

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

Rolf Kuhn GmbH

Revision date: 28.11.2017

### Kerafix® Flexpower H

11731-037

# ROLFKUHN GMBH

PASSIVER TECHNISCHER BRANDSCHUTZ

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

### 1.1. Product identifier

Kerafix® Flexpower H

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

#### Use of the substance/mixture

Intumescent building material based on graphite.  
formulated product / pasty intermediate.

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

|                 |                                                                    |                           |
|-----------------|--------------------------------------------------------------------|---------------------------|
| Company name:   | Rolf Kuhn GmbH                                                     |                           |
| Street:         | Jägersgrund 10                                                     |                           |
| Place:          | D-57339 Erndtebrück                                                |                           |
| Telephone:      | +49 2753 5945-0                                                    | Telefax: +49 2753 5945-21 |
| Contact person: | Anwendungstechnik                                                  |                           |
| e-mail:         | anwendungstechnik@rolfkuhn.com (Contact for technical information) |                           |
| Internet:       | www.kuhn-brandschutz.com                                           |                           |

### 1.4. Emergency telephone

#### number:

+49 (0) 6132 / 84463 (GBK GmbH)

Responsible for the safety data sheet: GBK GmbH, Ingelheim,  
sds@gbk-ingelheim.de

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

### 2.2. Label elements

#### Additional advice on labelling

The product does not require a hazard warning label in accordance with EC directives.

### 2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Complex mixture based on: source of carbon, Bonding material, special additives.

The product contains: Flame retardant

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

No hazards which require special first aid measures.

#### After inhalation

When used as intended, exposure through inhalation is not to be expected. In case of inhaling dust (possibly caused by abrasion) the affected person should be moved into fresh air. In case of unwellness seek medical advice.

#### After contact with skin

Remove and wash contaminated clothes before re-use. Wash off immediately with soap and plenty of water. Consult a doctor if skin irritation persists.

#### After contact with eyes

Remove contact lens. Rinse thoroughly with plenty of water, also under the eyelids. Summon a doctor immediately.



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#### After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Summon a doctor immediately.

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

See also chapter: 11.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

No data available.

### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Product itself does not burn. Fire-extinguishing activities according to surrounding.

##### **Unsuitable extinguishing media**

Not known.

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

None

#### **5.3. Advice for firefighters**

Protective equipment has to be chosen according to the ambient conditions.

### SECTION 6: Accidental release measures

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

Suitable gloves and eye protection/wear protective clothing.

#### **6.2. Environmental precautions**

Dispose of in closed containers. Do not discharge into the drains/surface waters/ground water.

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

Pick up mechanically, avoiding dust, and provide disposal in suitable recipients.

#### **6.4. Reference to other sections**

Information for personal protective equipment look up chapter 8.

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Ensure adequate ventilation, especially in confined areas. Avoid dust formation.

##### **Advice on protection against fire and explosion**

No specific fire preventions necessary. Pay attention to general rules of internal fire prevention.

##### **Further information on handling**

Take the usual precautions when handling with chemicals. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feeding stuffs. Remove and wash contaminated clothes before re-use.

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

##### **Requirements for storage rooms and vessels**

Protect against physical damage.

##### **Further information on storage conditions**

Protect from heat and direct solar radiation. Keep from freezing. To be kept tightly closed, in a cool and dry place.

#### **7.3. Specific end use(s)**

Intumescent building material based on graphite.

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### SECTION 8: Exposure controls/personal protection

#### **8.1. Control parameters**



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#### Exposure limits (EH40)

| CAS No     | Substance                    | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|------------|------------------------------|-----|-------------------|-----------|---------------|--------|
| 13463-67-7 | Titanium dioxide, respirable | -   | 4                 |           | TWA (8 h)     | WEL    |
|            |                              | -   | -                 |           | STEL (15 min) | WEL    |

#### 8.2. Exposure controls

##### Appropriate engineering controls

Technical and organisational measures must be applied preferentially (personal protection equipment must not be a permanent arrangement). Ensure adequate ventilation, especially in confined areas. Avoid the formation and deposition of dust.

##### Protective and hygiene measures

Take the usual precautions when handling with chemicals.

Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothes before re-use.

##### Eye/face protection

Eye wash bottle with pure water (EN 15154).

Tightly fitting goggles (EN 166).

##### Hand protection

Protective gloves (EN 374) Safety gloves for the site (EN420, Cat. 1 or 2).

Suitable materials also for extended, direct contact (recommended: protection index 6, corresponding to a permeation rate > 480 minutes according to EN 374): Nitrile rubber/nitrile latex - NBR (0,35 mm)

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

##### Skin protection

Wear closed/long working clothes.

##### Respiratory protection

Breathing protection is not necessary in the case of correct usage under normal conditions.

