



New Guard Coatings Group

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NORTH • SOUTH EAST • MIDLANDS • NORTH WEST • HULL • SCOTLAND

SIGMA ETCH

DESCRIPTION

Phosphoric acid-based etch solution for treating new, unweathered galvanized surfaces prior to painting

PRINCIPAL CHARACTERISTICS

- For pretreatment of new galvanized steel where blasting or abrasion is not possible
- May be overcoated with a wide range of protective coating systems
- May be used to give adhesion of high-temperature coatings to new galvanized steel
- Changes color on application from blue to black to indicate the effectiveness of primary pretreatment
- Meets the requirements of British Rail's 'T-wash' solution
- Not recommended for immersed conditions

COLOR AND GLOSS LEVEL

- Pale blue solution, which turns gray-black on application to clean galvanized surfaces

BASIC DATA AT 20°C (68°F)

Data for product	
Number of components	One
Mass density	1.0 kg/l (8.3 lb/US gal)
VOC (Supplied)	UK PG 6/23(92) Appendix 3: max. 335.0 g/l (approx. 2.8 lb/US gal)
Theoretical spreading rate	15.0 m ² /l for 0 µm (ft ² /US gal for 0.0 mils)
Overcoating Interval	Minimum: 2 hours Maximum: 48 hours
Shelf life	At least 12 months when stored cool and dry

Note: See ADDITIONAL DATA – Overcoating intervals

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Galvanized steel

- Galvanized surfaces are variable and the preferred method of treatment is to lightly sweep blast followed by degreasing and cleaning
- Remove all rust, dirt, moisture, grease or other contaminants from the surface
- Any traces of soluble zinc salts should be removed by abrading and washing
- Washed with fresh water to remove emulsified residues, dirt and other contaminants
- Surfaces which following application do not uniformly blacken, indicate insufficient primary surface preparation and these should be re-prepared by abrading



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INSTRUCTIONS FOR USE

- Mix thoroughly before application
- Over-application will produce a dense black powdery layer which is unsuitable for the application of top coats
- Such areas will require either abrading or washing to remove powdery deposits otherwise the adhesion of topcoats will be adversely affected

Brush/roller

- Brush recommended, apply at 15.0 m²/l (611 ft²/US gal), roller is suitable

Recommended thinner

No extra thinner is necessary

Note: If however application results in a black powdery surface then SIGMA ETCH can be diluted with tap water

Cleaning solvent

Tap water

ADDITIONAL DATA

Overcoating interval					
Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
recommended topcoats	Minimum	2 hours	2 hours	1 hour	30 minutes
	Maximum	48 hours	48 hours	48 hours	48 hours

SAFETY PRECAUTIONS

- This product contains phosphoric acid
- Before commencing application refer to Material Safety Data Sheet
- See INFORMATION SHEETS 1430, 1431
- Although this is a waterborne paint, care should be taken to avoid inhalation of spray mist, as well as contact between the wet paint and exposed skin or eyes

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

SIGMA ETCH

REFERENCES

• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431
• SAFE WORKING IN CONFINED SPACES	INFORMATION SHEET	1433
• DIRECTIVES FOR VENTILATION PRACTICE	INFORMATION SHEET	1434

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