## Independently verified by NSF in accordance with ISO 21930 and ISO 14025 Life cycle assessment independently verified in accordance with ISO 14044

### **DOCUMENT OBJECTIVE:**

Provide an overview of the critical data that can be used to calculate the Global Warming Potential (GWP) in kilograms per carbon equivalent (kg CO<sub>2</sub>e) for this product.

#### **METHODOLOGY FOR CARBON EQUIVALENT CALCULATIONS:**

The document utilises an externally validated methodology that has been developed for all site-applied decorative coatings which has been applied to high performance industrial coatings. The assessment was completed using high-quality datasets including primary source, industry data, and commercial data in the GaBi LCA tool. Although not a perfect fit, it provides comparative data through an established independently verified framework widely in use by the coatings industry.

Key clarifications include:

- Based on Product Stage to End-of-Life of Product (Cradle to Grave)
- Under Product Category Rules (PCR) selected for Architectural Coatings
- Functional Unit: 1 m<sup>2</sup> of protected substrate for 60 years (assumed lifetime of the building)
- PCR based on market life of 20 years includes multiple re-applications throughout the life of the building

#### WHAT IS CARBON EQUIVALENT?

A **carbon dioxide equivalent** or **CO**<sub>2</sub> **equivalent**, abbreviated as **CO**<sub>2</sub>**e** is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.\*

# HOW TO CALCULATE THE CARBON EQUIVALENT VALUE FROM THIS EPD DOCUMENT TO USE ON A PROJECT?

	FASTOP MULTI SL45	Mixed
A	Total Quantity Needed using Market-Based Life (kg/m²) <b>TABLE 4</b>	30
в	GWP Inc. Bio Carb (kg CO2e) stated on EPD <b>TABLE 9</b>	65.82
с	GWP Inc. Bio Carb (kg CO2e) per 1kg	2.19

\* https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Carbon\_dioxide\_equivalent#:~:text=A%20Carbon%20dioxide%20equivalent%20 or,with%20the%20same%20global%20warmingeu/eurostat/statistics-explained/index.php?title=Glossary:Carbon\_dioxide\_equivalent#:~:text=A%20Carbon%20 dioxide%20equivalent%20or,with%20the%20same%20global%20warming



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