

AKU-COMP SILENCER, TYPE P

ENVIRONMENTAL PRODUCT DECLARATION

COMPANY INFORMATION:

REC Indovent AB

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Quality certified

ISO 9001:2015

Environmental certified

ISO 14001:2015

Following data concerns AKU-COMP type P with length 0,6 m, in extended state and dimension 160 mm.

1. PRODUCT DESCRIPTION

AKU-COMP is an extensible duct silencer. There are two types, type P has a case of polyethylene. For recommended range of application we refer to the product catalogue.

2. DECLARATION OF CONTENTS

AKU-COMP is made of folded aluminium strips (AA4017), which is covered in mineral wool. The outer case consists of low density polyethylene. The endings are made of galvanized steelplate (Z275).

The product does not contain substances that are included in the Priority guide PRIO from Swedish National Chemical Inspectorate.

3. INPUT MATERIALS

Material:	weight-%	weight(kg)
Mineral wool	34,5	0,39
Aluminium strip	31,4	0,35
Sheet steel	24,0	0,26
Polyethylene	10,1	0,11

The aluminium strip and the mineral wool consists of 90 % and 68 % recycled material respectively. Data for steel is based on 8 % recycled material.

Energy consumption during material production (expressed as MJ/ AKU-COMP):

Aluminium strip	12,41
Mineral wool	10,78
Polyethylene	8,89
Sheet steel	8,06
Total:	40,11

Emissions to water during material production (expressed as g/ AKU-COMP):

Chloride (Cl ⁻)	0,33
COD	0,13
Suspended material	0,12
Chrometrixoxide (CrO ₃)	0,031
Total nitrogen (N _{tot})	0,023
Sodium (Na ⁺)	0,021

Emissions to air during material production (expressed as g/ AKU-COMP):

Carbon dioxide (CO ₂)	1454,50
Sulphur oxides (SO _x)	3,65
Nitrogen oxides (NO _x)	3,25
Carbon monoxide (CO)	2,27
Dust	1,94
VOC	1,27
Hydrocarbons (HC)	0,75

4. PRODUCTION

Energy consumption during production phase:

Estimated to 5,0 MJ/ AKU-COMP.

Emissions to water: Does not exist

Emissions to air: Negligible

Production waste (rest products):

2 % of used material per product form production waste. Mineral wool ends up in landfill, plastic goes to incineration and aluminium is recycled.

5. DISTRIBUTION OF FINAL PRODUCT

Packing materials: Corrugated cardboard and wooden loading pallet. The packing material can be recycled and then re-used, producing either new material or energy.

Transportation:

Average emissions from transportation by truck for 100 km (26 tonnes), expressed with characterization factors for a functional unit, weight 1,1 kg:

GWP	0,006 kg CO ₂ -equivalents
AP	0,00002 kg SO ₂ - equivalents
POCP	0,0034 g ethene-equivalents
EP	0 kg PO ₄ ³⁻ -equivalents

The majority of REC Indovent ABs transportations are carried out by truck.

6. USING PHASE

The product is emission free during use.

7. DISPOSED PRODUCT

The disposed product does not contain environmentally hazardous waste. Materials that are parts of the disposed product should be separated in order to enable re-use alternatively recycling.

8. ENVIRONMENTAL IMPACT

Environmental impact that the largest emissions are associated with:

Chloride	No environmental effect
COD	Oxygen consumption in lakes
Carbon dioxide	Greenhouse effect
Sulphur oxides	Acidification
Carbon monoxide	Deterioration of absorption of oxygen of the blood
Nitrogen oxides	Ground level ozone, acidification, eutrophication

9. OTHER INFORMATION

Characterization factors according to SS-EN15804. Calculated according to the standard SS-EN 15978. TYPE II - ISO 14025

Characterization factors for production phase:

GWP (Global Warming Potential)
AP (Acidification Potential)
POCP (Photochemical Ozone Creation Potential)
EP (Eutrophication potential)

1,46 kg CO₂- equivalents
 0,006 kg SO₂- equivalents
 0,5 g ethene-e equivalents
 0,00044 kg PO₄³⁻- equivalents