



ENVIRONMENTAL DECLARATION

**INVERCOTE!**<sup>®</sup>

2014

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# INVERCOTE!<sup>®</sup>

## 2014

Based on data from the period 2014-01-01 to 2014-12-31

Product: Invercote family, 180-770 gm<sup>2</sup>  
Site: Iggesund Bruk, Sweden  
Company: Iggesund Paperboard AB

### PRODUCT COMPOSITION

Sulphate pulp (ECF bleached)	70-80 % of which 100 % produced at the Site
Pigments and fillers	10-20 % of which 0 % produced at the Site
Binders	4- 7 % of which 0 % produced at the Site

### SOURCING OF ENERGY

Internal and procured fuels used for production of process steam and cogeneration of electricity at the Site.



Electricity used	1266 kWh/tonne
Thermal energy used	4763 kWh/tonne

### ENVIRONMENTAL LOAD

Production site process water use, waste water discharges, atmospheric emissions and solid waste per tonne in year 2014 (including both the environmental load of the production of pulp produced at the Site or procured and the environmental load of procured electricity).

### EMISSIONS TO WATER

COD	14 kg/t
AOX	0,13 kg/t
Nitrogen	0,19 kg/t
Phosphorus	0,01 kg/t
Process water discharge	74 m <sup>3</sup> /t

### EMISSIONS TO AIR

SO <sub>2</sub> (total)	0,12 kg/t
NO <sub>x</sub>	1,49 kg/t
CO <sub>2</sub> (from fossil sources)	30 kg/t

<b>WASTE TO LANDFILL</b>	0,31 kg/t
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### ENVIRONMENTAL MANAGEMENT

Certified environmental management system according to SS-EN ISO 14001 since 2001.

Other relevant information:

Certified energy management system according to SS 62 77 50 since 2005 and upgraded to ISO 50001 in 2011.

Certified according COC for FSC<sup>®</sup> and PEFC<sup>™</sup> since 2007.

### HANDLING AFTER USE OF THE PRODUCT AND ITS PACKAGING

Product recoverable as a material or energy resource. Packaging recoverable as a material or energy resource. Invercote is intrinsically biodegradable. For quantification regarding composting test should be made on the final packaging after the converting process (EN 13432:2000)

### CONTACT INFORMATION

Olle Bergerståhl, Iggesund Bruk, Sweden  
Telephone + 46 650 282 11, E-mail: olle.bergerstahl@iggesund.com

## **WOOD SUPPLY**

All wood used at Iggesund Mill is either certified in accordance with FSC or PEFC or meets FSC requirements for controlled wood. Invercote can be supplied certified in accordance with FSC or PEFC.

## **PRODUCT COMPOSITION**

Chemical pulp (ECF) ensures that the product has a good hygienic standard as well as taint and odour neutrality. Chemical pulp is produced in an energy-efficient process that makes use of all parts of the tree. All pulp used in Invercote is made on site at Iggesund. The coating consists of clay, calcium carbonate and a binding agent in various combinations depending on the end product's properties and intended uses.

## **SOURCING OF ENERGY**

Both thermal and electrical energy are used in paperboard manufacture. More than 95% of the thermal energy – the steam – that powers the mill is produced from biofuel. The electricity purchased by the mill supplies 10% of the mill's total energy requirements. The mill is planning to eliminate all fossil carbon dioxide emissions and to become self sufficient on electricity.

## **EMISSIONS TO WATER**

Igesund Mill is situated on the shores of the Baltic Sea, which is classified as a highly sensitive marine ecosystem. The mill complies with the emissions levels set for it by the Swedish environmental authorities by continually measuring discharged water at about 20 test points. Iggesund constantly monitors the conditions of the marine ecosystems around the mill to ensure that their balance is not disturbed.

## **COD**

Chemical oxygen demand is a measurement of the amount of oxygen consumed in the decomposition of organic compounds. The presence of organic by-products such as bark and wood chips gives rise to a COD value. The Swedish environmental authorities set emission levels based on COD to be acceptable to the local conditions and the marine environment adjacent to the mill. As a result of an investment in a new effluent water treatment the level of COD was decreased by 31 percent in 2011 compared to 2009.

