New Hydro Paint over Rust Product Information Pack









New

Hydro Paint over Rust

Information Pack

Table of Contents

L.	Introducing Hydro Paint over Rust.	Page 3.
2.	Product Description.	Page 3.
3.	Key Features.	Page 3.
1.	Intended Uses.	Page 4.
5.	Benefits of Water-Based Industrial Coatings.	Page 4.
5.	Technical Data.	Page 5.
7.	Illustrative Laboratory Results.	Page 7.
3.	Actual Product Applied	Page 8.
9.	Cost Benefit.	Page 9.

2 in 1: Rust Converter and Primer







1. Introducing the New Hydro Paint over Rust.

Dura Paints is pleased to introduce the new **Hydro Paint over Rust**, specifically formulated using the latest water-based coating technology.

2. Product Description

Hydro Paint over Rust is a Direct-To-Metal (DTM), **2 in 1 rust converter and primer**, which preserves, protects and conditions rusted steel. **Hydro Paint over Rust** is a water-based, cross-linking, adhesion promoted, high quality, pure acrylic coating which converts rust to a primed, paintable surface on corroded iron and steel. **Hydro Paint over Rust** incorporates the latest generation technology in pure acrylic, adhesion promoted binders and corrosion inhibiters. **Hydro Paint over Rust** has been specifically developed for use by fabrication shops, refurbishers, home renovators, contractors, industrial repairers and the DIY professional.

3. Key Features

New Hydro Paint over Rust	Hydro Prime		
2 in 1 – rust converter and primer for application to rusted bare steel and prepared galvanised iron	Water-based primer for application to prepared steel and galvanised iron.		
Pure Acrylic.			
Water-based.	Lead free.		
Non-flammable.	Solvent free.		
Tannic Acid free.	Non-flammable.		
Lead free.	Non-yellowing.		
Adhesion promoted.	Low VOC's.		
Resistant to flash rusting.	APEO free.		
Excellent flow.	Low odour.		
Low odour.	Adhesion promoted.		
Rust inhibiting.	High build.		
Excellent corrosion protection.	High volume solids (Grey & Biscuit).		
Low VOC.	Corrosion inhibiting.		
Easy to use.	Pure Acrylic.		
Reduce blocking characteristics.	Reduced blocking characteristics.		
Low water permeability.	Significant reduction in flash rusting when		
Reduce labour time and labour cost.	correctly applied.		
	Reduce coating cost per square meter.		

The Hydro Range has been specifically formulated using the latest water based industrial coatings technology.

4. Intended Uses

Hydro Paint over Rust is a Direct-To-Metal (DTM), high performance water-based coating, developed for rusted and corroded steel applications. For roofs, gates, fences, carports, burglar bars and structural steel. **Hydro Paint over Rust** can also be used on suitably prepared galvanised iron. Ideal for hard to reach areas. It converts rust and primes in one easy application. Suitable for interior and exterior use.





5. Benefits of Water-Based Industrial Coatings

Substrates are primed and coated for the purpose of corrosion protection and aesthetics. There have been a number of technological advancements in the field of industrial water based coatings over the past decade. **Benefits of industrial water-based coatings include**:

- Smaller ecological and environmental footprint.
- No solvent usage in product manufacturing, application, cleaning and thinning, resulting in significant cost savings.
- No fire hazard and the removal of fire store requirements.
- Reduction in insurance premiums.
- No need to dispose of contaminated solvent.
- Improved Health & Safety.
- The elimination of lead chromate pigments and reduced VOC's (volatile organic compounds).
- Higher volume solids and better coverage.
- Hazardous Substances Act Compliant Lead Free.

Further to these benefits, new generation water based coatings offer the following technical and performance benefits:

Technical: New generation water-based coatings generally have higher volume solids than QD's or AD's: they cover a greater m2 for each litre of paint, at the same thickness (DFT).

Performance: Current water-based primers and top coats have improved performance over QD, AD or Super Gloss Enamels (Alkyds), specifically in areas such as yellowing, UV, corrosion resistance and chalking. Higher volumes solids generally result in higher build (DFT), therefore reducing the number of coats required.

Hydro products are cross linking and adhesion promoted which means they do not block (blocking is when dry, painted items are placed on top of each other and then stick together). They also give a hard finish, unlike most alkyds. Adherence to substrate continues to improve over a period of approximately 7 days.





