according to ISO 14067, ISO 14040 and ISO 14044

## **PVC COMPOUNDS**

IN**EOS**Compounds



according to ISO 14067, ISO 14040 and ISO 14044

### **PVC COMPOUNDS**



### **Summary**

**PCF** holder **INEOS Compounds Sweden AB** 

> Gevärsgatan 4 254 66 Helsingborg www.ineos.com

Life cycle assessor

PeoplePlanetProfit GmbH

Gerberstrasse 7 88250 Weingarten

PVC compound Designation

NORVINYL GA.100.99.00103

**Description and** definition of the product

Description: PVC extrusion compound

Color: Black Application: Profiles

Shape: Pellets

General Properties	Test method	Units	Value
Density	EN ISO 1183-1A	kg/m³	1490
Hardness (15 sec, 23°C)	EN ISO 686	Shore D	79
Thermal stability (200°C)	EN ISO 182-1	min	25

**Document** number

22.09.2023 **Preparation date** 

22.09.2028 Validity period

This balance is intended to report the Product Carbon Footprint of PVC **Objective** 

compounds from INEOS Compounds (cradle to gate).

**Method and Notes** 

The method for the preparation of the PCF can be requested.

according to ISO 14067, ISO 14040 and ISO 14044

### **PVC COMPOUNDS**



These manufacturer-specific balances are valid for five years from the date of preparation.

A comparison of the PCF values is possible in principle, but not recommended, as assumptions in the report, models and the balancing software can differ from each other.

The LCA was calculated with the software Umberto LCA + on the basis of ISO 14067, ISO 14040 and ISO 14044.

The method is documented in a background report. The LCA study includes the definition of the objective and the scope of the study, the life cycle inventory, the impact assessment and the interpretation.

#### Considered life cvcle

In the PCF, the manufacturing phase was taken into account (cradle to gate).

#### Data base

The LCA data was collected by the INEOS Compounds Sweden AB and reviewed by PPP.

#### Level of data quality

Geographical	Technical	Temporal
representativeness	representativeness	representativeness
Medium	Good	Good

#### System boundaries

The system boundaries refer to the site in Helsingborg. Sweden. Outsourced processes were not present.

#### Functional / declared unit

The declared unit is 1 kg PVC compound.

The functional unit is as follows:

Product	Density
NORVINYL GA.100.99.00103	1490 kg/m³

#### Information modules

The following information modules or life cycle phases were considered were considered:

• Production A1 - A3

#### Interpretation of results

The main environmental impacts in the production of NORVINYL GA.100.99.00103 are caused by the raw material PVC or its upstream chains. Other additives, pigments, fillers and lubricants have a secondary influence.

The transport of the intermediate products also have a moderate impact on the environmental impact of the products.

IN**EOS**Compounds

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### Product carbon footprint over the life cycle of PVC compounds

Manu	facturing	phase		ruction ase	Use phase							Disposal phase			
Provision of raw materials	Transport	Production	Installation	Transport	Use	Inspection/maintenance/cleaning	Repair	Exchange/replacement	Operational energy use	Operational water use	Dismantling	Transport	Waste management	Landfill	Recycling potential
Х	Х	Х													

PCF – Product Carbon Footprint (ISO 14067)

ND: Not declared

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## **PVC COMPOUNDS**

NORVINYL GA.100.99.00103	Unit	Production A1 – A3	Transport A4	Installation/assembly A5	Usage B1	Inspection/Maintenance/ Cleaning B2	Repair B3	Replacement/Replacement B4	Improvement/Modernization B5	Operational energy use B6	Operational water use B7	Dismantling/demolition C1	Transport C2	Waste treatment C3	Elimination C4	Recycling potential D
PCF total	kg CO2 e	2.37E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCF fossil	kg CO2 e	2.31E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCF biogenic	kg CO2 e	-3.79E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCF land use	kg CO2 e	1.06E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCF Aviation	kg CO2 e	2.15E-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Packaging	Unit	Production A1 – A3	Transport A4	Installation/assembly A5	Usage B1	Inspection/Maintenance/ Cleaning B2	Repair B3	Replacement/Replacement B4	Improvement/Modernization B5	Operational energy use B6	Operational water use B7	Dismantling/demolition C1	Transport C2	Waste treatment C3	Elimination C4	Recycling potential D
PCF total	kg CO2 e	7.67E-04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCF fossil	kg CO2 e	8.13E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCF biogenic	kg CO2 e	-7.37E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCF land use	kg CO2 e	1.25E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCF Aviation	kg CO2 e	6.41E-11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND