

Pre-finished Steel Polyester Based Product Safety Data Sheet (SDS)

October 2020

1. Product Name and Contact Details of Supplier

1.1 Product

Other names:	Colorcoat® PE25, Colorcoat® PE15, Colorcoat® PE25 Matt, Colorcoat® SDP 35 Matt T, Colorcoat® SDP 35, Colorcoat® SDP 35 L4, Colorcoat® SDP 50, Colorcoat® SDP 50 HC, Colorcoat® FD® 25, Colorcoat® High Reflect, Colorcoat® PE25 HDP, Colorcoat® PE25 solar, Colorcoat® SDP25T, Colorcoat® SDP35T, Colorcoat® SDP35 solar, Colorcoat® SDP50 solar, Colorcoat® SDP 35 RWG, Colorcoat® SDP 50 RWG, Colorcoat® PE25 HC and Ruralclad
Description:	A solid polyester based coating on hot dip metallic coated steel sheet or coil.

1.2 Uses

For cladding buildings (internally and externally) and also general engineering.

1.3 Details of supplier

Company:	Tata Steel , Shotton Works, Deeside, Flintshire, North Wales, CH5 2NH, UK	Tata Steel Ijmuiden, Colorcoat Connection® helpline NI/B Postbus 10.000, 1970 CA Ijmuiden Netherlands	Tata Steel, Maubeuge, 22, avenue Jean de Béco BP 12099 Louvroil 59606 Maubeuge Cedex, France
Telephone:	+44 (0) 1244 892434	+31 (0) 251 492206	+33 (0)3 27 530 569
Email:	<i>colorcoat.connection@tatasteelurope.com</i> <i>Colorcoat.ConnectionEU@tatasteelurope.com</i>		

1.4 Emergency telephone number

Emergency Contact:	For emergency assistance, please contact the local site Safety Department via the telephone numbers shown above in Table 1.3.
Users located in France	<p>For Tata steel Maubeuge (France), products, additional free emergency advise may be obtained by contacting the French Centres Antipoison et de Toxicovigilance : +33 (0)1 40 05 48 48</p> <p>Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7 : numéro ORFILA (INRS): +33 (0)1 40 05 48 48</p>

2. Hazards Identification

2.1 Classification

Pre-finished steel is defined as an article under REACH and so there is no requirement for classification under the Classification, Labelling and Packaging of substances and mixtures (CLP) regulations (EC 1272/2008).

Under normal application we do not recommend the following activities and advise against carrying them out on our product. Mechanical working such as dry grinding / sanding and hot working such as welding or flame cutting could potentially give rise to hazardous dust / fumes from components of the coating layers. Section 3 identifies the main components of the pre-finished steel and those, which may be hazardous. Zinc and titanium dioxide are present within the coating layers of the product, however exposure to zinc (oxide) and titanium dioxide fumes should not occur as we advise against the activities listed above. Exposure to zinc (oxide) fume can lead to operators experiencing flu like symptoms (metal fume fever). Titanium dioxide may cause cancer by inhalation when in powder form containing 1% or more of particles with aerodynamic diameter $\leq 10\mu\text{m}$.

2.2 Label elements

No label required, no signal word required.

2.3 Other hazards

Pre-finished steel has sharp edges and corners and precautions should be taken when handling and storing. Under normal conditions of use and storage these materials are stable and non-toxic.

3. Composition / information on ingredients

Polyester based coatings are applied to hot dipped galvanised steel sheet, zinc/aluminium alloy coated steel sheet, zinc/magnesium/aluminium alloy coated steel sheet and cold reduced steel sheet. The reverse surface of the sheet is usually coated with a single coat polyester backing system or epoxy backing but may also be supplied as a double sided product.

The table below details the general composition of the steel substrate and the metallic and organic layers of the coating. The zinc metallic coating represents approximately 9% of the weight of the finished product (based on 0.4mm gauge material). The solvent components of the liquid paints, are **not present** in the finished product only the pigment and resin, however all hazard statements associated with the pre-treatment and primer coatings have been included for completeness. The organic coating represents approximately 1 – 2% of the weight of the finished product (Based on 0.4mm gauge material).

Once the polyester is cured it can be considered **non-hazardous**, as it forms an inert material, which protects the zinc and steel layers.

