

SSAB TUNNPLÅT AB

PRODUCT HEALTH AND SAFETY DATA SHEET

3. DOBEL 200XT Leathergrain Plastisol

PRODUCT DESCRIPTION

Hot dipped galvanised or aluminium zinc coated steel sheet coated with primer, reverse side paint and a plastisol based top coat.

COMPOSITION

The different layers on the steel sheet consist of:

Metal coating (approx 25µm):	Zinc or aluminium-zinc, the latter coating containing aluminium, zinc and silicon.
Primer (approx 7 µm):	Acrylate with strontium chromate.
Top Coat (approx 200 µm):	Plastisol of polyvinyl chloride.
Reverse side paint (approx 10 µm):	Epoxy.

The coatings do not contain any lead or antimony additives. The topcoat may include small amounts of tin organic compounds, barium or antimony additives.

HAZARDS IDENTIFICATION

In normal storage and handling such as cutting, bending and pressing the main risks are scratches and cut injuries caused by edges, corners etc. Since the packaging banding around the coil is pre-tensioned, there is the same risk when cutting the banding off. Obvious impact injuries may be caused if heavy material is not handled correctly and with caution.

The painting is essentially non-toxic, but grinding and polishing of the surface may give rise to dust emission from the paint and underlying metal coating. The dust may contain strontium chromate, which is known to be carcinogenic if inhaled.

In processes where the product is heated and melted, such as welding, flame cutting or brazing, toxic fumes will be formed. The fumes consist predominantly of particles of iron and iron oxides, but also to a minor extent, oxides of zinc, chromium, carbon and other decomponents from the coating (hydrogen chloride). Oxides of aluminium will also be formed if the metal coating contains aluminium. Inhaling may result in "metal fume fever" which has symptoms similar to influenza.

Harmful decomposition products from the coating, predominantly hydrogen chloride, will also be evolved if the material is subjected to high temperatures as for example in fire. Decomposition gives rise to many different, irritative components which might affect the eyes and even impair health if inhaled.

FIRST AID MEASURES

In cases of cuts, lacerations and impact injuries, seek immediate medical attention.

After exposition of irritative fumes from heated material, rinse opened eyes with plenty of water. Seek medical advice if irritation persists.

If fumes are inhaled introduce fresh air and seek medical advice if any symptoms appear.

FIRE FIGHTING MEASURES

Protective respiratory equipment should be worn by those at risk of inhalation.

ACCIDENTAL RELEASE MEASURES

No special precautions.

HANDLING AND STORAGE

See other documentation.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Wear protective gloves and clothing during handling in order to avoid injuries to the skin.

Make certain that adequate ventilation is provided during operations where dust and fumes are emitted. Apply local exhaust ventilation or use protective masks if necessary to keep exposure under the highest permissible levels. (See "Current occupational exposure limits" table).

PHYSICAL AND CHEMICAL PROPERTIES

A solid layer of polyvinyl chloride and plastisizers applied over a metal substrate.

STABILITY AND REACTIVITY

The product is stable under normal conditions but when subjected to elevated temperatures (e.g. in a fire), fumes and / or dust are produced.

TOXICOLOGICAL INFORMATION

See "Hazards identification".

ECOLOGICAL INFORMATION

The product is not known to cause harmful effects to the environment. The closed processes used during production of coated steel are generally superior from the environmental viewpoint to the methods employed in the engineering industry. More than 99% of the solvents are removed from the exhaust gases. The energy liberated when the solvents are burned is recovered and returned to the process for drying the paint.

DISPOSAL CONSIDERATIONS

Prepainted steel can be recovered at the end of its useful lifetime and represents an important raw material in the production of new steel by re-melting. The pollutants caused by the coatings of metal and paint during this melting process are removed to prevent their emission to the atmosphere. Prepainted sheet should be collected in the same way as all other steel sheet and should be routed through the same scrap recovery channels.

TRANSPORT INFORMATION

No special precautions.

REGULATORY INFORMATION

Coated steel products are articles not substances and, as such, not subject to either the Chemicals Regulations (Hazards Information and Packaging) as amended or by the Dangerous Preparations Directive (88/379/EEC) as amended.

The data given here only applies when the product is used for proper applications and describes the product in terms of safety requirements based on current knowledge and experience.

The product is not sold as suitable for other applications – usage as such may cause risks not mentioned in this data sheet. Do not use for other applications without seeking advice from SSAB Tunnpått AB or SSAB Dobel Coated Steel Ltd.

The data given here does not signify any warranty with regard to the product properties.

This data sheet does not constitute a workplace risk assessment.

OTHER INFORMATION

The information in this publication is valid at the time of publishing. It is subject to changes as a result of continual product development. The most recent data is available on request.

Some relevant references:

HSE Guidance Notes:	EH2 (Rev):	Chromium and its inorganic compounds - Health and safety precautions.
	EH26:	Occupational skin diseases Health and safety precautions.

Eh40:	Occupational exposure limits - Current edition.
Eh42:	Monitoring strategies for toxic substances.
Eh54:	Assessment of exposure to fumes from welding and allied processes.
Eh55:	The control of exposure to fumes from welding, brazing and similar processes.

HIGHEST PERMISSABLE VALUES ON EXPOSURE (COSHH¹⁾)

	Reference period	
	8 h TWA ²⁾	(15 min)
Iron oxide fumes	5 mg/m ³	(10 mg/m ³)
Zinc oxide fumes	5 mg/m ³	(10 mg/m ³)
Aluminium, metal or oxides		
- total inhalable dust	10 mg/m ³	
- respirable dust	5 mg/m ³	
Chromium metal and chromium (II) and (III) compounds (as Cr)	0.5 mg/m ³	
Chromium (VI) compounds (as Cr)	0.05 mg/m ³	
Carbon monoxide	50 ppm	(300 ppm)
Antimony and compounds (as Sb) ³⁾	0.5 mg/m ³	
Antimony trioxide and trisulphide (as Sb) ³⁾	0.5 mg/m ³	
Tin compounds, organic except Cyhexatin (ISO) (as Sn) ⁴⁾	0.1 mg/m ³	(0.2 mg/m ³)
Barium compounds soluble (as Ba)	0.5 mg/m ³	
Hydrogen chloride		(5 ppm)

- 1) Control of Substances Hazardous to Health Regulations
- 2) Time Weighted Average
- 3) To be reviewed
- 4) Can be absorbed through skin

