

Carbon Footprint

SC803 Intumescent Coating

Product Description

Nullifire SC803 Intumescent Coating

Production Process Description

The cradle-to-gate production process of coatings starts with the extraction of feedstock and the production of raw materials.

The raw materials are then transported from the supplier to the coating producer, where they undergo various grinding and mixing processes. Finally, the coating is filled into packaging units. The production process is illustrated in figure 1 on the right.

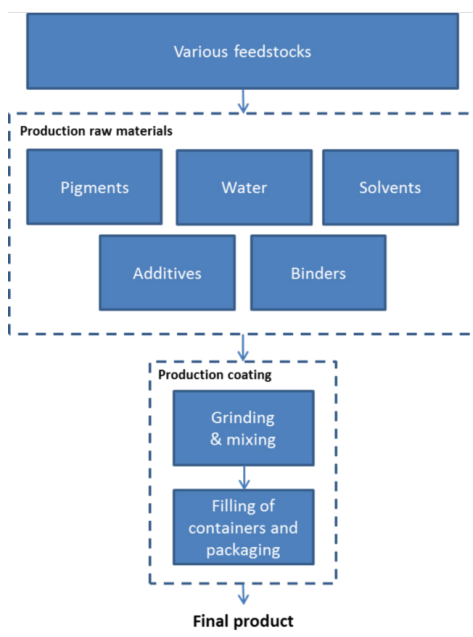
Functional Unit

This Carbon footprint (CF) is based upon life cycle inventory (LCI) data from IVL/CEPE. It reports the environmental performance indicators associated with the production of 1 kg of product from cradle-to-gate. This is equivalent to a coating surface covering of: 1.4 m².

At the gate, the product is packaged and ready for shipment. The weight corresponds to the actual product weight, excluding the weight of the packaging material.

System Boundaries

The scope of this Carbon footprint is cradle-to-gate. This means that the extraction of feedstock, the production of raw materials and the paint production (cradle-to-gate) are covered. The use phase and end of life are not covered in this CF (gate-to-grave).



● Figure One. Production process waterborne coating.

Information

This Carbon footprint was produced in August 2020. For more information about this product, please contact:

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Carbon Footprint

The Carbon footprint of the cradle-to-gate production of 1 kg of product is shown below. It is reported as the Global Warming Potential (GWP), which is an index used to translate the level of emissions of various gases into a common measure to compare their contributions to the atmospheric absorption of infrared radiation.

Carbon Footprint or Global Warming:
3714.3 g CO₂ eq Potential (GWP)

Impact Table

The impact table below shows the values of the Global Warming Potential for three separate scopes, in accordance to the GHG Protocol (for a more complete definition of the GHG protocol scopes, please see the reference manual of the tool). A distinction is made between direct and indirect emissions. Direct emissions are discharged by sources that are owned or controlled by the reporting entity. Indirect emissions occur at sources owned or controlled by another entity. In scope 1, 'Coating production', the direct environmental impact of the coating manufacturing process is calculated. Scope 2, 'energy use', covers the indirect GHG emissions related to the coating production that originate from purchased electricity, heat or steam. Scope 3, 'raw materials', includes the various environmental impacts related to the extraction of feedstock, production of raw material and transport. The cradle-to-gate total is the sum of the indicator values for each of the separate scopes.

	Raw Materials (Scope 3)	Energy Use (Scope 2)	Coating Production (Scope 1)	Total (Cradle to Exit Gate)	Unit
Carbon Footprint or Global Warming Potential (GWP)	3440.9	190.4	83	3714.3	g CO ₂ eq
	92.6%	5.1%	2.2%	100%	

Notes:

This ECO footprint is created using the CEPE ECO Footprint tool v.2.0, based on the CEPE RM Database v.3 released in April 2016 (see www.CEPE.org/ecofootprint). This Eco Footprint does not automatically meet all LCA and EPD requirements and should not be used in market claims or external communication without a review.