

Material

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The lid is made of powder-coated aluminum. The product does not have active addition of or have passivation of metal surfaces with chromium VI. Lead or cadmium has not actively been added, or the content is a maximum amount to 0,5 mg/kg measured value/detail for lead, and 0.001% of measured value/detail for cadmium. Aluminum is produced according to REACH regulation requirements, that is without using substances that have harmful effects on the environment and health, see table 1.

Table 1: Requirements surface treatment of metal

Requirements	Fulfills
The product is free from chromium VI and metal surfaces that have been passivated with chromium VI?	9
The product is free from lead? Maximum 0,5 mg/kg measured value/detail	9
The product is free from cadmium? Maximum 0.001 mg/kg measured value/detail	9



Birdie[• consists of steel plates. Thin plate produced by SSAB and referred to as DC01. In the production of steel SSAB use iron raw material (80%), which originates from Sweden (Kiruna, Gällivare). The remaining 20% consists of recycled scrap, mostly externally purchased construction scrap. A portion consists of excess material from SSAB's own production. The steel from Luleå and Oxelösund is rolled into sheets in Borlänge. The alloying elements are listed in Table 2. The steel plate used in the Kite is not classified as dangerous for the environment. Emissions to land and water during the milling of one tone of finished product is shown in Table 3.

Table 2: Alloying elements in steel sheet DC01.¹

Alloying Elements				
Name	CAS-nr	Conc %	Classification according to KIFS 2005:7	Classification according to (EG) v10
Carbon	7440440	<1.5	-	-
Manganese	7439965	<2.5	-	-
Silicon	74402103	<2.5	-	-
Chromium	7440473	<1.25	-	-
Nickel	7440020	<1	Carc. Cat. 3; R40 T; R48/23 R43	Carc.2; H351 STOT RE 1; H372 Skin Sens. 1; H317
Molybdenum	7439987	<0.7	-	-
Copper	7440508	<0.5	-	-

¹SSAB EMEA AB Miljövarudeklaration för varm- och kallvalsad tunnplåt DATABLAD: 13-03-18 SE9601-1, 2013.

Table 3: Emissions to air and water during the milling of steel per ton of finished product. Based on SSAB's averages over three years.¹

Emissions	Substances	Emissions kg/ton
Air	Carbon Dioxide	141
Air	Nitric Oxide	0,1
Air	Sulphur Dioxide	0,2
Air	Ash	0,01
Water	Oil	0,0005
Water	Fine particles	0,003

¹ SSAB EMEA AB, Miljövarudeklaration för varm- och kallvalsad tunnplåt DATABLAD: 13-03-18 SE9601-1, 2013.

Powder coating

Powder coating solutions have no properties that are carcinogenic, mutagenic and toxic for reproduction, and do not contain any substances on the candidate list. Thus the lacquers for fill, with a good margin, the requirements of the REACH regulation. The powder coating solution provides both environmental and quality advantages as it results in a durable and stylish finish without having to add solvents and with very little overflow amounts.

Plastic

Birdies lid insert is made of the plastic Polyoxymethylene (POM). Plastic can be recovered through energy extraction or recycling. To facilitate the sorting of plastics when recycling, we have permanently marked the plastic by its type according to the standard ISO 11469. The lid insert complies with the following environmental requirements for plastics, see *Table 5*.

Table 5: Requirements plastic

Requirements	Fulfills
Free from PVC (polyvinyl chloride)	✓
Free from softeners containing phthalates	
– DEHP Di (2-ethylhexyl) phthalate	✓
– DBP (Dibutylphthalate)	✓
– BBP (Butylbenzylphthalate)	✓
No pigments containing lead or cadmium	✓

Environmental aspects

The environment and the product

Environmental aspects associated with the product in addition to the materials are accounted for in *Table 6*.

Table 6: Environmental aspects associated with the product.

Aspect	
Packaging:	The stretch film and cardboard that is used for packing TreCe's products are free from chlorine and bleach. The cardboard is glued with wheat or corn starch.
Recycling	Birdie is designed so that the different materials can be separated without special tools. The dismantling causes no environmentally hazardous emissions.
Reuse	One of our core values is Smart Design. This means, among other things, that we look at design from a broader perspective. For example, we always put function and quality at the heart of product development. Products from TreCe last. Instead of having to replace the entire piece of furniture there is the possibility to only replace a few parts. This makes our products long term – a win for both you as a user and for the environment.
Life span and guarantee	TreCe leaves a 5-year warranty on the entire range of products; spare parts are available for 10 years. The estimated life span is from 5 years up to 30 years, depending on use.
Material recycling	Recycling leads to a reduced collection of virgin material, thus reducing CO ₂ emissions and resources. Birdie's steel can be melted down and recycled. Materials should be sent to recycling facilities, contact local authorities for more information.
Distribution	<i>Schenker</i> and <i>Görans Transport</i> transports products within Sweden. International transports are performed by <i>DSV Road</i> , <i>UPS</i> and <i>DHL</i> , all working actively with the environment and sustainability.

The environment and the production

Birdie is manufactured by Stoeryd AB, Sweden. Environmental aspects linked to production are shown in Table 7.

Table 7: Environmental aspects of production.

Miljöaspekt	
Environmentally classified materials / chemicals	Particularly hazardous chemicals, phasing or priority risk reduction substances do not occur at Stoeryd. Handling and storage of other chemicals / substances such as cutting fluids, process oils and hydraulic oil are controlled so that emissions to air, land or water does not occur.
Air emission	Emissions are controlled to at the minimum be below the stated licence conditions. The air emissions arising from the production are primarily indirect emissions such as transport and energy consumption. The largest local sources (which are small) regarding emissions to air are from welding and laser cutting. Welding fumes arising from the production are diverted via the ventilation system.
Water emission	Emissions are controlled to at the minimum be below the stated licence conditions. There are no emissions to water from the factory except for sanitary sewage.
Ground emission	Emissions are controlled to at the minimum be below the stated licence conditions, releases to land/ground are prevented by procedures for handling and storage.
Waste	All waste is sorted at Stoeryd and picked up by <i>JRAB Jönköping, Trania Metal</i> and <i>Tekniska verken</i> for safe handling and recycling. Specific procedures for the management of waste are managed by each department.
Energy	In the manufacture of Birdie fuel and electricity consumption is minimized mainly by the recovery of residual energy and incineration of process gas. Other energy sources are used sparingly and come primarily from retrieved excess energy. Stoeryd's consumption of electricity is used to run machines, fans, lighting, etc. and energy for heating of premises. Stoeryd has installed eco-heat in their own property, in the rented part oil is used for heating. Excess heat from e.g. the curing oven, laser machines and compressors is used to warm up the premises.
Production techniques	The production process is optimized to save use of materials, this also results in a reduced amount of waste and minimized energy consumption.