



### S-FIXX Black Filling Powder

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

### 1.1. Product identifier

**Product name** S-FIXX Black Filling Powder

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

**Identified uses** Filling powder for use with the cyanoacrylate adhesive provided in this kit.

**Uses advised against** No specific uses advised against are identified.

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

**Supplier** SFIXX LTD  
UNIT 15, OLD WALESWOOD  
COLLIERY MANSFIELD ROAD  
SHEFFIELD  
S26 5PQ  
UK +44 (0) 114 348 1262  
INFO@SFIXX.CO.UK

### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 114 348 1262 (Monday - Friday 09:00h - 17:00h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification

##### Physical hazards

Not Classified

##### Health hazards

Skin Irrit. 2 - H315 Eye Dam. 1 - H318

##### Environmental hazards

Aquatic Chronic 2 - H411

#### Classification (67/548/EEC or 1999/45/EC)

Xi; R41, R38. N; R51/53

#### Human health

Irritating to skin. Risk of serious damage to eyes.

#### Environmental

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2.2. Label elements

#### Pictogram



**S-FIXX Black Filling Powder**

**Signal word** Danger

**Hazard statements**  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**  
 P102 Keep out of reach of children.  
 P264 Wash contaminated skin thoroughly after handling.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves and eye protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER/doctor.  
 P501 Dispose of contents/container in accordance with national regulations.

**Contains** Calcium Oxide

**Supplementary precautionary statements**  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P321 Specific treatment (see medical advice on this label).  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P391 Collect spillage.

**2.3. Other hazards**

This product does not contain any substances classified as PBT or vPvB.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

<p><b>Iron Oxide</b> <span style="float: right;"><b>25 - &lt;50%</b></span>  <b>CAS number:</b> 1332-37-2 <b>EC number:</b> 215-570-8                  Substance with National workplace exposure limits.</p>
<p><b>Classification</b> <span style="float: right;"><b>Classification (67/548/EEC or 1999/45/EC)</b></span>                  Not Classified</p>
<p><b>Aluminium Oxide</b> <span style="float: right;"><b>10 - &lt;25%</b></span>  <b>CAS number:</b> 1344-28-1 <b>EC number:</b> 215-691-6                  Substance with National workplace exposure limits.</p>
<p><b>Classification</b> <span style="float: right;"><b>Classification (67/548/EEC or 1999/45/EC)</b></span>                  Not Classified</p>
<p><b>Magnesium Oxide</b> <span style="float: right;"><b>10 - &lt;25%</b></span>  <b>CAS number:</b> 1309-48-4 <b>EC number:</b> 215-171-9                  Substance with National workplace exposure limits.</p>
<p><b>Classification</b> <span style="float: right;"><b>Classification (67/548/EEC or 1999/45/EC)</b></span>                  Not Classified</p>

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<b>Zinc Oxide</b> <span style="float: right;"><b>10 - &lt;25%</b></span>	
CAS number: 1314-13-2 EC number: 215-222-5 M factor (Acute) = 1 M factor (Chronic) = 1	
<b>Classification</b> Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	<b>Classification (67/548/EEC or 1999/45/EC)</b> N; R50/53
<b>Magnesium Silicate</b> <span style="float: right;"><b>10 - &lt;25%</b></span>	
CAS number: 1343-88-0 EC number: 215-681-1 Substance with National workplace exposure limits.	
<b>Classification</b> Not Classified	<b>Classification (67/548/EEC or 1999/45/EC)</b>
<b>Calcium Oxide</b> <span style="float: right;"><b>10 - &lt;25%</b></span>	
CAS number: 1305-78-8 EC number: 215-138-9	
<b>Classification</b> Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xi; R41, R37/38
<b>Mica</b> <span style="float: right;"><b>5 - &lt;10%</b></span>	
CAS number: 12001-26-2 EC number: — Substance with National workplace exposure limits.	
<b>Classification</b> Not Classified	<b>Classification (67/548/EEC or 1999/45/EC)</b>

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Inhalation**

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

**Ingestion**

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if a large quantity has been ingested.

