

Product Data Sheet

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Makers of Fine Paint Since 1962

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116 Nylocote



USE



THINNER/CLEAN

T-11
Spray
T-27
Brushing



APPLICATION

RECOAT

8 Hr



HAZARD



116 Nylocote is a two part, cold cure, epoxy polyamide finish exhibiting outstanding adhesion to most material with excellent resistance against corrosive conditions such as atmospheric fumes or spillage and water immersion.

USES: 116 Nylocote is a 2 part Epoxy recommended as a finishing coat for all most applications where resistance to solvents, chemicals, water, abrasion and corrosion is desired e.g. Industrial and Chemical Plant, structural steel, balustrade, bridges, concrete floors, breweries, wineries, dairies. 116 Nylocote is suitable for use in contact with potable water and foodstuffs in accordance with the requirements of Title 21 CFR FDA (US Federal Government)

SURFACE PREPARATION: All surfaces should be clean, dry and free from oil and grease. Any corroded areas or corrosion products should be removed before painting in a manner appropriate to the substrate.

ALUMINIUM, ZINC COATED STEEL & GALVANISED IRON: Degrease with T-3 Wax and Grease remover. Apply 129 Super Etch Primer (10-15µm) or Forminex E3 Primer (20-40 µm) and allow 6-8 hours before coating with 858 Epoline Primer (min 40-80µm depending on application). Allow 8 hours (overnight) drying before coating with 116 Nylocote.

CONCRETE FLOORING - See Page 4

CONCRETE (General – Not Flooring): Repair all damaged areas and drummy areas. Remove dust and loosely adherent material and ensure that the surface is dry. For maximum results the use of 858 Epoline Primer Surfacer is recommended. Allow 8 hrs (overnight) drying before coating with 116 Nylocote. Recommended coating thickness will vary with service conditions.

PREVIOUSLY PAINTED - NYLOCOTE / EPOLINE: If 116 Nylocote is less than 36 hours old (ambient temperature 25°C) then it may be re-coated without any special preparation. Otherwise, abrade surface thoroughly and wash with T-11 Epoxy Reducer before re-coating. Higher ambient temperatures will shorten the time in which re-coating without preparation may be carried out.

PREVIOUSLY PAINTED - UNKNOWN: When applying 116 Nylocote to a previously painted surface ensure that "lifting" or "wrinkling" does not occur. Apply to a small area as a test piece either 858 Epoline Primer or 116 Nylocote in accordance with the application instructions. Where "lifting" or "wrinkling" occurs, the existing paint must be completely stripped off. Be aware that even if this test is passed the ultimate performance of 116 Nylocote may be compromised in some way by the unknown previous coats.

STRUCTURAL STEEL: Abrasive-blast clean to AS 1627 Part 4 Class 2½ or better. Then immediately prime with 858 Epoline Primer Surfacer. Wire brushing or power tool cleaning may be used to prepare the surface. However, this is recommended only for non-aggressive environments, as ultimate corrosion resistance may be impaired. Allow 8 hours (overnight) drying before over coating with 116 Nylocote. If the structural still is coated with an inorganic zinc after blasting then 858 Epoline Primer is recommended prior to 116 Nylocote.

TIMBER: Sand, remove any dust, oil or dirt and ensure that the surface is thoroughly dry. For maximum results the use of 858 Epoline Primer Surfacer is recommended. Allow a minimum of 16 hours to cure before coating with 116 Nylocote. Extremely waxy timber may benefit from solvent degreasing before primer application.

NOTE: Above re-coat times are for 25°C. Lower temperatures will increase times, higher temperatures will shorten times.

APPLICATION/THINNING: 116 Nylocote may be applied by conventional spray, airless spray or brush. Roller application may be suitable for some applications.