6. Technical Data

	Hydro Prime		Hydro Paint over Rust (NEW)			
SUBSTRATE:	Prepared steel, su Galvanised iron.	itably prepared	SUBSTRATE:	Bare rusted steel Galvanised iron.	Bare rusted steel and prepared Galvanised iron.	
APPEARANCE:	Matt.		APPEARANCE: Matt.			
COLOUR:	Black, Biscuit, Grey		COLOUR:	Deep Red	Deep Red	
SOLID CONTENT:	Biscuit & Grey 54% by mass. 42 % by volume Black 34% by mass. 27% by volume		SOLID CONTENT:	40% by mass. 28% by volume	•	
SG @ 25°C:	Biscuit & Grey 1.36 Black 1.14		SG @ 25°C:	1.25		
RECOMMENDED DFT	MIN: 25μm MAX:	IIN: 25μm MAX: 40μm per coat. RECOMMENDED DFT		MIN: 25μm MAX: 40μm per coat.		
PRACTICAL SPREADING RATE @ 35μ: Biscuit & Grey: 12- 14 m ² . Black: 8- 10 m ² (dependant on the substrate and application DFT).			PRACTICAL SPREADING RATE @ 35μ : 8- 10 m² (dependant on the substrate and application DFT).			
VISCOSITY @ 25°C:	Biscuit/Grey 80 TO 85 KU Black 60 TO 65 KU		VISCOSITY @ 25°C : 80 to 85 KU			
APPLICATION: Brush, roller or airless spray. The use of conventional spray equipment is not recommended as it may cause air bubbles. Apply unthinned.		APPLICATION:	Brush, roller or airless spray. The use of conventional spray equipment is not recommended as it may cause air bubbles. Apply unthinned.			
DRYING TIME:	Touch dry 30 Min Dry to handle 2 hours Over coating 4 hours		DRYING TIME:	Dry to handle 2 h	Touch dry 30 Min Dry to handle 2 hours Over coating 4 hours	
APPLICATION ENVIRONMENT:			APPLICATION ENVIRONMENT:			
Surface Temp	Ambient Temp	Relative Humidity	Surface Temp	Ambient Temp	Relative Humidity	
Min 10°C or 2°C	Min 10°C or 2°C	Min: 10%	Min 10°C or 2°C	Min 10°C or 2°C	Min: 10%	
above dew point	above dew point		above dew point	above dew point		
Max : 40°C	Max : 40°C	Max : 85%	Max: 40°C	Max : 40°C	Max : 85%	
PACK SIZES: 5L, 20L & 200L PACK SIZES: 1L & 5L						

Note: Adhesion and hardness will continue to improve for approximately seven days after application, subject to ambient temperatures.

Note: Overcoat with Hydro Finish, Opulent Roof Coat, Pro-Shield or Opulent Eggshell Aqua.

Do not overcoat with solvent-based coatings.

Overcoating solvent-based coatings with Hydro products is not recommended

Do not clean the surface to be painted with solvent/solvent-based products.





6. Technical Data (Continued)

Hydro Paint over Rust

SURFACE PREPARATION:

Ensure the surface is dry, sound, free from dirt, algae, oil, grease and any other contamination before painting.

Unpainted Substrate (Mild Steel)

- Remove all loose, flaking and embedded rust by sanding, wire brush or mechanical grinder. Bring substrate back to a sound condition. In the absence of loose or flaking rust, **Hydro Paint over Rust** can be directly applied to the rusted surface.
- o Do not clean substrate with thinners / solvents.
- Prime with one or two coats of Hydro Paint over Rust, depending on the required DFT and environment.
- Over coat with two to three coats of *Hydro Finish*, *Opulent Roof Coat*, *Opulent Eggshell Aqua or Pro-Shield*, depending on the colour, required DFT and application.
- Do not over coat with solvent-based coatings.

Galvanised Iron.

- Remove all loose, flaking and embedded rust by sanding, wire brush or mechanical grinder. Bring substrate back to a sound condition
- Clean un-weathered galvanised iron with suitable galvanised iron cleaner as per instructions. Rinse and allow to dry.
- o Prime rusted areas with one or two coats of *Hydro Paint over Rust*.
- Overcoat with two to three coats of *Hydro Finish, Opulent Roof Coat, Opulent Eggshell Aqua or Pro-Shield* depending on the colour, required DFT and application.

Previously Painted Substrate:

 Spot prime rusted patches of metal with Hydro Paint over Rust. It is not recommended to apply Hydro Paint over Rust to solvent-based products or vice versa.

APPLICATION:

Stir well using a flat paddle. Apply one or two coats, depending on the required DFT. Apply un-thinned, to prepared surfaces so as to achieve required build.

For Hydro Prime and Hydro Paint over Rust Technical Data Sheets (TDS) and Safety Data Sheets (SDS) Visit www.durapaints.co.za.



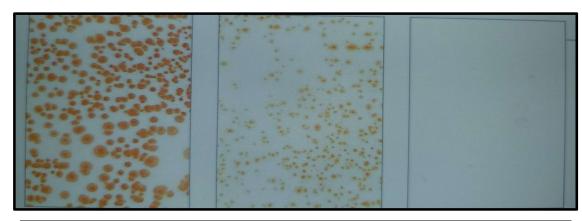


7. Illustrative Laboratory Results

Hydro Paint over Rust illustrative antiflash rust and rust conversion results below (*illustrative purposes only*).

Hydro Paint over Rust - Antiflash-Rust Performance

Water-based acrylic coatings applied to steel



Control Traditional Formulations Hydro Paint over Rust

Hydro Paint over Rust - Rust Conversion Performance (illustrative purposes only).

Water-based coatings applied to strongly rusted steel



Blank **Hydro Paint over Rust** Traditional Rust Coverter Formulations





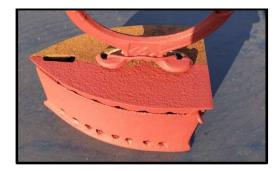
8. Actual Product Applied

Below an actual sample of rusted steel plate, with a single coat of **Hydro Paint over Rust** applied.













9. Cost Benefit

The cost of solvent has escalated dramatically over the past years and constitutes a significant cost of manufacturing and applying solvent based coating systems. This cost is not only inherent in the cost of the coating, but also in thinning, cleaning, solvent disposal, solvent storage and fire insurance. Switching to a water based system saves 100% on solvent spend, whilst eliminating the associated fire, health and environmental hazards.

The new **Hydro Paint over Rust** has been specifically formulated to ensure improved performance and reduce cost.

Hydro Paint over Rust reduces labour time and labour cost in the preparation of rusted & corroded steel.

Significant Savings.

Great Features.

Professional Finish.

Technical Data Sheets and Safety Data Sheets are available at www.durapaints.co.za

Contact your Technical Sales Representative for more information or email us at orders@durapaints.co.za.



