**PRODUCT INFORMATION**



# Körapur 689

KÖMMERLING CHEMISCHE FABRIK GMBH

**For coating floors of lorries, containers, sales vehicles, caravans, caravanettes, etc. on glass-fibre reinforced plastics, aluminium, primed steel sheets and timber**

- **Permitted to come into contact with foodstuffs, physiologically unobjectionable**
- **Test certificate available**
- **Particularly suitable for fresh service, meat, fish and deepfreeze vehicles (tested down to -30°C)**

## TECHNICAL DATA

| | | | |
|---|---|---|---|
| Base | Polyurethane, two-component, solvent-free | | |
| Colour | Grey, approx. RAL 7037 | | |
| Consistency | | | |
| Density | | | |
| - resin | 1.5 | g/cm³ | DIN 53 479 |
| - hardener | 1.2 | g/cm³ | |
| - mix | 1.4 | g/cm³ | |
| Viscosity | | | |
| - resin | 12.000 | mPa•s | Brookfield RVT |
| - hardener | 50 | mPa•s | |
| - mix | 3.600 | mPa•s | |
| Hardener / accelerator | **Köracur TH 240** | | |
| Mixing ratio | 4 : 1 | units by weight | |
| resin : hardener | 3.3 : 1 | units by volume | |
| Pot life | 40 | min (+20°C) | |

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Date: 2023.10.14 19:51:23 EEST
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Location: Moldova

## PROCESSING

### Processing temperature

+20°C to +22°C

### Preparation

The surfaces to be coated must be disposed horizontally, dry and free from dust and grease. The substrates must be prepared in order to assure a good adhesion.
Uncoated wooden sheets must not exceed 8–12 % of humidity. Coats on wooden sheets must be removed completely by grinding. Sheet joints are to be bended by tongue and groove and by frictional connection. If necessary, a glass fibre cloth strip must be inserted in order to avoid the formation of tearings and marks. Fill holes and sinkings, e. g. with with **Körapur 666**. Polyester must be thoroughly grinded. Polyester surfaces which may contain release agents, such as paraffine, must be sand blasted. Degrease and grind stainless steel and aluminium surfaces. Adhesion must be tested for compatibility by carrying out preliminary trials. The use of a suitable primer improves the bond strength and ageing characteristics, as well as resistance to hydrolysis.
When repairing older floors, particular care must be given to the pretreatment of the substrate.
Good results are achieved with sand blasting.

### Coating

Mix resin and hardener intensively in the weight ratio 4 : 1 with a stirrer unit (approx. 400 rpm), until no colour differences are still discernible. Pour the mixed compound into another clean vessel. Process only from this 2nd vessel.
The mixing process must be carried out thoroughly, but should not last longer than 5–8 minutes overall. One mixing unit of **Körapur 689** = 15 kg is sufficient for approx. 3 m² floor covering with a layer thickness of 3–4 mm. Mark this area on the floor by means of a line. Pour out the content of the mixing vessel immediately in 2 portions and disperse with a toothed spatula. After stirring, the compound must be processed within a maximum of 15 minutes, so that optimum flow is ensured. The coated surfaces can be exposed to light strain after 6–8 hours. The final coat strength is reached after 24–34 hours.
For vertical or inclined surfaces the desired creep stability can be achieved by mixing **Körathix PU** to the A component before adding the hardener. The additional quantities of **Körathix PU** are 0.5 to 1 %. Please note: **Körathix PU** shortens the pot-life.

## CLEANING

**Körasolv PU**.
Clean tools immediately after use. Cured adhesive can only be removed mechanically.

## SPECIAL NOTES

### Storage

Do not store at temperatures below +10°C and not for more than 12 months.

## SAFETY

Please read our Safety-Data-Sheet and the labels of each product before use.
Pay particular attention to the directions given in the Dangerous Substance Regulations.
Make sure the safety data sheet is readily available as it gives valuable information regarding the safe usage and disposal of the product and what to do in the event of an accident involving the product.