**Skin contact**

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

**Eye contact**

Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately.

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

**General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**

May cause respiratory system irritation.

**Ingestion**

May cause discomfort if swallowed.

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### Skin contact

Causes mild skin irritation.

### Eye contact

May cause serious eye damage.

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

#### Notes for the doctor

Treat symptomatically.

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## **SECTION 5: Firefighting measures**

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### **5.1. Extinguishing media**

#### Suitable extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

#### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

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

#### Specific hazards

Not known.

#### Hazardous combustion products

Irritating fumes may be created.

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

#### Protective actions during firefighting

Product contains environmentally hazardous substance(s) - contain extinguishing water where possible.

#### Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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## **SECTION 6: Accidental release measures**

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

#### Personal precautions

Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Avoid contact with skin and eyes. Avoid generation and spreading of dust.

### **6.2. Environmental precautions**

#### Environmental precautions

Avoid discharge to the aquatic environment. Avoid or minimise the creation of any environmental contamination.

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

#### Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid generation and spreading of dust. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Reuse or recycle products wherever possible. For waste disposal, see section 13.

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

#### Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

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## **SECTION 7: Handling and storage**

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

#### Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet.

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Provide adequate ventilation. Avoid spilling. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product.

**Advice on general occupational hygiene**

No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

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

**Storage precautions**

Keep out of the reach of children. Keep container tightly closed and dry.

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

**Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

**SECTION 8: Exposure Controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limits**

**Iron Oxide**

Long-term exposure limit (8-hour TWA): WEL 5 mg/m3 fume  
Short-term exposure limit (15-minute): WEL 10 mg/m3 fume  
as Fe  
(Iron oxide.)

**Aluminium Oxide**

Long-term exposure limit (8-hour TWA): WEL 10 mg/m3 inhalable dust  
Long-term exposure limit (8-hour TWA): WEL 4 mg/m3 respirable dust

**Magnesium Oxide**

Long-term exposure limit (8-hour TWA): WEL 10 mg/m3 inhalable dust  
Long-term exposure limit (8-hour TWA): WEL 4 mg/m3 fume and respirable dust

**Magnesium Silicate**

Long-term exposure limit (8-hour TWA): WEL 1 mg/m3 respirable dust  
(Talc.)

**Calcium Oxide**

Long-term exposure limit (8-hour TWA): WEL 2 mg/m3

**Mica**

Long-term exposure limit (8-hour TWA): WEL 10 mg/m3 total inhalable dust  
Long-term exposure limit (8-hour TWA): WEL 0.8 mg/m3 respirable dust

WEL = Workplace Exposure Limit

**8.2. Exposure controls**

**Protective equipment**



**Appropriate engineering controls**

Provide adequate ventilation. Provide eyewash station.

**Eye/face protection**

Wear chemical splash goggles.

**Hand protection**

It is recommended that chemical-resistant, impervious gloves are worn. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove

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consultation with the glove supplier/manufacture the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

**Other skin and body protection**

Wear appropriate clothing to prevent repeated or prolonged skin contact.

**Hygiene measures**

Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet.

**Respiratory protection**

Provide adequate ventilation. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Wear a suitable dust mask. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.

**Environmental exposure controls**

Keep container tightly sealed when not in use. Avoid or minimise the creation of any environmental contamination.

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**SECTION 9: Physical and Chemical Properties**

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**9.1. Information on basic physical and chemical properties****Appearance**

Powder.

**Colour**

Black.

**Odour**

Odourless.

**Odour threshold**

Not relevant.

**pH**

Not determined.

**Melting point**

Not determined.

**Initial boiling point and range**

Not relevant.

**Flash point**

Not relevant.

**Evaporation rate**

Not relevant.

**Evaporation factor**

Not relevant.

**Flammability (solid, gas)**

Not determined.

**Upper/lower flammability or explosive limits**

Not relevant.

**Vapour pressure**

Not relevant.

**Vapour density**

Not relevant.

**Relative density**

1.5 - 2.5 g/cm<sup>3</sup>

**Solubility(ies)**

Slightly soluble in water.

