



# FILLING PRODUCTS

Chemotechnische Fabrik e.K.



Product number FP F1000

## PRODUCT DATA SHEET

### FILLING 1000®

#### for extremely high temperature and pressure resistance

#### Description

You have chosen to purchase a high quality, single-component sealing material in paste form with **FILLING 1000®**. High temperatures combined with pressure on selective and shallow, trough-like corrosion or erosion damage (cavities) on housing butt joints make extremely high demands on the quality of the sealing compound. **The use of this product means that costly, mechanical pretreatments are no longer required.** This is particularly important when sealing metallic joints in **steam and gas turbines**, compressors, generators, expanders, pumps, housings and flange joints etc. You are optimally equipped for these jobs with **FILLING 1000®**.

#### Temperature resistance

**FILLING 1000®** is temperature resistant **up to 950 °C** against: hot steam and hot air, hot and cold water, fuel oils and lubricants, as well as crude oil and natural gas.

#### Pressure resistance

**FILLING 1000®** offers such a high level of adhesion on sealing surfaces and butt joints that we guarantee a one hundred per cent seal up to a pressure of **275 bar**. In addition, the pressure resistance for flanges without sealing rings is guaranteed up to **570 bar** and for screw joints it is even guaranteed up to **670 bar**.

#### Service life

We guarantee a service life for **FILLING 1000®** of **10 years** for use on machined sealing surfaces (butt joints). The prerequisite for this guarantee is that the product is used in accordance with the instructions and that the service intervals are observed in the product segment **steam and gas turbines**, as well as for the application areas named above.

#### Fields of application

**FILLING 1000®** is suitable for sealing all surface sizes. The quality of the sealing surfaces is equivalent to machined or abraded surfaces with a finishing accuracy of  $Ra = 0.8 \mu m$  to  $1.2 \mu m$ . Selective and shallow, trough-like corrosion or erosion damage on these surfaces of  $\leq 0.5 mm$  is compensated with the product **FILLING 1000®**.

For spot repairs on badly damaged areas of  $\leq 1.0 mm$ , we recommend the product **FILLING 2000®**.

#### Application

Using a putty knife, apply **FILLING 1000®** with force to the clean, grease-free damaged surfaces. The layer thickness to be applied is **0.2 mm** to **0.3 mm**. In order to make application easier, you can remove the anticipated amount required and heat it up to 100 °C. This is not absolutely necessary.

**FILLING 1000® may not be mixed with anything. It can be subjected to load immediately!**

It does not cure, will not change its consistency even after several hours, and remains flexible and elastic.

**FILLING 1000®** is dark brown.

Fill the **entire sealing surface area** with **FILLING 1000®**.

#### Storage

**FILLING 1000®** is packaged in 750 g tins.

If stored correctly, **FILLING 1000®** has a **storage life of 5 years** in closed tins.

The properties and workability of the product remain unchanged over this period of time.

Close the tin again properly if only part of its contents have been used.

Product data sheet as at 02.01.2025. Current download version at [www.filling-products.com](http://www.filling-products.com).



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## STORAGE LIFE CERTIFICATE

### **FILLING basic® - FILLING 1000® - FILLING 2000®**

#### **for extremely high temperature and pressure resistance**

In addition to the data in our product documents, such as the 2025 product data sheet and the safety data sheet as per 1907/2006/EC, Article 31, we confirm the following additions to **our General Agency**:

## QUALITY MANAGEMENT

**FILLING PRODUCTS** is certified in accordance with DIN EN ISO 9001. To ensure the high quality of our products and services and to continually improve our organisation, we continuously perform in-house audits and thus make sure that our company meets the requirements of the quality management standard.

### **Product service life**

For the products **FILLING basic®**, **FILLING 1000®** and **FILLING 2000®** we guarantee a product service life of **10 years** for machined sealing surfaces (butt joints) with a finishing accuracy of  $R_a = 0.8 \mu\text{m}$  to  $1.2 \mu\text{m}$ , as well as localised pitting, flat corrosion or erosion damage on these surfaces of  $\leq 1.0 \text{ mm}$ . The prerequisite for this is usage in accordance with instructions and with regular servicing as required for **steam and gas turbines** as well as other usage areas.

For high-pressure turbines (H), medium-pressure turbines (M) and low-pressure turbines (L), we guarantee that the product will withstand hot steam and hot air, hot and cold water, light fuel oils and lubricants as well as crude oil and natural gas up to **950°C** and withstand pressure up to **275 bar**.

