

## 1. BASIC DATA

### Document data

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Changes relates to:

### Active chilled beam 4

Article name:

Active chilled beam 4

### Article No/ID concept

Article identity: GTIN

Plexus

### Product group/Product group classification

Product group system	Product group id
BK04	21004
BSAB96	QM

Article description:

Plexus is provided with fixed lamellas which controls the primary air into non-parallel jets. Plexus can be used for both cooling, heating and ventilation. Plexus can be equipped with the functions Drypac condensation protection, Regula Secura condensation guard, down fold battery for better accessibility, and pre-mounted valves and actuators. Lindabs active chilled beams are Eurovent certified. Assessments at Byggvarubedömningen etc. are registered under the name "Aktiva tilluftsbaflar 4". It is also possible to use the article name as search criteria.

Declarations of performance:

Not applicable

Declaration of performance number:

Other information:

### Lindab Sverige AB

Company name:

Lindab Sverige AB

Organisation number:

556247-2273

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SE556247227301

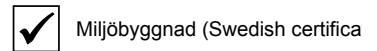
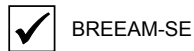
Website:

www.lindab.se

GLN:

DUNS:

## Environmental certification system



## References

### Reference

Widman J "Stålet och miljön". Stålbyggnadsinstitutet-Jernkontoret, Stockholm (2001)

Carbon Footprint study for Lindab produkts performed by WSP 2010

The International Aluminium Institute (IAI), Sustainability, <http://www.world-aluminium.org>, 2017-02

The International Stainless Steel Forum (ISSF), <http://www.worldstainless.org/>, 2017-02

Jernkontoret, Hälsoaspekter, <http://www.jernkontoret.se/>, 2017-02

## Annexes

### Annex

[https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building\\_product\\_Declarations/Attachment/Miljointyg\\_Oresundskr](https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building_product_Declarations/Attachment/Miljointyg_Oresundskr)

[https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building\\_product\\_Declarations/Attachment/AkzoNobel\\_Interpon\\_F](https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building_product_Declarations/Attachment/AkzoNobel_Interpon_F)

[https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building\\_product\\_Declarations/Attachment/AkzoNobel\\_Interpon\\_S](https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building_product_Declarations/Attachment/AkzoNobel_Interpon_S)

[https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building\\_product\\_Declarations/Attachment/Sikacryl\\_BVD\\_HM.pdf](https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building_product_Declarations/Attachment/Sikacryl_BVD_HM.pdf)

[https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building\\_product\\_Declarations/Attachment/Sikacryl\\_Säkerhetsdat](https://itsolution.lindab.com/LindabWebProductsDoc/PDF/Documentation/ADS/Lindab/Building_product_Declarations/Attachment/Sikacryl_Säkerhetsdat)

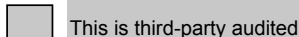
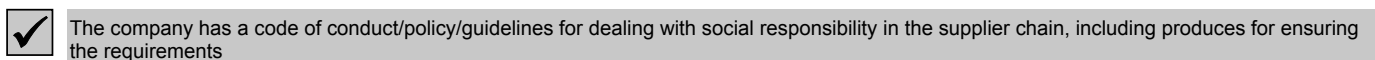
## 2. SUSTAINABILITY WORK

### Company's certification

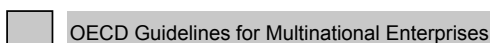
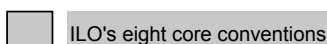
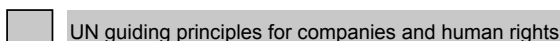


Other:

### Policies and guidelines



If yes, which if the following guidelines have you affiliated to or management system you have implemented





ISO 26000

Other policy guidelines

## Management system

If you have a management system for corporate social responsibility, what out of the following is included in the work?



Mapping



Risk analysis



Action plan



Monitoring

Sustainability reporting guidelines:

GRI - Global Reporting Initiative

## 3. DECLARATION OF CONTENTS

### Chemical content

Enter chemical content for the whole article. The concentration is calculated at component level according to the principle of "once an article always an article".

Is there a safety data sheet for the article?