116 Nylocote is a 2 part product. Do not use parts individually. Do not use a mix ratio other than that recommended. Stir each pack thoroughly until uniform and then mix Part A and Part B in the ratio 2:1 by volume. Stir evenly until well mixed, using a wide flat blade stirrer or "potato masher". Continue stirring for 2 - 3 minutes. Allow mixture to stand for 25-30 minutes before use (at 25°C).

Conventional Spray: 1.5 mm to 2mm Fluid nozzle at an air pressure of 345 kPa (45-50psi) is recommended. Reduce 20-25% with T-11 Epoxy Reducer.

Airless Spray: Recommended Tip size is 300-400µm. Thin approximately 5-10% with T-11 Epoxy Reducer.

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Customers need to appreciate that as Topline Paint cannot control the conditions under which our products are used, we therefore are unable to guarantee suitability or accuracy in every situation. If any doubt exists, do check with our technical people. Before large-scale use always test on a small sample and ascertain suitability. No warranties express or implied are made. The risks and liability arising from handling, storage, use and compliance with legal restrictions, rests with the buyer.





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Brush: Reduce sparingly to aid application with T-27 Special Reducer.

Roller: Reduce sparingly to aid application with T-27 Special Reducer. Roller application is usually only suited to application on absorbent surfaces such as concrete floors. Roller should be used to apply the paint at an even pressure and speed. Bubbling may result from certain types of roller cover (e.g. foam) or a vigorous roller action. In some circumstances it may not be possible to eliminate all bubbling.

CLEAN UP: T-11 Epoxy Reducer.

DRYING/RECOAT: 8 hours minimum. If longer than 36 hours between coats then the previous coat should be lightly abraded and solvent wiped with T-11 Epoxy Reducer before recoating.

1 - 2 hours touch dry, hard dry overnight. (at 25°C - longer at lower temperatures)

Full cure (maximum hardness and chemical resistance) will not be achieved in less than 7 days (at 25°C with good ventilation). 116 Nylocote will not cure below 10°C or relative humidity above 85%. Do not use below 10°C.

Mixed material has a pot life of 2-3 hours at 25°C.

COLOUR: Wide Colour Range available

FINISH: High gloss.

COVERAGE: Theoretical coverage 10 m² per litre at the minimum recommended 50µm dry film thickness. 100µm is recommended as a minimum where resistance to abrasion or aggressive chemicals is required.

PACK SIZES: 4 Lt pack (consisting of 2.7 lts of Part A in a 4 Lt can and 1.3 lts of Part B in a 2 Lt can)
20 Lt pack (consisting of 13.4 lts of Part A in a 20 Lt pail and 6.6 lts of Part B in a 10 Lt pail)

Vehicle Type: Epoxy polyamide.

Pigment Type: Selected chemically resistant pigments. Only a small range of colours and clear meet the US CFR 21 Food Contact requirements.

FILM PROPERTIES:

Solvent Resistance	Very Good.	Chemical Resistance	Acid – Excellent Alkalis - Good
Abrasion Resistance	Excellent.	Impact Resistance	Very Good.
Heat Resistance	Yellowing occurs at temperatures in excess of 90°C.	Flexibility	Passed 5mm bend test

FOOD CONTACT: To the best of our knowledge there is no external or 3rd party 'Certificate' or 'Certification' that can be provided for this. The relevant Australian Standard refers the reader to US and EU practices. In particular we determine the food contact safety of a paint product by reference to the US FDA regulations known as 21 CFR which lists compounds and materials safe for contact with food stuffs in the form of coatings and adhesives. We purchase raw materials from suppliers who manufacture those raws to comply with 21 CFR and use those in our Food Contact Coatings.

When painting food contact applications it is important to consider all aspects of the coating system including metal pre-treatments, primers, fillers and topcoats. We believe it is incorrect to use non-food contact coatings below a food-contact coating under the belief that the system is therefore safe. The risk is that if the system is worn through abrasion or chipping/mechanical damage then the non-food contact product may be exposed to the "food" material and contamination may occur, although admittedly at very low levels.