Table showing typical composition of the product range based on 0.4mm pre-finished steel gauge with a Hot Dip Galv (Z), Zinc/Aluminium (ZA) or MagiZinc (ZM) metallic coating

Product area	Substance	EINECS No.	CAS No.	(%) By Weight	Hazard Class (CLP Regs)
Steel Substrate	Iron	231-096-4	7439-89-6	~ 86.0%	---
	Carbon	231-153-3	7440-44-0	~ 0.50%	---
	Zinc	231-175-3	7440-66-6	~ 9.1%	---
	Aluminium (only in Galvalloy® or	231-072-3	7429-90-5	~ 0.5%	---

Hot dip metallic coating	MagiZinc substrate)				
	Magnesium (only in MagiZinc substrate)	231-104-6	7439-95-4	0.07 – 0.1%	---
Organic coating layers (Paints)	Cross linked polyester-melamine resin base	-	-	~ 1.5%	---
Organic coating layers (Paints)	Pre-treatment layer	-	-	<0.1	H290; May be corrosive to metals H302: Harmful if swallowed H315; Causes skin irritation H319; causes serious eye irritation
	These substance are present in the pre-treatment and primer prior to curing. They are not present in the final product	Cr free primer	-	-	~ 1.5%

4. First aid measures

4.1 Description of first aid measures

- Skin contact:** Cuts (lacerations) to the skin from sharp steel edges, treat as a normal cut and if required seek medical attention.
- Eye contact:** If particles enter the eye then wash the eye with running water for at least ten minutes. Seek medical advice if irritation persists.
- Inhalation:** If hot work such as welding / burning causes exposure to significant concentrations of fume/dust, remove to fresh air. Seek medical attention if symptoms such as coughing persist.
- Ingestion:** None required.

4.2 Most important symptoms and effects

The most important symptoms and effects for eye exposure are soreness and irritation.

4.3 Indication of any immediate attention and special treatment needed

Immediate medical attention is required if lacerations are deep.

5. Fire fighting measures

Non-flammable and has a high melting point of >1000°C. This product has a very low calorific value and reaction to fire classification. If the product is involved in a fire there is a potential for carbon monoxide to be released through combustion. In the event of fire, suitable and approved respiratory equipment should be worn by fire services.

6. Accidental release measures

Not applicable.

7. Handling and Storage

7.1 Handling

The supplied coiled or bundled product may be secured by banding straps, which have been fitted under tension and should not, under any circumstances, be used to lift the product.

When released, the coiled or bundled product itself or the banding straps can spring loose and cause impact injury to the eyes, face or any other part of the body. Certain products may, as a result of processing, be brittle or have residual stress, which can cause them to fracture or move significantly. Shearing these products, may produce flying debris and operators should be trained and aware of these issues prior to handling this material.

All products are likely to have sharp edges, which could cause lacerations. Operators should wear suitable protective clothing and equipment, such as hand and eye protection.

7.2 Storage

Some products may be secured by using straps or bands but they could cause injury to eyes or other injuries when tension is released. There may be sharp edges present, which could cause lacerations. Store in the appropriate facility to prevent damage, use suitable racks or stillages that will ensure stability. Lifting should always be done to prevent personal (injury) damage to the operators and lifting equipment is advised at all time to move the steel unless a full risk assessment has been carried out.

8. Exposure controls and personal protection

8.1 Control parameters (Occupational Exposure Limits (OELs))

Current Workplace Exposure Limits (WEL) (EH40/2005, revised 2011). Please note these exposure limits are not directly associated with the product but with possible exposures that may occur when performing certain activities, which are advised against and which may give rise to specific hazards associated with dust/fume.

Country in EU with OEL for the relevant substance	Substance					
	Iron oxide (Fe ₂ O ₃ & FeO) as Iron		Dust inhalable		Dust respirable (also applicable as fume)	
	8 hr TWA (mg/m ³)	STEL (mg/m ³)	8 hr TWA (mg/m ³)	STEL (mg/m ³)	8 hr TWA (mg/m ³)	STEL (mg/m ³)
Austria	5.0 (resp)	10.0 (resp)	10.0	20.0	5.0	10.0
Belgium	5.0	---	10.0	---	3.0	---
Denmark	3.5	7.0	10.0	20.0	---	---
France	---	---	10.0	---	5.0	---
Germany (AGS)	---	---	10.0	20.0	1.25	---
Germany (DFG)	---	---	4.0	---	0.3	2.4
Hungary	6.0 (resp)	---	10.0	---	6.0	---
Poland	5.0	10.0	---	---	---	---
Spain	5.0	---	10.0	---	3.0	---
Sweden	3.5	---	10.0	---	5.0	---

United Kingdom	5.0	10.0	10.0	---	4.0	---
TWA - Time Weighted Average measured over an 8 hour period						
STEL - Short Term Exposure Limit Value – 15 minute duration						
Resp - Respirable fraction of dust						

8.2 Control Measures

Wear suitable gloves, overalls and eye/face protection when handling the pre-finished steel to prevent cuts and abrasions.

