

ITW ROCOL METAL ENRICHED PAINTS





The differences between standard paints and **ROCOL** Metal Enriched Paints are significant. Standard paints create a passive barrier, which when breached will offer no protection against corrosion. Rust will begin to form underneath the paint, quickly removing it from the surface.

What is Triple Protection?

OPTIMUM CATHODIC DEFENCE

In order to protect steel from rust, Zinc can be engineered to sacrifice itself; oxidising in place of the steel which it is protecting. Galvanisation performance is determined by the purity of the Zinc and its concentration in the formula. **ROCOL** uses high purity Zinc at concentrations of up to 95% in order to maximise performance. **ROCOL COLD GALVANISING** Spray continues to

6mm Scratch

protect metal surfaces even when scratched* through the action of an invisible shield called a galvanic cell which covers the damaged area.

ENHANCED WATER RESISTANCE

Unprotected steel surfaces are prone to the pooling of water, which if left, will cause corrosion within hours. This pooling is due to microscopic pits on the metal surface which trap water droplets, this accelerates the rate of corrosion. **ROCOL** metal enriched paints fill the pits, smoothing the surface, allowing the water to run-off more easily.

MECHANICAL TOUGHNESS

The binder within a metal enriched paint determines the strength of adhesion to steel. **ROCOL** metal enriched paints have an advanced resin system which increases their durability and resilience to abrasion, therefore providing an exceptional protection life time.



Controlling the chemistry of corrosion for long term metal protection

ROCOL Metal Enriched Paints have a Triple Protection formula, which has been developed by **ROCOL** scientists to exploit the chemical properties of Zinc and an advanced resin system to shield steel from corrosion.

$4Fe + 3O_2 + 6H_2O \rightarrow 4Fe(OH)_3$

Metal enriched paints with industry leading performance

Available in a variety of finishes, the range offers a highly flexible method of galvanisation, which is suited to in-situ application and can be applied to both new and old metal components for long term protection against corrosion.

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The level of corrosion protection offered by galvanisation sprays differs greatly between brands.

Testing shows that **ROCOL** metal enriched paints have industry leading standards.







Salt water is sprayed onto steel plates coated with Metal Enriched Paints. The number of hours for which corrosion can be resisted is measured.



TRIPLE PROTECTION

Enhanced Water Resistance Optimum Cathodic Defence Mechanical Toughness



The most obvious effect of rust is visual; it causes a layer of red & flaking material to form on the surface of the metal. This impairs the appearance of the material, so if it has a decorative purpose, it is important to protect it.



If a metal rusts, it becomes weakened, so corrosion must be prevented in an object that is required to be strong (either to function properly or for safety purposes).



The seizure of metal components is accelerated by corrosion. Metals easily slide over each other, however rust increases friction and slows or prevents this motion. This friction has negative side effects including increased wear and unwanted heat generation.

THE RISK OF CORROSION



Industrial locations with high humidity and aggressive atmospheres. Coastal locations with high salt levels.



sulphur dioxide and salt levels. Coastal areas

with low salt levels.



Rural & urban locations with low acid, sulphur dioxide and salt levels.





ROCOL Metal Enriched Paints are single component zinc coatings for the protection of steel in heavy industrial and marine environments.



All **ROCOL** metal enriched paints have a non-toxic formulation, are suitable for use as a primer and can be over painted. The high performance valve will not block when used properly, minimising product waste.



Ultimate long term corrosion protection for metal components requiring a permanent zinc-rich coating

- Greater than 95% high purity zinc in the dry film
- Zero corrosion following 3500 hours salt spray
- Temperature range -30°C to 450°C
- Galvanic cell continues to protect bare metal when scratched



Outstanding long term corrosion protection for metal components requiring a permanent matt coating

- Greater than 70% high purity zinc in the dry film
- Zero corrosion following 2000 hours salt spray
- Temperature range -30°C to 450°C

GALVA BRIGHT Excellent long term corros requiring a permanent bri

Excellent long term corrosion protection for metal components requiring a permanent bright coating

- Greater than 45% high purity zinc in the dry film
- Zero corrosion following 2000 hours salt spray
- Temperature range -30°C to 450°C
- Contains zinc, aluminium, synthetic resins & additives



Corrosion protection for metal components requiring a permanent bright, glossy appearance with the lustre of aluminium

- Zinc and aluminium blend for a permanent reflective metal appearance
- Zero corrosion following 1000 hours salt spray
- Temperature range -30°C to 450°C

ROCOL® House, Swillington, Leeds LS26 8BS

- **T** +44 (0) 113 232 2600
- **F** +44 (0) 113 232 2740
- E customer-service@rocol.com

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www.rocol.com

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