For this reason we do not recommend rust converters, adhesion promoters or anti-corrosives of any kind as generally speaking they do not meet the requirements of 21 CFR.

For 116 Nylocote in food contact applications we typically recommend the application of 116 Nylocote direct to the substrate or in conjunction with Forminex E3 which is a specially developed variant of our Forminex E2 primer formulated with 21 CFR compliant raw materials.

It is also important to note that only 116 White and 116 Clear are food contact safe. Some other colours may be but general statements may not be made as it will depend on the tinting method and composition of the tinters used to produce the colour. If you have a requirement for a "food contact" colour please contact us to discuss the suitability of your colour.



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USE OF 116 NYLOCOTE FOR CONCRETE FLOORING: 116 Nylocote can be suitable for use on industrial flooring where its great chemical and wear resistance are valuable assets. Whilst 116 Nylocote has a full gloss finish it is not inherently slippery when dry. Where slipping is a serious concern or where a wet surface is possible 116 Nylocote is available in a special 'slip resistant' variation for improved safety.

SURFACE PREPARATION: The surface should be mechanically ground to remove all dirt and deposited materials from the surface. Alternatively the surface should be acid etched and pressure washed.

It is essential to note that the surface must be completely free of contaminants especially oil and grease.

New concrete should be at least 28 days old. Loose, powdery, flaking or drummy concrete should be removed and repaired as required. If a shorter aging period is required then consider Forminex Water Based Epoxy which can be used on green concrete.

CLEANING: Varying methods may be employed to thoroughly clean the concrete surface depending on the type and degree of surface contamination.

OIL CONTAMINATED AREAS: For heavy oil and grease, steam or chemical cleaning is recommended. For a more general cleaning, washing with an Industrial detergent may be sufficient. If unsure, please contact our Technical Services Department. NOTE: Acid Etching does not remove oil and grease.

WARNING: Oily and greasy floors are the most common cause of loss of adhesion of 116 Nylocote. Floors that are badly contaminated with oil (e.g. many years of service) are difficult to clean properly. The cleaning and removal of oil and grease is a crucial step in this coating system.

ACID ETCHING: Acid Etching is essential to remove any laitance from the concrete surface. Etch the surface using a mixture of 9 parts of clean water to 1 part of Commercial Hydrochloric Acid (32%). Add acid to water NOT water to acid as the reaction may be violent.

Apply using a plastic watering can at the rate of 1 litre/3-4 m².

Scrub into the surface of the concrete with a bristle broom and allow acid to react for 3-4 minutes.

Thoroughly wash away spent acid with clean water and allow surface to dry out.

Please observe all safety precautions whilst handling acid and acid preparations. Use gloves, goggles and protective clothing. Please observe local regulations for disposal of spent acid and do not allow it to enter storm water drains. Fines may apply for allowing spent acid to enter drains or watercourses.

PAINT APPLICATION: Individually stir each can of Nylocote and Part B.

Mix in required proportions of 2 parts by volume of part A with 1 part by volume of Part B. Mix thoroughly using a wide bladed stirrer or a "potato masher" type stirrer and allow the paint to stand for 20 minutes before thinning or use. For the first coat only over thin the paint by 10-20% with T-11 Epoxy Reducer to aid penetration into the concrete.

Apply by brush, roller or airless spray at the rate of 6-8 square metres per litre. (**WARNING:** Special protection equipment and ventilation will be required if spraying in an enclosed space)

Allow Nylocote to dry overnight before re-coating.

Two coats are recommended for normal applications (general industrial). High wear areas and particularly aggressive environments will benefit from additional coats. If unsure contact our Technical Department.

116 Nylocote will not cure at temperatures below 10°C. This coating system requires 7 days at normal temperatures (25°C) for full cure. However, light traffic can be tolerated after overnight drying. If service schedule is important then heaters or a warm environment will speed curing.