Not applicable

Enter which version of the candidate list has been used (Year, month, day)

The article is covered by the RoHS Directive:

No

Enter how large a proportion of the material content has been declared [%]:

100

If the article contains nanomaterials deliberately added to obtain a particular function, enter these here:

The product does not contain deliberately added nanomaterial

Is the article registered in Basta?

Yes

Other information:

Standard finish: Color coated.

Is there classification of the article?

Not applicable

For complex products, the concentration of included substances has been calculated at:

whole construction product

Enter the weight of the article:

Enter the proportion of volatile organic substances [g/litre], applies only to sealants, paints, varnishes and adhesives:

### Article and/or sub-components

Phase Delivery

Component Adjustment handle

Weight% of product

#### Comment

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	PA 66	=0.2	32131-17-2	<input type="checkbox"/>	<input type="checkbox"/>

Component	Aluminium battery		Weight% of product		
Comment	Aluminium AA 8009-H24				
Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Aluminium	=15.49	7429-90-5	<input type="checkbox"/>	<input type="checkbox"/>
	Chromium	=0.01	7440-47-3	<input type="checkbox"/>	<input type="checkbox"/>
	Iron	<0.01	7439-89-6	<input type="checkbox"/>	<input type="checkbox"/>
	Manganese	=0.11	7439-96-5	<input type="checkbox"/>	<input type="checkbox"/>
	Silicon	=0.16	7440-21-3	<input type="checkbox"/>	<input type="checkbox"/>
	Titanium	=0.02	7440-32-6	<input type="checkbox"/>	<input type="checkbox"/>
	Vanadium	=0.04	7440-62-2	<input type="checkbox"/>	<input type="checkbox"/>
	Zinc	=0.02	7440-66-6	<input type="checkbox"/>	<input type="checkbox"/>

Component	Body, connection box body, brackets, suspensi		Weight% of product		
Comment					
Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Galvanized steel	=44.57	EN 10346:2015	<input type="checkbox"/>	<input type="checkbox"/>

Component	Bottom plate		Weight% of product		
Comment					
Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Steel	=16.81	CK15 / 1.1141	<input type="checkbox"/>	<input type="checkbox"/>

Component	Color		Weight% of product		
Comment					
Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Barium sulphate	<0.01	007727-43-7	<input type="checkbox"/>	<input type="checkbox"/>
	Epoxy resin	=0.025	025036-25-3	<input type="checkbox"/>	<input type="checkbox"/>

Iron oxide	=0.025	001309-37-1	<input type="checkbox"/>	<input type="checkbox"/>
Titanium dioxide	<0.01	13463-67-7	<input type="checkbox"/>	<input type="checkbox"/>

<b>Component</b>	Copper battery	<b>Weight% of product</b>
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**Comment**

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Copper	=9.86	7440-50-8	<input type="checkbox"/>	<input type="checkbox"/>
	Phosphorus	<0.01	7723-14-0	<input type="checkbox"/>	<input type="checkbox"/>

<b>Component</b>	Gasket	<b>Weight% of product</b>
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**Comment**

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
Rubber	EPDM	=0.032	25034-71-3	<input type="checkbox"/>	<input type="checkbox"/>
Rubber	Parafin oil	=0.008	8012-95-1	<input type="checkbox"/>	<input type="checkbox"/>

<b>Component</b>	Nozzle beam	<b>Weight% of product</b>
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**Comment**

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Polycarbonate	=1.38	24936-68-3	<input type="checkbox"/>	<input type="checkbox"/>

<b>Component</b>	Plastic plugg, foam sealing	<b>Weight% of product</b>
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**Comment**

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	PVC	=0.11	9002-86-2	<input type="checkbox"/>	<input type="checkbox"/>

<b>Component</b>	Profile, rivets	<b>Weight% of product</b>
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**Comment**

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Aluminium	=8.24	Alu 6061	<input type="checkbox"/>	<input type="checkbox"/>

**Component** Safety wire, clips **Weight% of product**

**Comment**

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Stainless steel	=2.1	AISI 304 / 1.4301	<input type="checkbox"/>	<input type="checkbox"/>

**Component** Sealant **Weight% of product**

**Comment** See attached BPD and SDB for Sikacryl® HM Vent 188 N

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Sikacryl® HM	=0.72	-	<input type="checkbox"/>	<input type="checkbox"/>