## **AOX**

Adsorbable organic halogen is formed in the pulp making process. High levels of AOX negatively affect marine organisms. Here, too, limits are set to be acceptable to local conditions and the marine environment adjacent to the mill.

## **NITROGEN AND PHOSPHORUS**

Nitrogen and phosphorus are elements that when present in large amounts contribute to the overfertilisation (eutrophication) of marine environments.

## **PROCESS WATER DISCHARGE**

The Iggesund mill is geographically located in an area of abundant water supply and there is no shortage of availability. All process water is re-circulated and re-used within the process a number of times. Before final discharge to the receiving water, process water is treated in a three step process which includes mechanical, biological and chemical treatment, a combination of treatment technologies considered as Best Available Technology.

## **EMISSIONS TO AIR - SO<sub>2</sub> AND NO<sub>x</sub>**

These normally arise from combustion processes used in the production of energy. They contribute to eutrophication, acidification and the creation of ground-level ozone. All emissions are regulated and monitored by the Swedish licensing authorities.

## **CO<sub>2</sub> (FROM FOSSIL SOURCES)**

Carbon dioxide is an invisible gas that occurs naturally but its increased emissions from fossil fuel use are contributing to global climate change. This figure indicates the emission of fossil CO<sub>2</sub> from the production of Invercote. The figure should not be confused with the far broader concept of carbon footprint, which encompasses much of the product's lifecycle. For information about Invercote's carbon footprint please contact an Iggesund representative in your market or visit [www.iggesund.com](http://www.iggesund.com).

## **WASTE TO LANDFILL**

Sending waste to landfill creates an unsustainable stress on local landfill facilities and is a growing environmental problem. In the production of Invercote we have systematically reduced our process waste to zero, with the very small balance coming from other mill activities where this waste cannot be reused or recycled. As a result, the Iggesund Mill has been deregistered from waste tax by the Swedish authorities.

## FIBRE SOURCING INFORMATION

Based on data from the period 1 Jan 2014 – 31 Dec 2014

Paper product:	Invercote 180 – 780 g/m <sup>2</sup>
Paper type:	Solid bleached board, virgin fibre
Company and mill:	Iggesund Paperboard, Iggesund Mill
Mill's environmental certificates:	FSC TUEV-COC-000232 PEFC™ SP-COC-2778-PEFC ISO 14001 SP-2778 M

[www.iggesund.com/en/Iggesund/Sustainable-goals/FSC-and-PEFC-Certificates/](http://www.iggesund.com/en/Iggesund/Sustainable-goals/FSC-and-PEFC-Certificates/)

Reporting period: 1 Jan 2014 – 31 Dec 2014

### WOOD SOURCING INFORMATION, IGGESUNDS BRUK 2014

Type of wood	Country of origin	%	Procurement region	Species	Forest owners	Certificates
Softwood	Sweden	100	Central Sweden	Pinus silvestris	Forest companies	DNV-COC-000004
				Pinus contorta	Private owners	DNV-CW-000004
				Picea abies		2003-SKM-PEFC-006
Hardwood	Sweden	53	Central Sweden	Betula spp Populus	Forest companies Private owners	DNV-COC-000004 DNV-CW-000004 2003-SKM- PEFC-006
	Baltic area	47	Estonia, Latvia	Betula spp Populus	State forests	
	Finland	< 1	Southern Finland	Betula spp Populus	Private owners	

All pulp for the Invercote production is produced internally within the Iggesund Mill. All wood procurement for the production of Invercote is handled by Holmen Skog, a sister company in the Holmen Group. The certificates given in the table above belong to Holmen Skog.

### METHODS

Certification scheme	Method	
FSC	Volume credit system	All FSC certified deliveries contain 100 % certified fibre
PEFC™	Volume credit method	All PEFC certified deliveries contain 100 % certified fibre