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NON-SLIP: For more detailed information on Slip Resistant finishes and any potential legal/mandatory requirements please see the Spescoat Information Sheet entitled "Slip Resistant Finishes".

116 Nylocote has a gloss finish but it is not slippery and provides good grip to rubber and synthetic soled shoes. Slip however should be taken into account in areas where the floor may become wet with water, oil or chemicals. Under these circumstances the finish may become slippery.

There are 2 ways to produce a non slip finish with 116 Nylocote. We manufacture a version of 116 Nylocote (simply called 116 Nylocote Slip Resistant) that incorporates textured polymer beads. This produces a rough gritty finish that is slip resistant. It is also possible to sprinkle coarse washed builder's sand on to the first coat whilst it is wet. Sweep up the excess sand prior to applying the second coat. Once the second coat is applied the sand acts in much the same way as the textured beads above. Whilst being more work, the advantage to this approach is that you can control the areas you make non slip, and restrict it to doorways, work areas benches and such like. This overcomes some of the one disadvantage of non slip floors and that is that they get dirtier faster than the normal "un textured 116 Nylocote" coated floors. Topline also produces 3 texturing products – Spescoat Addgrip Fine and Coarse and Spescoat 'Broadcast'.

PRECAUTIONS:

The following information is a general guide only. Industrial users (i.e. where the product is being used in the workplace) are legally required to have available a Safety Data Sheet on this product. If you are unsure if you have an SDS on this product please contact Topline Paint and one will be provided.

Safety Directions: **KEEP OUT OF REACH OF CHILDREN – DO NOT SWALLOW.** Breathing the vapour is harmful and may cause lung irritation. Avoid contact with skin and eyes. Wear suitable, protective clothing, eye protection and impervious gloves when mixing and using. Handling and usage of this product must be carried out under well ventilation conditions that prevent inhalation of vapours, dust or mist. Use the appropriate breathing equipment (refer to Aust Stand. 1716) when ventilation is restricted. Keep containers closed when not in use. Eliminate any source of ignition (open fires, pilot lights, furnaces, spark producing switches etc.) as this product is flammable. **DO NOT SMOKE.** Take precautionary measures against static discharges. Used clean up rags may spontaneously ignite. To avoid ignition immerse in water or store in a sealable glass container.

First Aid Instructions: If affected by inhalation, remove to fresh air. If breathing difficulty persists or occurs later, consult a doctor. If swallowed, **DO NOT INDUCE VOMITING** drink plenty of water and seek medical advice. Contact a Doctor of Poisons Information Centre (Phone 131126). If skin contact occurs, remove contaminated clothing and wash skin thoroughly with soap and water. If irritation occurs seek prompt medical advice. Immerse contaminated clothing in water for 24 hours and do not use until laundered. In case of eye contact, hold eyes open and flood with running water for at least 15 minutes seek medical advice.

Leaks, Spills and Disposal: To prevent ignition of fumes product shut off all ignition sources. Contain or shut off leak if safe to do so. For large leaks or spills of volatile, flammable product, use respiratory protection, protective apparel and footwear. Spills should be absorbed either with rags (small spill) or dry sand/earth (large spill). In the case of flammable product spillage, use spark free implements to place rags or absorbed material into a solvent resistant container. Cover with water for 24 hours before disposal. DO NOT pour left over product down the drain – retain it in marked sealed container for future use or disposal through chemical waste collection programs. Dried empty cans can be recycled and should be disposed of via council steel recycling facilities.

Fire: Use foam and breathing apparatus. Avoid breathing products of combustion.

Hazard: The coloured square at the top of page 1 is provided for a quick reference as to the hazard level of a product. Blue refers to coatings with low hazard (e.g. water based wall paints). Yellow refers to medium hazard products such as QD enamels, which contain solvents, are flammable and need respirators for vapour protection. Red refers to products with special hazards such as isocyanate cured two pack finishes