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### Partition coefficient

Not determined.

### Auto-ignition temperature

Not relevant.

### Decomposition Temperature

Not determined.

### Viscosity

Not relevant.

### Explosive properties

Not considered to be explosive.

### Explosive under the influence of a flame

Not considered to be explosive.

### Oxidising properties

Does not meet the criteria for classification as oxidising.

## 9.2. Other information

### Other information

None.

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## SECTION 10: Stability and reactivity

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### 10.1. Reactivity

Reacts with water. Acids.

### 10.2. Chemical stability

#### Stability

Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation.

### 10.5. Incompatible materials

#### Materials to avoid

Acids. Water, moisture.

### 10.6. Hazardous decomposition products

Thermal decomposition or combustion products may include the following substances: Irritating fumes may be created.

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## SECTION 11: Toxicological information

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### 11.1. Information on toxicological effects

#### Acute toxicity - oral

##### Notes (oral LD50)

Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

##### Notes (dermal LD50)

Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

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### Notes (inhalation LC50)

Based on available data the classification criteria are not met.

### Skin corrosion/irritation

#### Animal data

Irritating. Skin Irrit. 2 - H315

### Serious eye damage/irritation

May cause serious eye damage. Eye Dam. 1 - H318

### Respiratory sensitisation

Based on available data the classification criteria are not met.

### Skin sensitisation

Based on available data the classification criteria are not met.

### Germ cell mutagenicity

#### Genotoxicity - in vitro

Based on available data the classification criteria are not met.

#### Genotoxicity - in vivo

Based on available data the classification criteria are not met.

### Carcinogenicity

Based on available data the classification criteria are not met.

### Reproductive toxicity

#### Reproductive toxicity - fertility

Based on available data the classification criteria are not met.

#### Reproductive toxicity - development

Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

#### STOT - single exposure

Based on available data the classification criteria are not met.

### Specific target organ toxicity - repeated exposure

#### STOT - repeated exposure

Based on available data the classification criteria are not met.

### Aspiration hazard

Based on available data the classification criteria are not met.

### Toxicological information on ingredients.

#### Iron Oxide

#### Acute toxicity - oral

##### Acute toxicity oral (LD50 mg/kg)

10,000.0

##### Species

Rat

##### Notes (oral LD50)

Based on available data the classification criteria are not met. REACH dossier information.

##### ATE oral (mg/kg)

10,000.0



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### Acute toxicity - dermal

#### Notes (dermal LD50)

Based on available data the classification criteria are not met. REACH dossier information.

### Acute toxicity - inhalation

#### Notes (inhalation LC50)

Based on available data the classification criteria are not met. REACH dossier information.

### Skin corrosion/irritation

#### Animal data

Dose: 500mg, 4 hours, Rabbit Oedema score: No oedema (0). Erythema/eschar score: No erythema (0). Based on available data the classification criteria are not met. REACH dossier information.

### Serious eye damage/irritation

Based on available data the classification criteria are not met. REACH dossier information.

### Respiratory sensitisation

Based on available data the classification criteria are not met. REACH dossier information.

### Skin sensitisation

Based on available data the classification criteria are not met. REACH dossier information.

### Germ cell mutagenicity

#### Genotoxicity - in vitro

Gene mutation: Negative. Chromosome aberration: Negative. Based on available data the classification criteria are not met. REACH dossier information. Estimated value.

#### Genotoxicity - in vivo

Based on available data the classification criteria are not met. REACH dossier information.

### Carcinogenicity

Dose level: <40 mg/kg/day, Combined, Rat Based on available data the classification criteria are not met. REACH dossier information.

### Reproductive toxicity

#### Reproductive toxicity - fertility

Based on available data the classification criteria are not met. REACH dossier information.

#### Reproductive toxicity - development

Based on available data the classification criteria are not met. REACH dossier information.

### Specific target organ toxicity - single exposure

#### STOT - single exposure

Based on available data the classification criteria are not met. REACH dossier information.

### Specific target organ toxicity - repeated exposure

#### STOT - repeated exposure

NOAEC not identified, Inhalation, Rat Based on available data the classification criteria are not met. REACH dossier information.

### Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

## Aluminium Oxide

### Acute toxicity - oral

#### Acute toxicity oral (LD50 mg/kg)

15,900.0

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### **Species**

Rat

### **Notes (oral LD50)**

Based on available data the classification criteria are not met. REACH dossier information.

### **ATE oral (mg/kg)**

15,900.0

### **Acute toxicity - dermal**

#### **Notes (dermal LD50)**

Based on available data the classification criteria are not met. REACH dossier information.

### **Acute toxicity - inhalation**

#### **Acute toxicity inhalation (LC50 dust/mist mg/l)**

7.6

### **Species**

Rat

### **Notes (inhalation LC50)**

Based on available data the classification criteria are not met. REACH dossier information.

### **ATE inhalation (dusts/mists mg/l)**

7.6

### **Skin corrosion/irritation**

#### **Animal data**

Dose: 0.5g, 24 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Based on available data the classification criteria are not met. REACH dossier information.

### **Serious eye damage/irritation**

Based on available data the classification criteria are not met. REACH dossier information.

### **Respiratory sensitisation**

Mouse: Not sensitising. Based on available data the classification criteria are not met. REACH dossier information.

### **Skin sensitisation**

Draize test - Guinea pig: Not sensitising. Based on available data the classification criteria are not met. REACH dossier information.

### **Germ cell mutagenicity**

#### **Genotoxicity - in vitro**

Data presented applicable to nanoparticle form of substance. Inconclusive data. REACH dossier information.

#### **Genotoxicity - in vivo**

Data presented applicable to nanoparticle form of substance. Inconclusive data. REACH dossier information.

### **Carcinogenicity**

Based on available data the classification criteria are not met. REACH dossier information.

### **Reproductive toxicity**

#### **Reproductive toxicity - fertility**

Based on available data the classification criteria are not met. REACH dossier information.

#### **Reproductive toxicity - development**

Developmental toxicity: - NOAEL: 200 mg/kg, Oral, Rat Based on available data the classification criteria are not met. REACH dossier information.

### **Specific target organ toxicity - single exposure**

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#### STOT - single exposure

Based on available data the classification criteria are not met. REACH dossier information.

#### Specific target organ toxicity - repeated exposure

##### STOT - repeated exposure

Dose level: 80 mmol/L, Oral, Rat Based on available data the classification criteria are not met. REACH dossier information.

#### Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

### Magnesium Oxide

#### Toxicological effects

Based on available data the classification criteria are not met.

### Zinc Oxide

#### Acute toxicity - oral

##### Acute toxicity oral (LD50 mg/kg)

5,000.0

##### Species

Rat

##### Notes (oral LD50)

Based on available data the classification criteria are not met. REACH dossier information.

##### ATE oral (mg/kg)

5,000.0

#### Acute toxicity - dermal

##### Acute toxicity dermal (LD50 mg/kg)

2001.0

##### Species

Rat

##### Notes (dermal LD50)

Based on available data the classification criteria are not met. REACH dossier information.

##### ATE dermal (mg/kg)

2001.0

#### Acute toxicity - inhalation

##### Acute toxicity inhalation (LC50 dust/mist mg/l)

5700.0

##### Species

Rat

##### Notes (inhalation LC50)

Based on available data the classification criteria are not met. REACH dossier information.

##### ATE inhalation (dusts/mists mg/l)

5700.0

#### Skin corrosion/irritation

##### Animal data

Dose: 20%w/v, 5 days, Guinea pig Not irritating. Based on available data the classification criteria are not met. REACH dossier information.

#### Serious eye damage/irritation

Based on available data the classification criteria are not met. REACH dossier information.

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### Respiratory sensitisation

Based on available data the classification criteria are not met. REACH dossier information.

### Skin sensitisation

Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. Based on available data the classification criteria are not met. REACH dossier information.

### Germ cell mutagenicity

#### **Genotoxicity - in vitro**

Gene mutation: Negative. Based on available data the classification criteria are not met. REACH dossier information.

