

PRODUCT TECHNICAL DATA SHEET



PDS No: 9036

Product Details

Product Code:

Product Name: **2 Pack Waterborne Polyurethane**

Other Name(s): 2K water based gloss polyurethane clear

Description

APCO 2 pack Waterborne polyurethane is a water based polyurethane topcoat with excellent toughness, adhesion, gloss retention and mar resistance. It is a highly durable coating suitable for medium to heavy industrial applications. With excellent adhesion and fast set-up time, this product is a replacement for solvent-borne polyurethanes with significant reduction in VOC emissions.

Features and Benefits

- Chemical resistant
- Excellent gloss retention
- Extremely hard wearing, durable finish
- Impact resistant

Limitations and Precautions

- Do not apply when the surface temperature is below 10°C or above 35°C.
- Do not apply when humidity is 85% or above.

PRODUCT TECHNICAL DATA SHEET



PDS No: 9036

Physical Properties

Resin Type	Aliphatic polyurethane / Aliphatic polyisocyanate
Pigmentation	None
Colour	Clear (colourless)
Gloss at 60° head	> 75% @ 60°
Specific Gravity(Kg/Litre)	1.2 – 1.4
Coverage (m²/Litre)	10 - 12
No. of coats	2
Dry Times(at 20°C and 60%RH)*	3 hours (touch dry)
*(cooler temperatures, higher film thickness and higher humidity can extend the drying time)	
Recoat time	4 hours, maximum 24 hours
Cure	14 Days (full hardness)
Pot Life	2 hours
Wet Film Thickness (µm)	150 µm
Dry Film Thickness (µm)	70 µm
Flash Point	Not applicable
Packaging Sizes	4 L
Thinner and cleanup	Water
Theoretical VOC(g/Litre)	152 g/L
Mix Ratio	5:1 by weight
Coats	Two
Theoretical Coverage (m²/Litre)	10 – 12

Surface Preparation

(Refer to "Surface Preparation and Paint Systems" for full details). To ensure a successful application all surfaces to be coated must be clean, dry and stable. Generally, 2K Anti-Graffiti water based gloss clear is applied to substrates previously coated with an acrylic topcoat. Ezi-coat Low Sheen Acrylic is ideal.

CONCRETE BLOCK, TILT SLAB, BRICK ETC:

Where product is to be applied to bare substrate, ensure any laitance is removed by thorough cleaning. Rough surfaces should be sealed and prepared correctly (See "Guide for Applicators"). New concrete should be allowed to cure for a minimum of 7 days prior to coating (28 days preferred). Filling of rough surfaces is done to make removal of graffiti easier, rough surfaces are harder to wipe when cleaning and allow graffiti to remain in crevices.

FIBROLITE / EIFS:

Treat as for concrete.

PRODUCT TECHNICAL DATA SHEET



PDS No: 9036

WOOD:

2K water based gloss polyurethane clear can be applied to timber previously painted with acrylic coatings. It can also be applied to bare timber however 3 coats may be required to allow for absorption of the first coat. In exterior situations, 2K water based gloss polyurethane clear will break down from timber movement and UV degradation of the timber just like any clear coating in this environment.

METAL:

2K water based gloss polyurethane clear can be applied directly to clean, degreased metal substrates, or those which have been previously finished in acrylic.

ALL SURFACES:

All cracks and joints need to be treated as appropriate to suit the situation. Do not expect paint to bridge moving cracks / joints successfully. Any mould, moss or algae should be treated with a suitable chemical cleaner/inhibitor.

Application and Process

Mix the base (Part A) for a minimum of 5 minutes using a broad flat paddle. Avoid rapid mechanical stirring as this will entrain air bubbles into the product.

Add the Hardener (Part B) and mix well for at least 60 seconds, ensuring the sides and bottom of the pot are mixed in. Please note, the product will thicken when the hardener is added. Ensure the two parts are mixed properly. Allow the mixture to stand for 5 – 10 minutes. Stir the mixture for further 1 – 2 minutes before applying. Product can be applied by brush, roller or airless spray (Pressure 2500psi max; 515-619 tip).

Thining is not usuallky required. Use water and a mild detergent for clean-up.

On new surfaces, apply one coat of APCO 2 Pack WB Polyurethane, thinned 20% with water, to seal the surface. For very soft and porous timbers, two sealer coats may be required. For hard timbers the sealer coat may require 15% thinning to affect better penetration. Sand the surface lightly after 2 - 4 hours to obtain a smooth finish. Apply one or two further coats of APCO 2 pack WB Polyurethane thinned 15% with water, with a minimum of 2 hours recoating interval.

On a previously varnished surface, clean and sand the entire surface. For best results, the previous coating should be removed completely. If the previous coating is not removed, it is advised that a small test application be done to confirm adequate adhesion and compatibility.

If adhesion is confirmed, then one or two coats of APCO 2 Pack WB Polyurethane thinned 15% can be applied.

SECOND COAT MUST BE APPLIED WITHIN 24 HOURS OF PREVIOUS COAT.

PRODUCT TECHNICAL DATA SHEET



PDS No: 9036

Health and Safety

- Please refer to Safety Data Sheet before use

First Aid:

- Eyes and Skin irritation – Wash with large amounts of fresh running water
- If swallowed – drink 2-3 glasses of water and seek appropriate medical advice.
- Inhalation-In case of exposure to high vapour concentration leading to dizziness,nausea,headache ,move the person to fresh air environment and consult a doctor

2K water based gloss polyurethane clear is a water reducible non toxic coating. It is non flammable and requires no specific handling. We recommend the use of a barrier cream for hands when applying.

Transport	:	UN No. : 1263
Class	:	N/A
Hazchem	:	N/A

Storage

Avoid freezing or temperatures in excess of 50°C. Self Life 12 Months

Environmental

DO NOT POUR paint or wash down storm water or water courses. ALWAYS dispose of in accordance with local Government regulations. Soak up spills with absorbent material and dispose of properly. If spraying use suitable respiratory protection. Refer to the MATERIAL SAFETY DATA SHEET.

PRODUCT TECHNICAL DATA SHEET



PDS No: 9036

Spillage and Disposal

Use rags or sawdust to contain any spill and then dispose of through a commercial waste disposal organisation.

Please refer to the updated versions of Safety data sheet(SDS) and Technical Data sheet (TDS) before using any APCO Product.

KEEP OUT OF REACH OF CHILDREN

APCO Coatings (NZ) Limited

Ph. (09) 2733 041. Fax. (09) 2733 045. Physical Add. 14 Ron Driver Place, East Tamaki, Auckland 2013

The information and recommendations set down here in this document are presented in good faith and believed to be correct, APCO Coatings (NZ) Ltd gives no guarantee to the completeness and accuracy thereof.

APCO Coatings (NZ) Ltd is not be responsible for damages of any nature what so ever resulting from the use or reliance upon this information. No warranties expressed or implied or merchantability, fitness for purpose or any other nature are made hereunder with respect to information or the product to which the Technical Data Sheet refers.