

SUSTAINABILITY FACT SHEET

SikaPlast®-82 SCM

Sustainability Portfolio Management (SPM) is the methodology used by Sika to evaluate and classify its products in defined market segments in terms of Performance and Sustainability. The outcome of the SPM evaluation is a portfolio of “Sustainable Solutions” – products with combined significant Sustainability and Performance benefits.

The evaluation criteria that fall under the sustainability category of SPM are presented in the infographic below.



SUSTAINABILITY FACT SHEET

SikaPlast®-82 SCM

SUSTAINABLY IMPACTFUL

The perfect balance of optimized performance and sustainability engineered for a durable and more responsible future.

Sika's Impact products, assessed by the Sika Sustainable Portfolio Management (SPM) methodology, deliver both optimized performance and sustainability benefits. Designed to be fit for purpose, these advanced solutions meet the highest standards in sustainability. Our Sustainability Impact Areas drive progress toward a sustainable future by addressing key priorities: Carbon Emission Reduction, Durability, Circularity, Resource/Material Consumption, Waste Management, Energy Consumption, Health and Safety, and Green Building Contribution.



PRODUCT CHARACTERISTICS AND BENEFITS

SikaPlast®-82 SCM Supplementary Cementitious Materials (SCM) is a new advanced mid-range water reducer, based on an engineered blend of selected polymers, specifically designed for high slag or and fly ash content concrete mixtures. Sika customers benefit from: Increased water cut and improved slump retention when used as an MWR type in high SCM mixes. Enhanced rheology in high SCM and low water/binder ratio mixes, addressing pumpability challenges and better cost efficiency per treated cubic meter due to a higher cement replacement rate.

- **REPUTATIONAL AND BUSINESS RISKS:** Partial replacement of cement with Supplementary Cementitious Materials
- **CLIMATE:** 25% reduced carbon footprint compared to the internal reference product
- **RESOURCES AND CIRCULAR ECONOMY:** 70% replacement of cement with Supplementary Cementitious Materials

REPUTATIONAL AND BUSINESS RISKS:

SikaPlast®-82 SCM supports a low-carbon economy by partial replacement of cement with Supplementary Cementitious Materials (SCM).

CLIMATE: REDUCED CARBON FOOTPRINT

The carbon footprint of SikaPlast®-82 SCM is 25% lower than the carbon footprint of the internal reference polycarboxylate ether based concrete water reducer¹. The reduction in the carbon footprint of SikaPlast®-82 SCM was achieved by introducing more efficient formulation.

Further details about the calculation:

- A Carbon Footprint Study was conducted to generate the carbon footprint reductions presented in this factsheet based on ISO 14044.
- The reduction in carbon footprint presented is based on IPCC AR6 GWP100 incl. biogenic CO₂ as well as land use and land use change (luluc).
- The goal of the CF study was to compare the raw material composition of SikaPlast®-82 SCM, produced in all admixture production sites in Australia with the internal reference to evaluate the carbon footprint reduction of the improved formulation. The comparison was calculated on equivalent performance basis as the two formulations are functionally equivalent.
- The life cycle stage included in the calculation is the production of raw materials (cradle to raw material) because the focus of the product development was to improve the formulation, which represents the largest share of the product carbon footprint. Transport and manufacturing processes are similar for both products.
- The LCI used for the CF calculation consists of secondary data from Sphera MLC Databases & BI Cubes which are generic or average representations of the raw materials, as well as primary data from suppliers if available. The regional, technological and time related representativeness of the Carbon Footprint are fair¹.

1 The internal reference is the best-selling product in the Product Technology Application Combination (PTAC), a unique combination of the application and market segment, brand family and technology of a given product, which ensures a homogenous approach, as products in a well-defined segmentation will have a similar sustainability profile. More details can be provided upon request.

2 The CF study has not been independently reviewed for conformance with ISO 14044. The calculation has been conducted involving Sika's R&D and LCA specialists under consideration of Sika's internal quality assurance processes.

SikaPlast®-82 SCM

RESOURCES AND CIRCULAR ECONOMY:

Reduced Material Consumption in Application

SikaPlast®-82 SCM has been developed to reduce the consumption of Portland Cement for concrete by 70% and replacing it with SCM (supplementary cementitious materials). With this the yield of SikaPlast®-82 SCM has been significantly improved compared to the internal reference.

The information contained herein and any other advice are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. The information only applies to the application(s) and product(s) expressly referred to herein and is based on laboratory tests which do not replace practical tests. In case of changes in the parameters of the application, such as changes in substrates etc., or in case of a different application, consult Sika's Technical Service prior to using Sika products. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.