**Component** Steel band **Weight% of product**

**Comment**

Material	Substance	Concentration interval (%)	EG/CAS/Alternative designation	Candidate list	Phasing-out substance
	Steel	=0.03	AZ SS-EN 10215	<input type="checkbox"/>	<input type="checkbox"/>

## 4. RAW MATERIALS

### Raw materials

<b>Component</b>	<b>Material</b>	<b>Transport type</b>
	Steel	Ship
<b>Country of raw material extraction</b>	<b>City of raw material extraction</b>	
Sweden	-	
<b>Country of manufacture/production</b>	<b>City of manufacture/production</b>	
<b>Comment</b>		
The steel raw material is produced at different smelting plants, mainly in the EU, according to the detailed specification of the current standard. The sheet dimensions are then adjusted at the production unit in Greve.		

## Total recycled material in the article



Is recycled material included in the article?

### Material

Steel

Proportion after the consumer stage	Proportion before the consumer stage	Weight/percent by weight
100	0	20 %

### Comment

About 20% recycled material are being used in the production of steel.

### Material

Aluminium

Proportion after the consumer stage	Proportion before the consumer stage	Weight/percent by weight
39	61	57,9 %

### Comment

The amount of recycled aluminium varies depending on availability. Hence it can vary between 0 and 100%. All collected aluminium are being reused.

### Material

Copper

Proportion after the consumer stage	Proportion before the consumer stage	Weight/percent by weight
38	62	97 %

### Comment

The European copper production is normally based on ~97% recycled material.

### Material

Stainless steel

Proportion after the consumer stage	Proportion before the consumer stage	Weight/percent by weight
74,7	25,3	79 %

### Comment

About 75% recycled material are being used in the production of stainless steel.

## Renewable material

Enter proportion of renewable material in the article (short cycle, less than 10 years):

0

Enter proportion of renewable material in the article (long cycle, more than 10 years):

0

Included biobased raw material is tested according to ASTM test method D6866:

Is there supporting documentation for the raw materials for third-party certified system for control of origin, raw material extraction, manufacturing or recycling processes or similar (for example BES 6001:2008, EMS certificate, USGBC Program)? If yes, enter system(s):

No

## Wood raw materials

Wood raw materials are included

Included wood raw material is certified

How large a proportion is certified [%]?

What certification system has been used (for example FSC, CSA, SFI with CoC, PEFC)?

Reference number:

Enter logging country for the wood raw material and that following criteria have been met. Country of logging:

Does not contain type of wood or origin in CITES appendix of endangered species

The timber has been logged legally and there is certification for this



## 5. ENVIRONMENTAL IMPACT

### Environmental impact during life cycle of the article, production phase module A1-A3 under EN

Has environmental product declaration been drawn up according to EN 15804 or ISO 14025 for the article?

These product-specific rules, known as PCR, have been applied:

Registration number / ID number for EPD:

Climate impact (GWP100) [kg CO<sub>2</sub>-eq]:

Ozone depletion (ODP) [kg CFC 11-eq]:

Acidification (AP) [kg SO<sub>2</sub>-eq]:

Ground-level ozone (POCP) [kg ethene-eq]:

Eutrophication (EP) [kg (PO<sub>4</sub>)-3-eq]:

Renewable energy [MJ]:

Non-renewable energy [MJ]:

If calculation has been made in Green Guide, enter which rating:

If there is environmental product declaration or other life cycle assessment, describe how the environmental impact of the article is taken into account from a life cycle perspective:

The information refer to "gate to gate", inflows (raw materials, inputs, energy, etc.) for the registered product into the manufacturing unit, and outflows (emissions and waste) from it and relates to unit of product 1 kg.

Country of final manufacture: Sweden

Energy used in the manufacture of the product: electricity 1,8 kWh per produced kilo. From 2017, all units in Sweden only uses electricity from renewable sources. See attached file.

Transport: <99% truck, deliveries to the customer/branch, <1% electric forklift.

Climate impact from internal transports: CO<sub>2</sub> 0,0025 kg, CH<sub>4</sub> <0,0001 kg and N<sub>2</sub>O <0,0001 kg.

