
	Technical Data Sheet Floorsil™ 2		
Date: 20.08.2011	Issue 5	Prepared: J.Bormuth	Release: PM / QM

RTV-1 silicone sealant for high-duty floor joints and acidproof constructions

AIRBUS Spec.: DA4-653-3SF ; Issue 8; Date: 10/10/01

Description

Floorsil™ 2

- is a high-performance one-component silicone sealant
- is based on a oxime cross-linking system
- vulcanizes at room temperature (RTV)

Floorsil™ 2 is designed for applications in the, aircraft industry. Sealing non-textile floor coverings made of silicone, PVC in aircrafts.

Please note: Floorsil 2 is not suitable for sewage applications, for motorway and runway applications. Do not use Floorsil 2 for sealing applications around petrol pumps.



Advantages

- + Especially designed for high – duty floor joints and acid proof constructions in contrast to conventional sealants, Floorsil 2 shows a very high notched impact value and an extreme resistance to chemicals
- + Fast curing and short tack – free time
- + Excellent compatibility and adhesion to silicone floor coverings
- + Excellent weatherability, resistance to ageing, UV-radiation, temperature resistance
- + Resistance to lift truck and fork lift traffic
- + Resistance to steam jet cleaning
- + Excellent resistance to detergents
- + Extreme resistance to chemicals (see chapter 2.)
- + Ready to use
- + High tensile strength and high shore – A – Hardness ensure an excellent notched impact value
- + Contains no solvents, formaldehyde, CFC, PCB, PCP

Chapter 1.: Technical data

Viscosity:	Non-sag, pasty
Density at 23 °C, 50 % RH: ISO 2781	~ 1.16 g/cm ³
Shore-A-hardness after 7 d at 23 °C, 50 % RH; ISO 868	- 38
Temperature resistance:	- 40 to + 265 °C
Tooling temperature:	+ 5 to + 35 °C
Skin-forming time at 23 °C, 50 % RH:	~ 10 min. (standard)
Curing in 24 hours at 23 °C, 50 % RH:	~ 2 – 3 mm
Tensile strength: ISO 37, Type 2 test piece	~ 2,9 N/mm ²
Tensile elongation: ISO 37, Type 2 test piece	~ 400 %
Modulus at 100 % elongation:	~ 1,00 N/mm ²
Movement capability	~ 20 %
Shelf life at 23 °C, 50 % RH: Cartridge	15 months

These data are not intended for use in preparing specifications. Please contact **METZELER** before writing specifications.

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Chapter 2: Resistance to chemicals at room temperature:

Chemical	Concentration	Resistance to chemical
Acetic acid, 23°C; 30 min	10 %	+
Cleaning Agent AMS 1550, 23 °C; 30 min	-	+
Desinfectant agent AMS 1452: 23 °C; 30 min	-	+
Hydrochloric acid	10 %	0
Caustic soda solution	10 %	+
Caustic soda solution	20 %	+
Ammonia solution	25 %	+
Ethylalcohol		+
Acetone		0
Petrol		-
Diesel fuel		-
Ethylene glycole		+
Formalin	10 %	+
Cooler Antifreeze ARAL Pure		
Antifreeze : water		+
1 : 2 (-20°C)		+
1 : 1,5 (-27°C)		+
1 : 1 (-40°C)		+
Sea water		+
Methanol		+
Cold degreasingagent ARAL		-

Agenda:

+	RESISTANCE TO CHEMICAL
0	Short – term sesisatnce to chemical (72 hours)
-	Not resistance

2. Instructions for use

2.1. Surface preparation

Compatibility: Paints, lacquers, plastics and any other coatings must be compatible to the sealant/adhesive.

Cleaning: Clean all joints/substrates, remove all foreign matter and contaminants such as mould-release agents, preserving agents, grease, oil, dust, water, frost, surface dirt, old sealants/adhesives and other substances which can affect adhesion. The joint edges/substrates must be firm.

Cleaners for non-porous substrates: They should be cleaned methylated spirit or other cleaners on an acetone or isopropanol basis and a clean, lintfree, cotton cloth.

2.2. Adhesion and Priming

Floorsil products are high-performance and highly specialized products which exhibit an excellent primerless adhesion to Airfloor and Airflex products!

For PVC and similar materials please use **Floorsil 1217**



3. Packaging

Floorsil™ 2 is packed in 310 ml cartridges. A carton is packed with 12 cartridges.
You can have special cartridges on request.

4. Application sealant

Avoid direct contact between sealant and plasticizer emigrating products: Direct contact between sealant and the following plasticizer emigrating products should be avoided because these products may cause yellowing of light-coloured silicone sealants: e.g. butyl rubber; ethylenepropylenedienemonomeropolymer (EPDM), neoprene, bitumious and products.

Application sealant: Sealant must be applied after the primer has dried up for least 15 minutes

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Avoid air entrapment: The joint must be completely filled to avoid air entrapment and to make the joint leak-proof

Tooling / smoothing: The sealant must be smoothly tooled before the skin – formation in order to ensure integral contact with joint flanks.

Masking tapes: Masking tapes must be removed immediately after tooling

Steam jet apparatus: On using a steam – jet apparatus the distance between the joint and the steam nozzle is to be at least 50 cm.

Using the sealed objects the first time: Floorsil 2 must have cured completely before the sealant object is exposed to mechanical or chemical stress the first time. Floorsil 2 should have cured at least 24 to 48 hours at room temperature (see chapter 1. For curing data)

5. Safety precautions during processing, First-aid, Disposal

See Material Safety Data Sheet

6. Warranty

All information, data, direction or advice presented by METZELER are believed to be accurate and reliable, but do not absolve the user from carefully checking all supplies immediately on receipt. However, as METZELER has no control over the uses to which its products may be put or the conditions of use, it is the user's responsibility to determine suitability of use e.g. by performing own tests. METZELER makes no warranties concerning the fitness or suitability of its products for a particular use. Statements concerning possible or suggested uses of the materials described herein can not be seen as warranty for your application. METZELER warrants only that its products will meet its specifications. We reserve the right to alter product constants within the scope of technical progress or new developments.

Of course, METZELER can perform tests and deliver a special written recommendation for a specific application on request.

If the application in which the products are used requires governmental approval or clearance, the user must obtain it.

In the event of a claim due to failure of our products, METZELER's sole liability is limited to provide sufficient product for replacement. METZELER will not be liable for any labour or any other costs associated with the repair, if the failure is due to incorrect use of any materials.

The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position.

7. Edition

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This edition becomes invalid in the event of a republication.

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