#### **Genotoxicity - in vivo**

Based on available data the classification criteria are not met. REACH dossier information.

### Carcinogenicity

Based on available data the classification criteria are not met. REACH dossier information.

### Reproductive toxicity

#### **Reproductive toxicity - fertility**

Two-generation study - NOAEL 7.5 mg/kg/day, Oral, Rat F1 Based on available data the classification criteria are not met. REACH dossier information.

#### **Reproductive toxicity - development**

Maternal toxicity: - NOAEC: 1.5 mg/m<sup>3</sup>, Inhalation, Rat Based on available data the classification criteria are not met. REACH dossier information.

### Specific target organ toxicity - single exposure

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

Based on available data the classification criteria are not met. REACH dossier information.

### Specific target organ toxicity - repeated exposure

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

NOAEL 1.5 mg/m<sup>3</sup>, Inhalation, Rat Based on available data the classification criteria are not met. REACH dossier information.

### Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

## Magnesium Silicate

### Acute toxicity - oral

#### **Acute toxicity oral (LD50 mg/kg)**

5,000.0

#### **Species**

Rat

#### **Notes (oral LD50)**

Based on available data the classification criteria are not met. REACH dossier information.

#### **ATE oral (mg/kg)**

5,000.0

### Acute toxicity - dermal

#### **Acute toxicity dermal (LD50 mg/kg)**

2001.0

#### **Species**

Rabbit

#### **Notes (dermal LD50)**

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Based on available data the classification criteria are not met. REACH dossier information.

### **ATE dermal (mg/kg)**

2001.0

### **Acute toxicity - inhalation**

#### **Acute toxicity inhalation (LC50 dust/mist mg/l)**

20.0

#### **Species**

Rat

#### **Notes (inhalation LC50)**

Based on available data the classification criteria are not met. REACH dossier information.

#### **ATE inhalation (dusts/mists mg/l)**

20.0

### **Skin corrosion/irritation**

#### **Animal data**

Dose: 0.5g, 24 hours, Rabbit Primary dermal irritation index: 0.8 Based on available data the classification criteria are not met. REACH dossier information.

### **Serious eye damage/irritation**

Based on available data the classification criteria are not met. REACH dossier information.

### **Respiratory sensitisation**

Based on available data the classification criteria are not met. REACH dossier information.

### **Skin sensitisation**

Based on available data the classification criteria are not met. REACH dossier information.

### **Germ cell mutagenicity**

#### **Genotoxicity - in vitro**

Gene mutation: Negative. Chromosome aberration: Negative. Based on available data the classification criteria are not met. REACH dossier information. Estimated value.

#### **Genotoxicity - in vivo**

Based on available data the classification criteria are not met. REACH dossier information.

### **Carcinogenicity**

NOAEL 5 %, (dietary intake), Oral, Rat Based on available data the classification criteria are not met. REACH dossier information. Estimated value.

### **Reproductive toxicity**

#### **Reproductive toxicity - fertility**

One-generation study - NOAEL 497 mg/kg/day, Oral, Rat P Based on available data the classification criteria are not met. REACH dossier information. Estimated value.

#### **Reproductive toxicity - development**

Maternal toxicity: - NOAEL: 1350 mg/kg/day, Oral, Rat Based on available data the classification criteria are not met. REACH dossier information. Estimated value.

### **Specific target organ toxicity - single exposure**

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

Based on available data the classification criteria are not met. REACH dossier information.

### **Specific target organ toxicity - repeated exposure**

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

Based on available data the classification criteria are not met. REACH dossier information.

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### Aspiration hazard

Not anticipated to present an aspiration hazard, based on chemical structure.

### Calcium Oxide

#### Acute toxicity - oral

##### **Acute toxicity oral (LD50 mg/kg)**

7,430.0

##### **Species**

Rat

##### **Notes (oral LD50)**

Based on available data the classification criteria are not met. REACH dossier information.

##### **ATE oral (mg/kg)**

7,430.0

#### Acute toxicity - dermal

##### **Notes (dermal LD50)**

Based on available data the classification criteria are not met. REACH dossier information.

