

Environment declaration

Zinc-aluminium-magnesium coated steel sheet “Magnelis ®”

Statement of contents

Steel according to EN 10346.
Magnelis® coating according SEW022
Temporary protection : oil, E-passivation®

1. Component materials

Raw materials

Steel core according to EN-10346.

Element (% by weight)	* Iron	96% Min
	* Carbon	0.20% Max
	* Manganese	1.70% Max
	* Sulphur	0.045% Max
	* Silicon	0.60% Max
	* Phosphorus	0.10% Max
	* Titanium	0.30 % Max
	* Niobium	0.09% Max

The Zinc-aluminium-magnesium coating contains 3.5%Al, 93.5%Zn and 3%Mg in weight. The specific weight is 6.2.

The quantity of aluminium-zinc alloy coating depends on the specification the material and is defined in weight per square meter both sides.

Standard coatings 90 – 120 – 175 – 195 – 250 and 310 gr/m² both sides
codified as ZM90 – ZM120 – ZM175 – ZM195 – ZM250 – ZM310

The material is passivated on the production line with solutions containing chromium trivalent compounds.

Recycled material

In average, the recycled steel scrap is comprised between 20 and 25% of the steel production. See also document from ArcelorMittal on “recycled material contents in AMFCE steels.

http://www.mycarcelormittal.com/1intranet/home/BA/fce/mycompany/cmo/SE_TCT/TCT/Documents/Health,%20Safety%20and%20Environment/European_market.pdf

Origin of the raw material

The base steel is produced internally in the ArcelorMittal Group. The coating metals are purchased from external companies.

2. Production

Energy

Natural gas and electrical energy are used in the processing of the product and for the heating of the premises.

Emissions to air



Date : December 16th, 2011

The following parameters are under control of the local Environment Administration and have to be kept within legal standards: CO, NO_x, SO₂.

Emissions to water

The following parameters are under control of the local Environment Administration and have to be kept within legal standards: heavy metals, particles in suspension, AOX, pH, hydrocarbons.

3. Distribution of finished products

Production sites

Legal entities:

- ArcelorMittal Belgium – Eurogal Site (Ivoz-Ramet) site – Belgium

The legal entity operates according to certified management systems defined by ISO 9001, ISO 14001 and OSHAS 18001.

Means of transport

The products are distributed by:

- Truck (60%),
- Train (25%),
- Boat (15%)

Packaging

The following types of material are used in packaging.

Packaging	Material included	Recyclability	Reusable
Small timber	Wood	X	X
Pallet	Wood	X	X
Sealing disk	Waxed fiberboard	X	
Protective paperfilm	Paper + laminate		
Shrink film	Polyethene		
Protective plastic film	Plastics		
Eye and side protections	Steel	X	X
Cover guards	Steel	X	X
Steelband	Steel	X	

4. During construction

Environment: No identified environmental impact.

Health: During any processing of the article (welding, grinding, cutting, recycling by remelting, etc.) in which dust, fumes or gas can be generated, ensure that the limits listed mentioned in the Safety data sheet are not exceeded at the workplace.

Extraction is therefore recommended at the workplace. Otherwise, personal protective equipments (PPE) should be necessarily worn. The risk of explosion or ignition at the time of the aspiration and confined accumulation of metallic dust shall be taken into account.

See Safety data sheet related to the specific temporary protection.

5. During use

Environment: No identified environmental impact.

Health: No identified health impact.

6. Demolition

The product can be recycled as scrap metal and can in some cases be reused.

7. Waste

The product can be recycled as scrap metal and can in some cases be reused.

8. Working environment

Environment: Currently, no identified environmental impact

Health:

- Inhalation: During any processing of the product (welding, grinding, cutting, recycling by remelting, etc.) in which dust, fumes or gas can be generated, ensure that the limits mentioned in the Safety data sheet are not exceeded at the workplace. Extraction is therefore recommended at the workplace. Otherwise, personal protective equipments (PPE) should be necessarily worn. The risk of explosion or ignition at the time of the aspiration and confined accumulation of metallic dust shall be taken into account.
- Skin: In the event of direct contacts (without gloves) frequent or prolonged (oils):
 - o Local effects: Possible irritation phenomena.
 - o Sensitization: Possible allergy phenomena.
- Eye contact: Indirect (protective oil) Local effects: risk of irritation.