Emissions to air, water or soil from the manufacture of the product, climate impact from operations: carbon dioxide equivalents (CO<sub>2</sub>-e) ≈ 3,75 kg per kilo product (includes energy/waste/scrap/travels)

The production itself causes no emissions to air, water or land.

Residual products from the manufacture of the product: <8% steel scrap, 100% is recycled, waste code 17 04 05. <5% aluminium scrap, 100% is recycled, waste code 17 04 02. <5% copper scrap, 100% is recycled, waste code 17 04 01. All waste is taken care of by a carrier with the necessary permits. No waste is exported.

For information about raw materials, distribution, waste etc., see the other sections.

## 6. DISTRIBUTION

### Distribution of finished article

Does the supplier use Retursystem Byggpall?

Yes

Does the supplier apply any system with multiple-use packaging for the article?

No

Does the supplier take back packaging for the article?

No

Is the supplier affiliated to a system for product responsibility for packaging?

Yes

If yes, which packaging and which system?

Förpacknings & Tidningsinsamlingen

Other information:

If possible products are packed together. The packaging materials include wood, cardboard, and plastic wrap. Wooden pallets are being reused. All packaging consists of recyclable material, the cardboard Lindab uses for packaging consist of 97,5% recycled material. Shipments of manufactured goods are mainly transported by truck to the customer/branch. The average transporting distance is <500 km.

## 7. CONSTRUCTION PHASE

### Construction phase

Does the article make special requirements in storage?

Yes

Specify

To prevent soiling and oxidation, the product should be stored protected from the weather. See Lindab's product catalogue for more information.

Does the article make special requirements for surrounding building products?

No

Specify

Other information:

## 8. USE PHASE

### Use phase

Does the article make requirements for input materials for operation and maintenance?

No

Specify:

Does the article require supply of energy during operation?

No

Specify:

Estimated technical service life for the article:

>50 years

Comment:

Lifetime depends on the environment where the product is being used. Corrosive environments can affect the life of the product negatively. There is a special product for corrosive environments. The product can be adapted to work with new technology.

Is there energy labelling under the Energy Labelling Directive (2010/30/EU) for the article?

Not applicable

If yes, enter labelling (G to A, A+, A++, A+++):

Other information:

## 9. DEMOLITION

### Demolition

Is the article prepared for disassembly (dismantling)?

Yes

Specify:

The parts can easily be separated.

Does the article require special measures for protection of health and environment in demolition/disassembly?

No

Specify:

Other information:

## 10. WASTE MANAGEMENT

### Delivered article

Is the supplied article covered by the Ordinance (2014:1075) on producer responsibility for electrical and electronic products when it becomes waste?

No

Is reuse possible for the whole or parts of the article when it becomes waste?

Yes

Specify:

The entire product can be reused.

Is material recovery possible for the whole or parts of the article when it becomes waste?

Yes

Specify:

<99% of the material can be recycled.

Is energy recovery possible for the whole or parts of the article when it becomes waste?

Yes

Specify:

Heat recovery occurs at smelter.

Does the supplier have restrictions and recommendation for re-use, material or energy recovery or landfilling?

Yes

Specify:

Should be recycled according to recommended waste code.

#### Waste code for the delivered article when it becomes waste

170203 - 03 Plast.

170401 - 01 Koppar, brons, mässing.

170402 - 02 Aluminium.

170405 - 05 Järn och stål.

When the supplied article becomes waste, is it classified as hazardous waste?

No

### Mounted article

Is the mounted article classified as hazardous waste?

No

### Other information

## 11. INDOOR ENVIRONMENT

### Indoor environment

The article is not intended for indoor use

The article does not produce any emissions

Emissions from the article not measured

Does the article have a critical moisture state?

No

If yes, state what:

#### Noise

Can the article give rise to own noise?

No

Value:

Unit:

Measuring method:

#### Electrical field

Can the article give rise to electrical fields?

No

Value:

Unit:

Measuring method:

#### Magnetic fields

Can the article give rise to magnetic fields?

No

Value:

Unit:

Measuring method:

### Paints and varnishes

The article is resistant to fungi and algae in use in wet areas

### Emissions

The article produces the following emissions in intended use:

### Other information