</b>	<p>E~Line 949 may be applied by air or airless spray.</p> <p>Ensure all equipment and lines are clean and moisture free.</p>						
<b>Conventional Spray</b>	<p>1.2mm to 1.8mm fluid tip with appropriate air cap.</p>						
<b>Airless Spray</b>	<table border="0"> <tr> <td style="padding-right: 10px;">Pump Ratio</td> <td>30:1</td> </tr> <tr> <td>Material Hose</td> <td>3/8" I.D min</td> </tr> <tr> <td>Tip Size</td> <td>0.015 – 0.019</td> </tr> </table> <p>(Note: The above is a guide. Other equipment to the above may be used.)</p>	Pump Ratio	30:1	Material Hose	3/8" I.D min	Tip Size	0.015 – 0.019
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<b>Brush &amp; Roller (General)</b>	<p>Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or rerolling. For best results, tie-in within 10 minutes at 24°C.</p>						
<b>Brush</b>	<p>Recommended for stripe coating, small areas and touch-ups. Use a medium, natural bristle brush.</p>						
<b>Roller</b>	<p>Use a medium-nap synthetic roller cover with phenolic core.</p>						

## APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C	5°C	7°C	0%
Maximum	32°C	32°C	32°C	80%
Optimum	16-24°C	16-24°C	16-24°C	30-70%

**Caution:** This product is moisture sensitive in the liquid stage and until fully cured. Protect from high humidity, dew and moisture contact until fully cured. Application and/or curing in humidity's above maximum, or exposure to moisture from rain or dew may result in a loss of gloss and/or micro-bubbling of the product.

## CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Self-Recoat	Dry to Touch
10°C	6½ Hours	6 Hours	90 Minutes
15°C	4½ Hours	4 Hours	60 Minutes
24°C	2 Hours	2 Hours	30 Minutes
30°C	90 Minutes	90 Minutes	15 Minutes

Curing schedule based on 50 – 75 microns DFT

## CLEANUP & SAFETY

**Cleanup** | Use Altex Thinning Solvent #22 or #25

**Safety** | For industrial use only: Read and follow all the caution statements on this Product Data Sheet, the product label, and the Safety Data Sheet (SDS) for health and safety information prior to use.

**Ventilation** | It is very important for the safety of the applicator and the proper performance of E~Line 949 that good ventilation be provided to all portions of the enclosed area. It is equally important to bring into the enclosed area dry fresh air to remove all solvent vapours. Since solvent vapours are heavier than air, ventilation ducts should reach to the lowest portions of the enclosed areas as well as into any structural pockets. Ventilation should be provided throughout the cure period to ensure all the solvents are removed from the coating.  
Mixed E~Line 949 contains isocyanate. When sprayed it may be harmful by inhalation - do not breath vapour or spray. Wear suitable clothing, gloves, eye, and face protection, including suitable breathing protection such as an air supplied respirator or hood.

## PACKAGING, HANDLING & STORAGE

**Shelf Life** | Part A: 36 months at 24°C  
Part B: 12 months at 24°C

Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers. For products/components exceeding the stated shelf life, contact Technical Services for further advice.

**Shipping Weight (Approximate)** | 4.5L kit - 6.2 kg  
9L kit – 12.33 kg

**Storage Temperature & Humidity** | Optimum: 15-20°C  
0-90% Relative Humidity

**Flash Point (Setaflash)** | 34°C

**Storage** | Store under cool, dry conditions.  
Avoid large fluctuations between high and low temperatures.  
Avoid the formation of condensate due to low temperatures.

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## APPROVALS

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<b>Approvals NZ/AU</b>	<b><u>Food Processing - New Zealand</u></b> AsureQuality® assessed for food/beverage industry including dairy factory and dairy farm non-incident contact (assessment reference number: h3116).
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## WARRANTY

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### DISCLAIMER

The information in this datasheet is provided as a guide only and is provided without warranty, implied or otherwise. It is your responsibility to determine the suitability of any information or product for the use contemplated. Conditions of use, application and the substrate are beyond our control so no liability whatsoever (whether as to coverage, performance, injury or otherwise) is accepted for the information contained herein.

Data sheets may change from time to time and it is your responsibility to ensure you have the latest product datasheet and material safety data sheet from your supplier. Check the data sheet date with the listings at [www.altexcoatings.com](http://www.altexcoatings.com)  
Altex Terms and Conditions of Trade, available at [www.altexcoatings.com](http://www.altexcoatings.com), apply in respect of all coating products and materials supplied, including samples.