#### Acute toxicity - inhalation

##### **Notes (inhalation LC50)**

Based on available data the classification criteria are not met. REACH dossier information.

#### Skin corrosion/irritation

##### **Human skin model test**

Alkaline nature of chemical can cause skin irritation upon prolonged dermal exposure. Skin Irrit. 2 - H315 REACH dossier information.

#### Serious eye damage/irritation

Corneal damage. Eye Dam. 1 - H318 REACH dossier information. Estimated value.

#### Respiratory sensitisation

Based on available data the classification criteria are not met. REACH dossier information.

#### Skin sensitisation

Based on available data the classification criteria are not met. REACH dossier information.

#### Germ cell mutagenicity

##### **Genotoxicity - in vitro**

Gene mutation: Negative. DNA damage and/or repair: Negative. Based on available data the classification criteria are not met. REACH dossier information.

##### **Genotoxicity - in vivo**

This substance has no evidence of mutagenic properties. Based on available data the classification criteria are not met. REACH dossier information.

#### Carcinogenicity

Dose level: >5 %, aqueous solution, Oral, Rat Based on available data the classification criteria are not met. REACH dossier information.

#### Reproductive toxicity

##### **Reproductive toxicity - development**

Developmental toxicity: - Dose level:: >440 mg/kg/day, aqueous solution, Oral, Mouse Based on available data the classification criteria are not met. REACH dossier information.

#### Specific target organ toxicity - single exposure

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**STOT - single exposure**

STOT SE 3 - H335 May cause respiratory irritation. REACH dossier information.

**Target organs**

Respiratory system, lungs

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure**

Based on available data the classification criteria are not met. REACH dossier information.

**Aspiration hazard**

Not anticipated to present an aspiration hazard, based on chemical structure.

**Mica**

**Toxicological effects**

Based on available data the classification criteria are not met.

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## SECTION 12: Ecological Information

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**Ecological information on ingredients.**

**Magnesium Oxide**

**Ecotoxicity**

Based on available data the classification criteria are not met.

**Mica**

**Ecotoxicity**

Based on available data the classification criteria are not met.

**12.1. Toxicity**

Toxic to aquatic life with long lasting effects. Aquatic Chronic 2 - H411

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### Ecological information on ingredients.

#### Iron Oxide

##### **Acute toxicity - fish**

LC<sub>50</sub>, 96 hours: >50000 mg/l, Brachydanio rerio (Zebra Fish) REACH dossier information.

##### **Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 48 hours: >100 mg/l, Daphnia magna REACH dossier information.

#### Aluminium Oxide

##### **Acute toxicity - fish**

LC<sub>50</sub>, 96 hour: 19.3 mg/l, Onchorhynchus mykiss (Rainbow trout) REACH dossier information. Estimated value.

#### Zinc Oxide

### Acute aquatic toxicity

#### **LE(C)<sub>50</sub>**

0.1 < L(E)C<sub>50</sub> ≤ 1

#### **M factor (Acute)**

1

##### **Acute toxicity - fish**

NOEC, 32 hours: 0.54 mg/l, Brachydanio rerio (Zebra Fish) LC<sub>50</sub>, 96 hours: 0.33 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.

##### **Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 48 hours: 1.7 mg/l, Daphnia magna REACH dossier information.

### Chronic aquatic toxicity

#### **M factor (Chronic)**

1

##### **Chronic toxicity - aquatic invertebrates**

NOEC, 10 days: 0.297 mg/l, Daphnia magna REACH dossier information.

#### Magnesium Silicate

##### **Acute toxicity - fish**

LC<sub>50</sub>, 96 hours: 10000 mg/l, Brachydanio rerio (Zebra Fish) REACH dossier information. Estimated value.

##### **Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 24 hours: 1000 mg/l, Daphnia magna REACH dossier information.

#### Calcium Oxide

##### **Acute toxicity - fish**

LC<sub>50</sub>, 96 hours: >1070 mg/l, Cyprinus carpio (Common carp) REACH dossier information.