If hot work activities such as welding or burning or mechanical abrasion are to take place then local exhaust ventilation (LEV) should be used to remove any fume produced. During the use of LEV systems the manufacturer's instructions and guidance should be followed at all times so that there is sufficient capture hood and capture velocity and the air cleaning system is in good working order. If a large amount of fume is generated then in conjunction with the LEV, use of suitable and approved respiratory protection should be worn if exposure is likely to be above the OEL. Ori-nasal respirators fitted with either a P2 or P3 filter (EN149: FFP2S / FFP3S) may be used when fume levels are high depending on concentration. Manufacturer's directions for use must be followed and where applicable an Respiratory Protective Equipment (RPE) face fit test should be successfully completed before use. It should be necessary to prove a tight fitting face seal via face fit testing.

9. Physical and chemical properties

The product is an article. As such, the physical and chemical properties are not relevant, and therefore not listed on this SDS.

10. Stability and reactivity

The product is stable under normal conditions. For the maximum continuous operating temperature and maximum intermittent operating temperature, please refer to the current product data sheet

11. Toxicological information

The product is an article. As such, the toxicological information is not relevant, and therefore not listed on this SDS.

12. Ecological information

The product is an article. As such, ecological information is not relevant, and therefore not listed on this SDS.

13. Disposal considerations

Steel products are 100% recyclable and should be recycled at "end of life" in all situations.

14. Transport information

Pre-finished steel is not classified as hazardous under CLP for transport so there is no requirement for transport information.

15. *Regulatory information*

15.1 Safety, health and environmental regulations

Plain carbon steel specifications are covered by numerous ISO standards. All steels covered by this safety data sheet comply with the packaging and packaging waste EC Directive 94/62/EEC on heavy metal content, the Restriction of Hazardous substances directive 2002/95/EC and the End of Life Vehicle directive 2000/53/EC. The iron manufactured and used to produce this steel product has been registered under REACH along with any other component where a registration was required.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out as steel is defined as an article under REACH and does not require an assessment.

16. *Other Information*

Revision

This safety data sheet (SDS) has been produced in line with Annex II of the REACH Regulations (2006) as guidance only, as articles do not require a SDS. Information in this safety data sheet is supplied to inform the customer and should be used where necessary.

This is the current version dated **October 2020** – changes: updated contact information, titanium dioxide statement and removal of toxicological information for consistency

Previous version: October 2019, September 2019 and November 2017

Hazard and Precautionary Statements according to CLP Regulations (EC)1272/2008): None

GESTIS International Limit Values Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA) – website:

<http://limitvalue.ifa.dguv.de/>

Disclaimer

The information, specifications, procedures, and recommendations herein are presented in good faith and are believed to be accurate and reliable at the date of issue. Where information is taken from supplied items it is the responsibility of the supplier to ensure the accuracy of the data. The individual authors of this safety sheet are deemed to be appropriately competent. This safety data sheet was constructed using the guidance provided under the REACH regulations ((EC) No 1907/2006) as to the format and information required. For steel articles a safety data sheet is not a legal requirement and is provided for the convenience of downstream users. Occupational exposure limits (OEL) used in this safety data sheet will be EU OELs and where these limits do not exist UK OELs will be the reference limit. No liability can be accepted with regard to the handling, processing or use of the product concerned which, in all cases, shall be in accordance with appropriate regulations and or legislation. Tata Steel Europe gives no warranty or representation as to the accuracy of the information or for the guidance being for, or suitable for, a specific purpose. All implied warranties and conditions are excluded, to the maximum extent permitted by law. Use of this document by any third party is at your own risk. Save to the extent that liability cannot be excluded by law, Tata Steel Europe is in no way responsible or liable for any damage or loss whatsoever arising from the use of or reliance on the information and guidance contained in this document.

