

Electro-Galvanized Steel Sheet with a Trivalent Chromium Passivation

Product Description

ECT EG3 is a multifunctional product consisting of an electro galvanized zinc coating with a new generation surface reactive trivalent chromium conversion coating for the protection of steel sheet.

Technical & Economical Advantages of ECT EG3

- Contains no Hexavalent Chromium
- Excellent Tri-Chromium protection against corrosion
- Good Formability
- Good Weld-ability
- No Volatile Organic Compounds
- Compatible with most adhesives
- High Adhesion with Polyurethane Foams
- Compliant with the European *RoHS Directive 2002/95/EC*
- Compliant with the NERC *Toxics in Packaging* legislation
- Compliant with the California *Toxics in Packaging Prevention Act* Article 10.4

ECT EG3 provides excellent corrosion resistance while also being environmentally friendly because it contains no *hexavalent* chromium. The Tri-chrome coating is applied to the surface of the zinc by the roll coat method which allows precise application control and is recognized by the USEPA as being one of the most efficient and environmentally friendly transfer methods used in the industry.

The passivation coating is applied to the zinc surface at a deposition of 3.0 – 5.0 milligrams per square foot (mg/ft²) of tri-chrome (Cr³).

ASTM B117 Neutral Salt Spray results of 72 hours to white rust have been obtained. Corrosion performance varies in relation to the amount of tri-chrome content deposited on the substrate.

Formability is characteristic of electrogalvanized coated steel. **This coating does not contain lubricant additives** and therefore may require the use of lubricants in the forming process.

Weld-ability is determined by the thickness of the zinc coating. The effects of the passivation coating on the welding process are negligible. When welding, burning, brazing, sawing or grinding any zinc or chrome coated steel, the use of good ventilation is recommended.

ECT EG3 is compatible with many adhesive and polyurethane applications, however each application should be tested and evaluated prior to production.

 CERTIFICATE OF COMPLIANCE Company Name: Electric Coating Technologies Product: ECT-EG Zinc & Trichrome Product This certifies that the above named product has been tested by Quantex Laboratories and found and certified to be in compliance with the requirements of the NERC/Toxics in Packaging legislation (formerly known as CONEG). ECT-EG Zinc & Trichrome Product has been identified as NERC/Toxics in Packaging (CONEG) compliant and does not exceed the maximum limit for following 4 designated substances. <table><thead><tr><th>Substance</th><th>Maximum Limit (ppm)</th></tr></thead><tbody><tr><td>Cadmium (Cd)</td><td>100</td></tr><tr><td>Lead (Pb)</td><td>100</td></tr><tr><td>Mercury (Hg)</td><td>100</td></tr><tr><td>Hexavalent Chromium (Cr⁶⁺)</td><td>100</td></tr></tbody></table> Authorized By: James Menoutis, Ph.D., FAIC, CPC Director of Analytical Services Quantex Laboratories Date Issued: October 6, 2008	Substance	Maximum Limit (ppm)	Cadmium (Cd)	100	Lead (Pb)	100	Mercury (Hg)	100	Hexavalent Chromium (Cr ⁶⁺)	100	 CERTIFICATE OF COMPLIANCE Company Name: Electric Coating Technologies Product: ECT-EG Zinc & Trichrome Product This certifies that the above named product has been tested by Quantex Laboratories and found and certified to be in compliance with the European Union Directive 2002/95/EC for the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS). ECT-EG Zinc & Trichrome Product has been identified as RoHS compliant and does not exceed the maximum limit for following 4 designated substances. <table><thead><tr><th>Substance</th><th>RoHS Maximum Limit (ppm)</th></tr></thead><tbody><tr><td>Cadmium (Cd)</td><td>100</td></tr><tr><td>Lead (Pb)</td><td>1000</td></tr><tr><td>Mercury (Hg)</td><td>1000</td></tr><tr><td>Hexavalent Chromium (Cr⁶⁺)</td><td>1000</td></tr></tbody></table> Authorized By: James Menoutis, Ph.D., FAIC, CPC Director of Analytical Services Quantex Laboratories Date Issued: October 6, 2008	Substance	RoHS Maximum Limit (ppm)	Cadmium (Cd)	100	Lead (Pb)	1000	Mercury (Hg)	1000	Hexavalent Chromium (Cr ⁶⁺)	1000
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