BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor® BC 920

(formerly MTop BC 920)

High Performance, Odorless Self-smoothing flooring system based on Xolutec technology

DESCRIPTION

Sikafloor® BC 920 is a four-component, odorless high performance & durable self-smoothing flooring system based on Xolutec technology. It provides a seamless surface resistant to abrasion & impact and easy to clean. Being moisture tolerant can be applied on 14-day old concrete floors. Sikafloor® BC 920 is used as a scratch primer & body coat in Sikafloor® XTC system.

USES

Sikafloor® BC 920 may only be used by experienced professionals.
Sikafloor® BC 920 is recommended for new floors & floors needing refurbishment, where protection from mechanical abuse is required. Sikafloor® BC 920 is used to provide a hard wearing, abrasion resistant and easy to clean surface.
Application areas include:

- Automotive Production and assembly lines
- Pharmaceutical Plants
- Heavy Engineering workshops
- Aircraft Maintenance and assembly
- Industrial & Warehousing floors
- Laboratories

CHARACTERISTICS / ADVANTAGES

- Odorless– Environment friendly & comfortable application.
- Scratch Resistance–Longer retention of surface appearance.
- Fast curing at low temperature – Reduced wait-ing times even at low temperatures.
- Impact Resistance – Longer life even under ag-gressive mechanical abuse.
- High Early Strength – Fast return to service; Open to Light vehicular traffic in 24 hrs.
- Moisture Tolerant – Faster application; Can be applied on 14-day old concrete.
- Chemical Resistance – Unaffected by chemical spillages.

APPROVALS / STANDARDS

GB/T 22374-2018

PRODUCT INFORMATION

Chemical base	High Performance Polyurethane	
Packaging	Part A	3.5 kg/pail
	Part B	5.65 kg/pail
	Part C	4 kg/bag
	Part D	0.5 kg/bag
	Part A+B+C+D	13.65 kg/set
Colour	Sikafloor® BC 920 is supplied in seven standard colors: Grey, Light Grey, Cream, Green, Light Green, Red, Yellow	

Shelf life	Part A	12 months
	Part B	12 months
	Part C	24 months
	Part D	24 months
Storage conditions	Store in original, unopened, undamaged, sealed packages in dry, dry environments between +15 °C and + 30 °C, out of direct sunlight, on pallets protected from rain and away from the ground, and protect the liquid from frost.	
Density	Mixture: 1.5~1.6 kg/L All Density values at +20°C.	
Volatile organic compound (VOC) content	≤ 60g/L	

TECHNICAL INFORMATION

Shore D Hardness	~70 (1 Day)	
Abrasion Resistance	65mg (loss in Mass)	(EN ISO 7784) 1Kg / 1000rev./ CS17
Resistance to Impact	30 Joules	EN ISO 7765
Compressive Strength	30MPa (1 Day) 45MPa (7 Days)	EN ISO 604
Tensile Strength in Flexure	15MPa (7 Days)	EN ISO 178
Tensile Strength	12MPa (7 Days)	ISO 527
Tensile Adhesion Strength	1.5MPa (7 Days)	ASTM D7234
CHEMICAL RESISTANCE	√	Hydrochloric Acid, 20% Solution
	√	Sulphuric Acid, 50% Solution
	√	Acetic Acid, 36% Solution
	√	Phosphoric Acid, 20% Solution
	√	Sodium Hydroxide 50% Solution
	√	Methyl Ethyl Ketone
	√	Methanol
	√	Xylene
	Higher concentration of mineral acids may cause matting of the surface and color changes.	
Surface hardness	4H	EN ISO 15184

APPLICATION INFORMATION

Mixing ratio	Part A : Part B: Part C: Part D = 3.5 : 5.65 : 4 : 0.5 (by weight)		
Consumption	Coating system	Product	Comsumption
	Primer	Sikafloor® P 920	1.2~1.5 kg/m²
	Topcoat	Sikafloor® BC 920	1.5~3.0 kg/m²
	Sealer (optional)	Sikafloor® TC 941/-943	0.1~0.12 kg/m²
	Note:These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc.		
Product Temperature	+10°C min. / +25°C max.		
Ambient Air Temperature	+10°C min. / +30°C max.		
Relative Air Humidity	80% r.h. max.		

Dew Point

Beware of condensation!
The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation or blooming on the floor finish.

Substrate Temperature

+10°C min. / +30°C max.

Substrate Moisture Content

≤ 8% pbw moisture content.
Test method: Sika®-Tramex meter or CM - measurement.
No rising moisture according to ASTM (Polyethylene-sheet).

Pot Life

Temperatures	Time
+20°C	~ 15 minutes

Waiting Time / Overcoating

Before applying Sikafloor® BC 920 on Sikafloor® P 920 allow:

Substrate temperature	Minimum	Maximum
+20°C	8 hours	48 hours

Applied Product Ready for Use

Temperature	Foot traffic	Light traffic	Full cure
+20°C	16 hours	~24 hours	3 days

Note:At low temperature the curing need longer time.

SYSTEM INFORMATION

Systems

Coating system	Product
Primer	Sikafloor® P 920
Topcoat	Sikafloor® BC 920
Sealer (optional)	Sikafloor® TC 941/-943

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.