## SECTION 9: Physical and chemical properties

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

Physical state: formulated product / pasty intermediate

Colour: according to product specification

Odour: faint, characteristic

#### Test method

pH-Value: Not applicable

#### Changes in the physical state

Melting point: Not determined

Initial boiling point and boiling range: Not determined

Sublimation point: Not applicable

Flash point: Not applicable

Sustaining combustion: Not sustaining combustion

#### Flammability

Solid: Not applicable

#### Explosive properties

The product is not explosive.

Lower explosion limits: Not determined

Upper explosion limits: Not determined

Ignition temperature: Not applicable

#### Auto-ignition temperature

Solid: Not applicable



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Decomposition temperature: Not determined

#### **Oxidizing properties**

The product is not self-igniting

Vapour pressure: Not applicable

Density (at 20 °C): Not determined

#### **Solubility in other solvents**

Not determined

Partition coefficient: Not applicable

Viscosity / dynamic:  
(at 20 °C) Not determined

Viscosity / kinematic: Not determined

Solvent content: 0,0 %

### **9.2. Other information**

water solubility:

formulated product - insoluble

pasty intermediate - Miscible

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Under the influence of high temperature starts a physico-chemical reaction which increase the volume (~175°C).

### **10.2. Chemical stability**

Stable under normal conditions.

### **10.3. Possibility of hazardous reactions**

No hazardous reactions known.

### **10.4. Conditions to avoid**

Avoid effect of heat.

### **10.5. Incompatible materials**

Strong oxidizing agents, strong acids and strong bases.

### **10.6. Hazardous decomposition products**

Ammonia, aldehydes, alcohols, organic acids, carbon dioxide (CO<sub>2</sub>), Carbon monoxide (CO), sulfur oxides, nitrous oxides (NO<sub>x</sub>).

## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

#### **Toxicokinetics, metabolism and distribution**

No toxicological data available.

#### **Acute toxicity**

Based on available data, the classification criteria are not met.

#### **Irritation and corrosivity**

Based on available data, the classification criteria are not met.

#### **Sensitising effects**

Based on available data, the classification criteria are not met.  
No sensitizing effect known.

#### **Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

#### **STOT-single exposure**

Based on available data, the classification criteria are not met.

#### **STOT-repeated exposure**

Based on available data, the classification criteria are not met.



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#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Further information

If appropriately handled and if in accordance with the general hygienic rules, no damages to health have become known.

## SECTION 12: Ecological information

### 12.1. Toxicity

No data available.

### 12.2. Persistence and degradability

Not readily degradable.

### 12.3. Bioaccumulative potential

The product has not been tested. Because of the product's consistency and low solubility in water bioavailability is not likely.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT substance.

### 12.6. Other adverse effects

Not known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Advice on disposal

Disposal in accordance with local regulations.

formulated product: The hardened material can be disposed of together with the household rubbish or commercial waste. Unused material (liquid, pasty) must be disposed of as hazardous waste.

#### Waste disposal number of waste from residues/unused products

170904 CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES); other construction and demolition wastes; mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

#### Waste disposal number of contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

#### Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

## SECTION 14: Transport information

### Land transport (ADR/RID)

#### 14.1. UN number:

No dangerous good in sense of this transport regulation.

#### 14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

#### 14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

#### 14.4. Packing group:

No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

#### 14.1. UN number:

No dangerous good in sense of this transport regulation.

#### 14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

#### 14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

#### 14.4. Packing group:

No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)



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|                                          |                                                          |
|------------------------------------------|----------------------------------------------------------|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

#### Air transport (ICAO-TI/IATA-DGR)

|                                          |                                                          |
|------------------------------------------|----------------------------------------------------------|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

#### Other applicable information

Not applicable. No hazardous material as defined by the transport regulations.

## SECTION 15: Regulatory information

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

#### EU regulatory information

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

#### Additional information

This mixture is not classified as dangerous in according to Regulation (EC) No 1272/2008. (GHS)

#### National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

#### Changes

Update 2017; VO(EU) 2016/918, VO(EU) 2016/1179.

#### Abbreviations and acronyms

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (Agreement concerning the international carriage of Dangerous goods by Road);

IMDG-Code: International Maritime Code for Dangerous Goods;

ICAO: International Civil Aviation Organisation (IATA: The International Air Transport Association);

GHS: Globally Harmonized System of Classification, Labelling and Packaging of Chemicals;

EINECS: European Inventory of Existing Commercial Chemical Substances;

ELINCS: European List of Notified Chemical Substances;

CAS-Nr.: Chemical Abstracts Service;

LC50: Lethal concentration, 50%;

LD50: Lethal dose, 50%.

#### Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.



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This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*