### **Service life data on the tin**

The following information on the tin label of our products ensures reliable monitoring of service life properties:

**Filling date, unopened usable until, service life after opening, opened on** (the last detail is to be entered by qualified staff working for the customer).

### **Service life data in storage**

#### Unopened tin

If stored correctly, we guarantee a service life of the product in the tin of **5 years**.

#### Opened tins

If the tins are resealed correctly after partial use, we guarantee a service life of the product of **3 years**.

### **Product use**

After removal of **FILLING basic®**, **FILLING 1000®** or **FILLING 2000®**, we guarantee a product service life of **10 years** for the product in use.

Storage life certificate as at 02.01.2025. Current download version at [www.filling-products.com](http://www.filling-products.com).

Görlitz, 02.01.2025

## **FILLING PRODUCTS**

Chemotechnische Fabrik e.K.

Company Management

Dieter Bartkowiak



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Chemotechnische Fabrik e.K.



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## SAFETY DATA SHEET

### **FILLING 1000®**

**for extremely high temperature and pressure resistance**

**Safety data sheet according to 1907/2006/EC, Article 31**

**FILLING 1000®**

**Date: 02.01.2025 replaces all previous safety data sheets**

**The latest version may be found on our website: [www.filling-products.com](http://www.filling-products.com)**

The information provided here is based on our knowledge and experience at the current time. The safety data sheet sets out the safety requirements relating to our product and does not constitute a warranty of any particular properties. It is the responsibility of the consignee of our product to observe the existing laws and regulations.

## **SECTION 1: Identification of the substance / mixture and of the company / undertaking**

### **1.1. Product identifier:**

**Registered trade name: FILLING 1000®**

### **1.2. Relevant identified uses of the substance or mixture and uses advised against:**

**Application of the substance / the preparation:** Sealing of metallic joints.

### **1.3. Details of the supplier of the safety data sheet**

#### **Manufacturer/Supplier:**

FILLING PRODUCTS Chemotechnische Fabrik e.K.  
Johannes-Robert-Becher-Straße 35  
02827 GÖRLITZ  
GERMANY

Tel. +49 3581 7049-517

Fax +49 3581 750566

email: [management@filling-products.com](mailto:management@filling-products.com)

**Further information obtainable from:** FILLING PRODUCTS Chemotechnische Fabrik e.K.

### **1.4. Emergency telephone number:**

Tel. +49 3581 7049-518 (24h)

## **SECTION 2: Hazards identification**

### **2.1. Classification of the substance or mixture:**

**Classification according to Regulation (EC) No 1272/2008:** The product is not classified according to the CLP regulation.



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#### 2.2. Label elements:

**Labelling according to Regulation (EC) No 1272/2008:** Void

**Hazard pictograms:** Void

**Signal word:** Void

**Hazard statements:** Void

#### 2.3. Other hazards:

**Results of PBT and vPvB assessment:**

**PBT:** Not applicable

**vPvB:** Not applicable

## SECTION 3: Composition / information on ingredients

### 3.1. Chemical characterisation: Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.  
The formulation contains both inorganic and organic additives.

#### Dangerous components:

Linseed oil, oxidized	CAS: 68649-95-6	EINECS: 272-038-8	REACH: 01-2119484875-20
Manganese ferrite black spinel	CAS: 68186-94-7	EINECS: 269-056-3	REACH: -

**Additional information:** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures:

**General information:** Take affected persons out into the fresh air. Do not leave affected persons unattended.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water. Call a doctor immediately.

**After swallowing:** Call a doctor immediately.

### 4.2. Most important symptoms and effects, both acute and delayed:

No further relevant information available.



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#### 4.3. Indication of any immediate medical attention and special treatment required:

No further relevant information available.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media:

**Suitable extinguishing media:** CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### 5.2. Special hazards arising from the substance or mixture:

No further relevant information available.

#### 5.3. Advice for firefighters:

**Protective equipment:** Do not inhale explosion gases or combustion gases.  
Wear self-contained respiratory protective device.

**Additional information:** Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures:

Wear protective clothing.  
Ensure adequate ventilation.

#### 6.2. Environmental precautions:

Do not allow product to reach sewage system or any water course.

#### 6.3. Methods and material for containment and cleaning up:

Pick up mechanically.  
Ensure adequate ventilation.

#### 6.4. Reference to other sections:

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.