##### **Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 48 hours: 159.6 mg/l, Freshwater invertebrates REACH dossier information. Estimated value.

## 12.2. Persistence and degradability

### **Persistence and degradability**

No data available.



## S-FIXX Black Filling Powder

### Ecological information on ingredients.

#### **Persistence and degradability**

Substance is inorganic.

#### Iron Oxide

#### Aluminium Oxide

#### **Persistence and degradability**

Substance is inorganic.

#### Zinc Oxide

#### **Persistence and degradability**

Substance is inorganic.

#### Magnesium Silicate

#### **Persistence and degradability**

Substance is inorganic.

#### Calcium Oxide

#### **Persistence and degradability**

Substance is inorganic.

### 12.3. Bioaccumulative potential

No data available on bioaccumulation.

#### **Partition coefficient**

Not determined.

### Ecological information on ingredients.

No data available on bioaccumulation.

#### Iron Oxide

#### Aluminium Oxide

No data available on bioaccumulation.

#### Zinc Oxide

BCF: < 3.3, REACH dossier information. Estimated value.

#### Magnesium Silicate

No data available on bioaccumulation.

#### Calcium Oxide

Substance is inorganic.

### 12.4. Mobility in soil

#### **Mobility**

No data available.

## S-FIXX Black Filling Powder

### Ecological information on ingredients.

#### Iron Oxide

**Mobility**

Insoluble in water.

#### Aluminium Oxide

**Mobility**

Insoluble in water.

#### Zinc Oxide

**Mobility**

Slightly soluble in water.

#### Magnesium Silicate

**Mobility**

Soluble in water.

#### Calcium Oxide

**Mobility**

Soluble in water.

### 12.5. Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

### Ecological information on ingredients.

#### Iron Oxide

This substance is not classified as PBT or vPvB according to current EU criteria.

#### Aluminium Oxide

This substance is not classified as PBT or vPvB according to current EU criteria.

#### Zinc Oxide

This substance is not classified as PBT or vPvB according to current EU criteria.

#### Magnesium Silicate

This substance is not classified as PBT or vPvB according to current EU criteria.

#### Calcium Oxide

This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

None known.

### S-FIXX Black Filling Powder

#### Ecological information on ingredients.

##### Iron Oxide

None known.

##### Aluminium Oxide

None known.

##### Zinc Oxide

None known.

##### Magnesium Silicate

None known.

##### Calcium Oxide

None known.

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### **General information**

This material and its container must be disposed of in a safe way.

##### **Disposal methods**

Do not empty into drains. Dispose of contents/container in accordance with national regulations.

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### SECTION 14: Transport information

#### 14.1. UN number

UN No. (ADR/RID)	3077
UN No. (IMDG)	3077
UN No. (ICAO)	3077
UN No. (ADN)	3077

#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS ZINC OXIDE)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS ZINC OXIDE)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS ZINC OXIDE)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS ZINC OXIDE)

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

ADR/RID class	9
ADR/RID classification code	M7
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

##### Transport labels



#### 14.4. Packing group

ADR/RID packing group	III
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### S-FIXX Black Filling Powder

IMDG packing group	III
ICAO packing group	III
ADN packing group	III

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



Yes.

#### 14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	2Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant.

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### SECTION 15: Regulatory information

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

##### National regulations

EH40/2005 Workplace exposure limits. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

##### EU legislation

Dangerous Preparations Directive 1999/45/EC. Dangerous Substances Directive 67/548/EEC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 453/2010 of 20 May 2010.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

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### SECTION 16: Other information

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#### Classification procedures according to Regulation (EC) 1272/2008

Skin Irrit. 2 - H315, Eye Dam. 1 - H318, Aquatic Chronic 2 - H411: Calculation method.

#### Revision comments

Classification according to CLP Annex I.

Revision date 27/06/2014

Revision 1.2

Supersedes date 17/04/2014

SDS number 492

Risk phrases in full

### **S-FIXX Black Filling Powder**

R37/38 Irritating to respiratory system and skin.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### **Hazard statements in full**

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

#### **Disclaimer**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.