## PACKAGING UNITS

**Körapur 689 A + B:**
15 kg mixing unit in stacked container

## PRODUCT NUMBER

**C44853**

**For safety related data please refer to the safety data sheet!**



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Zertifikat: 01 100 044853
ISO 14001:2004
Zertifikat: 01 104 053913
OHSAS 18001:1999
Zertifikat: QA 05 116 4030

TÜV
SÜDDEUTSCHLAND

# Test report

| | |
|---|---|
| Order no.: | KL |
| Employee in charge: | Becher |
| Customer: | Kömmerling Chemische Fabrik GmbH & Co.<br>Zweibrücker Straße 200<br>66954 Pirmasens |
| Date of order: | August 17, 1998<br>November 17, 1998 |
| Order reference: | H. Fuhrmann |
| Purpose of order: | Analyses of a polyurethane coating (here: Körapur 689) |


**Bau und Betrieb**

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Munich, 1999-04-16
FEKlbe

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This report consists of 5 pages and 0 Annexes



The test results refer exclusively to the inspected test objects

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## 1 Order

Kömmerling Chemische Fabrik GmbH & Co., Pirmasens, commissioned TÜV Bau und Betrieb GmbH, Institute for Plastics, to analyze the polyurethane coating Körapur 689 in line with the Consumer Goods Regulation for the food sector.

## 2 Sample description

According to Kömmerling, the polyurethane coating concerned is the following product:

Körapur 689 polyurethane coating

The Institute for Plastics was provided with a sample board of the material for the purpose of analysis.

## 3. Analyses and results

### 3.1 Overall migration

The analysis was conducted in line with Article 35 LMBG (Food and Consumer Products Act)

| | |
|---|---|
| Duration of migration analysis: | 10 days at 40°C. |
| Tests conducted using: | distilled water |
| | 3% acetic acid |
| | 15% ethanol |

Analyses with fatty simulants were not conducted.

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Results of analysis:

| Test medium | Körapur 689 residue in mg/dm² | Limit value in mg/dm² |
|---|---|---|
| distilled water | 3.4 | 20 |
| 3% acetic acid | 17 | |
| 15% ethanol | 0.8 | |

### 3.2 Analysis for free monomeric isocyanates

The analysis for free monomeric isocyanates was carried out in line with B II XXXIX.

Results of analysis:
There was no evidence of free monomeric isocyanates in the analyzed material. The detection limit was 0.1 µg/g.

### 3.3 Analysis for cadmium

Description of method:
The analysis for cadmium was conducted in line with DIN 38406-E19

Results of analysis:
There was no evidence of cadmium in the material (detection limit 0.01 mg/dm²).

### 3.4 Phenol analysis

The phenol index was determined in line with DIN 38409-H16

Results of analysis:
There was no evidence of phenol in the analyzed sample (detection limit 0.01mg/dm²).

### 3.5 Analysis for peroxide oxygen

The analysis was conducted in line with B II V and VI.

Results of analysis
There was no evidence of peroxide oxygen

## 4. Summary

Kömmerling Chemische Fabrik GmbH & Co., Pirmasens, commissioned TÜV Süddeutschland Bau und Betrieb GmbH, Institute for Plastics, to analyze a polyurethane coating in line with the Consumer Goods Regulation for the food sector.

According to the Consumer Goods Regulation, a migration value of 20 mg/dm² must not be exceeded in the migration test conducted with test food products after immersion for 10 days at 40°C in the various test simulants (distilled water, 3% acetic acid, 15% ethanol). The analyzed PU coating satisfies these requirements. The values determined are presented in Section 3.1.

Consumer goods made of polyurethane must not contain any ascertainable residues of free monomeric isocyanates. In the analyzed samples, the content of free monomeric isocyanates was below the detection limit of 0.2 µg/g.

Consumer goods made of polyurethane must not contain more than 0.5 mg/dm² of phenol. There was no evidence of phenol in the analyzed sample (detection limit 0.01 mg/dm²).

There was no evidence of cadmium or peroxide oxygen, either.

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Analyses for primary aromatic amines, hexamethylene diamines and dihydric alcohols were waived. Analyses of overall migration with test fat (olive oil) as the test simulant were not conducted either.

Institute for Plastics

(Kühne)

TÜV SÜDDEUTSCHLAND BAU UND BETRIEB GMBH

Officially Authorized Expert

i.V.

(Becher)