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#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling:

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

**Information about fire - and explosion protection:** No special measures required.

##### 7.2. Conditions for safe storage, including any incompatibilities:

###### Storage:

**Requirements to be met by storerooms and receptacles:** Store in a cool location.

Store only in the original receptacle.

**Information about storage in one common storage facility:** Store away from foodstuffs.

**Further information about storage conditions:** None

##### 7.3. Specific end uses:

No further recommendations.

#### SECTION 8: Exposure controls / personal protection

**Additional information about design of technical facilities:** No further data; see item 7.

##### 8.1. Control parameters:

**Ingredients with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

##### 8.2. Exposure controls:

###### Personal protective equipment:

**General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

**Respiratory protection:** Not necessary if room is well-ventilated.

**Protection of hands:** Protective gloves.

Plastic gloves.

**Material of gloves:** The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.



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**Penetration time of glove material:** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Safety glasses

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties:

#### General Information:

**Form:** Viscous at 20 °C

**Colour:** Coloured

**Odour:** Characteristic

### 9.2. Other information:

**Density:** (25 °C) ~ 1.55 g/cm<sup>3</sup>

**Bulk density:** (20 °C) not applicable

**Vapour pressure:** (20 °C) < 1 hPa

**Viscosity:** (25 °C) no data

**Solubility in water:** (20 °C) insoluble

**Solubility in fat:** Partly miscible with common organic solvents

**pH:** Not applicable

**Flash point:** Non-flammable

**Ignition temperature:** Non-combustible

**Explosion hazards:** None

**Partition coefficient n-octanol/water, log P<sub>ow</sub>:** Not applicable

## SECTION 10: Stability and reactivity

### 10.1. Reactivity:

No further relevant information available.





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#### 10.2. Chemical stability:

Stable

#### 10.3. Possibility of hazardous reactions:

Reacts with strong oxidising agents.

#### 10.4. Conditions to avoid:

The product is stable at room temperature.

#### 10.5. Incompatible materials:

Strong oxidants

#### 10.6. Hazardous decomposition products:

Carbon monoxide and carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects:

**Acute toxicity** no significant risk.

**Primary irritant effect:**

**Skin corrosion/irritation** no significant risk.

**Serious eye damage/irritation** no significant risk.

**Respiratory or skin sensitisation** no significant risk.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

**Germ cell mutagenicity** no significant risk.

**Carcinogenicity** no significant risk.

**Reproductive toxicity** no significant risk.

**STOT-single exposure** no significant risk.

**STOT-repeated exposure** no significant risk.

**Aspiration hazard** no significant risk.

### SECTION 12: Ecological information

#### 12.1. Toxicity:

**Aquatic toxicity:** Not relevant





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#### 12.2. Persistence and degradability:

Not relevant

#### 12.3. Bioaccumulative potential:

Not relevant

#### 12.4. Mobility in soil:

Not relevant

#### Additional ecological information:

**General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water; Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

#### 12.5. Results of PBT and vPvB assessment:

**PBT:** Not applicable

**vPvB:** Not applicable

#### 12.6. Other adverse effects:

Water hazard class **WK 1 (slightly hazardous to waters)** (according to VwVwS publication dated 17.05.1999, formerly WK 0 which has now ceased to exist).

## SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods:

**European waste catalogue:** Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

#### 14.1. UN number:

ADR, ADN, IMDG, IATA Void

#### 14.2. UN proper shipping name:

ADR, ADN, IMDG, IATA Void



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- 14.3. Transport hazard classes:**  
ADR, ADN, IMDG, IATA Class: Void
- 14.4. Packing group:**  
ADR, IMDG, IATA Void
- 14.5. Environmental hazards:**  
Not applicable
- 14.6. Special precautions for the user:**  
Not applicable
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:**  
Not applicable

**UN "Model Regulation":** Void

## SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture:**

**Directive 2012/18/EU**

**Named dangerous substances - ANNEX I** None of the ingredients is listed.

- 15.2. Chemical safety assessment:** Not relevant

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Training hints:** Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.

### **Department issuing SDS:**

ADEEGO GmbH  
Wildsteig 4A  
42113 WUPPERTAL  
GERMANY

**Contact:** Dr. Axel Deeg



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#### **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

GHS: Globally Harmonised System of Classification and Labelling of Chemicals.

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

VOC: Volatile Organic Compounds (USA, EU).

PBT: Persistent, Bioaccumulative and Toxic.

vPvB: very Persistent and very Bioaccumulative.

Safety data sheet as at 02.01.2025. Current download version at [www.filling-products.com](http://www.filling-products.com).