

Data Sheet: C1.8

CHROMAPREP®

Pre-painted Hot-Dip Galvanised Steel Sheet

General description

Chromaprep® is ArcelorMittal South Africa's registered trade name for hot-dip galvanised steel sheet, coated with a high quality, flexible and corrosion inhibiting chrome free primer on both sides of the sheet on ArcelorMittal South Africa's continuous coil coating line. The substrate is chemically cleaned and treated to ensure good adhesion of the chrome free primer before oven curing at elevated temperatures. The primer surface is suitable for over-coating with most locally available paint systems.

Chromaprep® can be used for interior applications such as office furniture, appliances, air ducting, ceiling systems, wall panels, kitchen cupboards and bread tins and also for exterior applications such as bus body panels, garage doors, trailers, industrial shipping containers and other applications that require corrosion resistance of the steel sheet before application of the final coat.

Chromaprep® is available on Hot-Dip Galvanised Sheet (Data Sheet reference C1.1) with either a Z200 or Z275 flattened minimised spangle finish. A ZE75/75 Electro-Galvanised Sheet (Data Sheet reference EG 1) is also available but for Bus Bodies only and only on enquiry.

Paint system properties**Table 1: Typical primer coating properties**

<i>Property</i>	<i>Typical Values</i>
Dry film thickness	4 - 6 µm
Heat resistance	Maximum 120 °C
Resistance to water based detergents	Excellent
Resistance to mild solvents ¹	Fair
Elasticity ²	1T
UV resistance ³	Fair

Notes:

1. Sensitive to common lacquer thinners i.e. chlorinated or aromatic hydrocarbons and ketones but resistant to mineral turpentine, solvent naphtha, methylated spirits and paraffins.
2. There will be no visible cracking of the coat or loss of adhesion when bent around a mandrel with a diameter equal to the thickness of the sheet.
3. As is the case with most universal primer coats, Chromaprep® is sensitive to ultraviolet radiation and should not be exposed to direct sunlight. If the coating is to be exposed to sunlight (ultraviolet radiation) then it must be over-painted within seven days.

For further information, contact:

ArcelorMittal South Africa Limited, PO Box 2, Vanderbijlpark 1900.
 e-mail address: chromadek@arcelormittal.com

Care has been taken to ensure that the information in this data sheet is accurate. ArcelorMittal South Africa Limited does not, however, assume responsibility for any inaccuracies or misinterpretations of this data. We are continuously engaged in product development and revised data sheets will be issued from time to time. Please ensure that you have the most recent issue. **Effective date: July 2020**

Processing

Standard equipment can be used for cutting and forming Chromaprep®, provided the machinery is kept clean and well maintained. The normal methods needed for steel sheet fabrication can be applied which include mild pressing, mild drawing, shearing, slitting and stamping.

Welding

Conventional welding techniques are not advisable but stud, spot and seam welding processes may be applied in concealed areas.

For applications where weldability is a specific requirement, the use of Electro-Galvanised Sheet (available on enquiry) could be considered, refer to Data Sheet reference EG1: Electro-Galvanised Steel Sheet.

Cleaning before painting

Surfaces should be cleaned by removing surface contaminants with mineral turpentine, solvent naphtha or methylated spirits, followed by a warm water detergent wash and a clean water rinse. Customers are advised to ensure that thinners or adhesives used are compatible with Chromaprep®. The Chromaprep® primer coat is slightly under cured to assure good bonding of subsequent top coats. The use of strong solvents will thus attack the primer coat, and lead to premature peeling of the paint.

Common lacquer thinners such as chlorinated hydrocarbons or ketones (MEK) should also not be used for cleaning purposes, because it will result in adhesion problems with the primer coat.

Painting

The required Top Coat paint finish can be applied by normal spray, airless spray or brushing techniques.

Amongst current industrial products, the following paint systems can be applied to Chromaprep®: alkyds, vinyls, acrylics, polyesters, powder coatings, stoving enamels, acrylic polymers, epoxies and polyurethanes.

Quality assurance

A quality assurance system that complies with SANS 9001 is in operation throughout the manufacturing process, and the Galvanised substrate used for ArcelorMittal South Africa's Chromaprep® conform to the requirements of both SANS 3575 and SANS 4998.

Supply conditions

Chromaprep® is supplied in terms Price List 145 and ArcelorMittal South Africa's General Conditions of Sale.

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