

## PRODUCT DATA SHEET

# SikaFiber® Force PP-55 / RAD55s

POLYOLEFIN MACRO-SYNTHETIC FIBERS FOR FIBER REINFORCED SHOTCRETE AND CONCRETE

### DESCRIPTION

SikaFiber® Force PP-55 / RAD55s is a macro structural synthetic fibre that delivers optimum performance in highly corrosive environments. It is used in pre-cast, slabs on ground among many other applications. Higher Re3 values (equivalent flexural strength ratio based on ASTM C1609 testing) are achieved in slabs on grade when using this fiber

### USES

- Fibercrete / shotcrete
- Ground supported slabs
- Precast
- Sea defence
- Airport & pavements
- Slope stabilisation

### CHARACTERISTICS / ADVANTAGES

- Non-magnetic, rustproof and alkali proof
- Less balling effect for difficult mixes
- No site waste or disposal issues
- Saves time and storage space in comparison to traditional mesh
- Uniquely designed and packaged allowing it to be evenly dispersed ensuring no balling or pumping problems will occur

### PRODUCT INFORMATION

<b>Composition</b>	Polyolefin Polymer
<b>Packaging</b>	5 kg boxes- fibers wrapped in water soluble plastic pucks (Parallel Packed) in biodegradable boxes. Environmentally friendly recycled packaging.
<b>Shelf Life</b>	NA
<b>Storage Conditions</b>	Store protected from the weather
<b>Density</b>	0.92 g/cm <sup>3</sup>
<b>Dimensions</b>	Fiber length 55 mm Mean width 1.37 mm Mean thickness 0.34 mm
<b>Melting Point</b>	170 °C
<b>Water Absorption</b>	Nil
<b>Tensile Strength</b>	550+ MPa
<b>Resistance to Alkalinity</b>	Excellent
<b>Recommended Dosage</b>	5–9 kg/m <sup>3</sup>

## Compatibility

SikaFiber® Force PP-55 / RAD55s macro-synthetic fibers are compatible with all concrete admixtures and performance enhancing chemicals.

## Dispensing

Entire package can be thrown into the mix allowing for easy handling whilst leaving no waste on site.

SikaFiber® Force PP-55 / RAD55s can be added to the mix at any stage during batching.

Allow 5 minutes at mixing speed for fibres to disperse evenly throughout matrix.

## FURTHER DOCUMENTS

### Specification clause

Fibers for concrete shall be SikaFiber® Force PP-55 / RAD55s polyolefin high performance macro-synthetic fiber conforming to EN 14889-2:2006 Class II and manufactured specifically for the reinforcement of concrete. SikaFiber® Force PP-55 / RAD55s macro-synthetic fibers shall be mixed at the batch plant, at the recommended rate of 5–9 kg per cubic metre, and mixed for sufficient time (minimum 5 minutes) to ensure uniform distribution of the fibers throughout the concrete mix.

## IMPORTANT CONSIDERATIONS

The addition of SikaFiber® Force PP-55 / RAD55s can cause a reduction in concrete consistency. We recommend correcting this loss, not by adding more water, but by adjusting the mix to the required consistency with a suitable dosage of ViscoCrete® or SikaPlast® admixtures.

## BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, 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. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. 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.

### Sika Kimia Sdn. Bhd.

Lot 689, Nilai Industrial Estate, 71800

Nilai

Negeri Sembilan D.K., Malaysia

Phone: +606-7991762

Fax: +606-7991980

e-mail: info@my.sika.com



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