IMPORTANT CONSIDERATION

- Substrates will normally be concrete or polymer modified screeds, but some other types of substrates may be suitable, please consult your Sika sales representative or technician for details.
- If you are unsure of the surface type or quality of the substrate, please test some samples in small area first.
- Freshly applied Sikafloor® BC 920 must be protected from moisture and water within 24 hours.
- This product should not be applied to vertical or suspended surfaces. For application to vertical surfaces, refer to other suitable products such as Sika® Ucrete® RG.
- Due to thermal shock, the use of steam cleaning may cause the floor to delaminate. For floors requiring steam cleaning, please use other suitable products such as Sika® Ucrete® UD 200.
- Due to the fact that the material is produced in batches, it is not possible to guarantee complete colour consistency. Therefore when using Sikafloor® products, please do not mix different batch numbers in the same area.

ECOLOGY, HEALTH AND SAFETY

APPLICATION INSTRUCTIONS

EQUIPMENT

Sikafloor® BC 920 must be mechanically mixed using an electric power stirrer (300 - 400 rpm) or other suitable equipment.

SUBSTRATE QUALITY / PRE-TREATMENT

- The base concrete must be of sufficient strength (compressive strength of at least 25 N/mm² and tensile strength of at least 1.5 N/mm²).
- The concrete surface must be treated by mechanical means such as sandblasting, shotblasting and grinding to thoroughly remove cement floats, oil contamination and loose concrete of insufficient strength and to expose holes, while obtaining substrate with good surface strength and roughness (longitudinally open textured surface).
- Holes and cracks in the concrete surface must be repaired and filled with suitable Sika specialised systems such as Sika® Ucrete®, Sikafloor®, Sikadur® and Sikagard® first, where dynamic cracks need to be filled with elastomeric material after evaluation.
- If the substrate is uneven, it needs to be levelled with Sika's special levelling mortar to obtain a more even and aesthetic appearance.
- All dust, particles and rubbish on the surface of the substrate must be cleaned up by vacuuming etc before application.
- Expansion joints - Expansion joints are provided at

the intersection of different materials on the base. Separate zones according to thermal stresses, vibrations and surrounding load-bearing columns, see additional details.

MIXING

Before mixing we should confirm the Temperature Requirements again:
- Substrate temperatures: 10°C – 30°C
- **Material temperatures: 10°C – 25°C**

Very low or very hot temperatures will make application more difficult and careful consideration should be given to storage of materials. In the cold weather conditions, precondition materials by keeping it in a heated room. In hot weather conditions, some form of airconditioned storage is required. Preconditioned materials at 18-25°C will reduce the possibilities of flash/slow setting and other defects

Mixing:
Sikafloor® BC 920 is supplied in four components; Part A, B, C & D with Part D being color component. The typical mixing steps are as follows:
1.Mix Part A with high speed electric drill for 1 to 2 minutes until material becomes fully homogeneous. Ensure no material is settled at the bottom of the pail.
2. Empty Part B in a separate clean mixing bucket. Whilst mixing with high speed electric drill Add mixed Part A and Part D.
3. Mix for 1 minute making sure to reach the bottom and sides of the can. Continue mixing for 1 minute to produce a fully blended, uniform material without color streaks.
4. Gradually Add Part C whilst mixing continues; Mix until the filler is uniformly dispersed, and the mix is uniform, typically 1½ - 2 minutes.
5. It is important to maintain constant mixing times throughout to ensure consistent color and to avoid introducing excessive air into the system.

APPLICATION

Scratch Primer:
Sikafloor® BC 920 shall be applied to a cured scratch coat of Sikafloor P 920 of 0.8mm nominal thickness at a consumption rate of 1.2 – 1.5 kg/m² .
The scratch coat is applied to the prepared substrate using a steel trowel, pin rake trowel or squeegee. The scratch coat shall be allowed to dry completely to achieve a tack free surface before overcoating with Sikafloor® BC 920.
Before progressing further, ensure that substrate is fully sealed with scratch coat primer and if required apply another coat of scratch primer to ensure complete sealing of substrate.
Sealed substrate is very important to ensure the performance of Sikalfoor XTC as a system Please take note of the overcoating times for scratch coat before applying the Bodycoat.

Bodycoat:
Spread the mixed material over the dry scratch coat at a consumption of 1.5 to 3.0 kg/m² using pin rake trowel or steel trowel. The pins of the pin rake adjusted to appropriate depth. Use steel trowel for edge work. Use a spiked roller to produce smooth even finish. The whole floor should spike rollered twice. On the first pass the spike roller should be pushed right through the material to substrate to assist the flow, remove pin rake marks and to flatten the floor. Subsequent passes with the roller held lightly just upon the surface to bring the resin up to the surface and improve aesthetics.

CLEANING OF TOOLS

Clean all tools and application equipment with Thinner C immediately after use. Hardened / cured material can only be mechanically removed.

MAINTENANCE

CLEANING

To maintain the appearance of the floor after application, Sikafloor® BC 920 must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc. using suitable detergents and waxes.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product 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 Limited (Vietnam)
Nhon Trach 1 Industrial Zone,
Nhon Trach Dist., Dong Nai Province,
Vietnam
Tel: (84-251) 3560 700
Fax: (84-251) 3560 699
sikavietnam@vn.sika.com