# SAFETY DATA SHEET
# FLAMEX S PRIMER

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

### 1.1. Product identifier

**Product name** FLAMEX S PRIMER

**Product number** 1495000UK9

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

**Identified uses** Primer for sealants.

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

**Supplier**

Fosroc Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
Staffordshire
B78 3XN
England
Tel: +44 (0) 1827 262222
Fax: +44 (0) 1827 262444
enquiryuk@fosroc.com

### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification (EC 1272/2008)**

**Physical hazards** Flam. Liq. 2 - H225

**Health hazards** Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373

**Environmental hazards** Not Classified

**Environmental** The product is not expected to be hazardous to the environment.

**Physicochemical** The product is highly flammable. Vapours may form explosive mixtures with air.

### 2.2. Label elements

**Hazard pictograms**

**Signal word** Danger

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| | |
|---|---|
| **Hazard statements** | H225 Highly flammable liquid and vapour.<br>H315 Causes skin irritation.<br>H318 Causes serious eye damage.<br>H317 May cause an allergic skin reaction.<br>H361d Suspected of damaging the unborn child.<br>H336 May cause drowsiness or dizziness.<br>H373 May cause damage to organs through prolonged or repeated exposure. |
| **Precautionary statements** | P201 Obtain special instructions before use.<br>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>P233 Keep container tightly closed.<br>P273 Avoid release to the environment.<br>P280 Wear protective clothing, gloves, eye and face protection.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| **Contains** | TOLUENE, n-BUTANOL, METHYLTRIMETHOXYSILANE |

### 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

**TOLUENE** **60-100%**

| | | |
|---|---|---|
| CAS number: 108-88-3 | EC number: 203-625-9 | REACH registration number: 01-2119471310-51-0000 |

**Classification**
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Repr. 2 - H361d
STOT SE 3 - H336
STOT RE 2 - H373
Asp. Tox. 1 - H304

**METHYLTRIMETHOXYSILANE** **5-10%**

| | | |
|---|---|---|
| CAS number: 1185-55-3 | EC number: 214-685-0 | REACH registration number: 01-2119517436-40 |

**Classification**
Flam. Liq. 2 - H225
Skin Sens. 1 - H317

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| n-BUTANOL | | 5-10% |
|---|---|---|
| CAS number: 71-36-3 | EC number: 200-751-6 | REACH registration number: 01-2119484630-38-0000 |

**Classification**
Flam. Liq. 3 - H226
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 3 - H335, H336

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

**General information** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). When symptoms persist or in all cases of doubt seek medical advice.

**Inhalation** Move affected person to fresh air at once. Get medical attention.

**Ingestion** If conscious, give several small portions of water to drink. Do not induce vomiting. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

**Skin contact** Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

**Eye contact** Remove affected person from source of contamination. Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes and get medical attention.

**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue.

### 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** Vapours may cause drowsiness and dizziness.

**Ingestion** Diarrhoea. Nausea, vomiting.

**Skin contact** May cause sensitization by skin contact.

**Eye contact** Causes serious eye damage.

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

**Notes for the doctor** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**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

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**Specific hazards** Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

**Hazardous combustion products** Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO2).

### 5.3. Advice for firefighters

**Protective actions during firefighting** No specific firefighting precautions known.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

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

**Personal precautions** Remove all sources of ignition. Provide adequate ventilation. For personal protection, see Section 8. Follow precautions for safe handling described in this safety data sheet.

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground. Contain spillage with sand, earth or other suitable non-combustible material. Collect and dispose of spillage as indicated in Section 13.

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

**Methods for cleaning up** Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid inhalation of vapours. Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Static electricity and formation of sparks must be prevented. Closed containers can burst violently when heated, due to excess pressure build-up.

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

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 0°C and 30°C.

**Storage class** Flammable liquid storage.

### 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**

**TOLUENE**

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Long-term exposure limit (8-hour TWA): WEL 50 ppm 191 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 384 mg/m³
Sk

**n-BUTANOL**

Long-term exposure limit (8-hour TWA): WEL
Short-term exposure limit (15-minute): WEL 50 ppm 154 mg/m³
Sk

WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.
Sk = Can be absorbed through skin.

**Ingredient comments** WEL = Workplace Exposure Limits

**TOLUENE (CAS: 108-88-3)**

**DNEL**
Workers - Inhalation; Short term systemic effects, local effects: 384 mg/m³
Workers - Inhalation; Short term systemic effects, local effects: 384 mg/m³
Workers - Dermal; Long term systemic effects: 384 mg/kg/day
General population - Inhalation; Long term systemic effects, local effects: 56.5 mg/m³
General population - Inhalation; Short term systemic effects, local effects: 226 mg/m³
General population - Dermal; Long term systemic effects: 226 mg/kg/day
General population - Oral; Long term systemic effects: 8.13 mg/kg/day

**PNEC**
- Fresh water, marine water; 0.68 mg/l
- Sediment (Freshwater), Sediment (Marinewater); 16.39 mg/kg
- STP; 13.61 mg/l
- Soil; 2.89 mg/kg

**n-BUTANOL (CAS: 71-36-3)**

**DNEL**
Workers - ; : 310 mg/m³

**PNEC**
- Fresh water; 0.082 mg/l
- marine water; 0.0082 mg/l
- Intermittent release; 2.25 mg/l
- STP; 2476 mg/l
- Sediment (Freshwater); 0.178 mg/kg dw
- Sediment (Marinewater); 0.0178 mg/kg dw
- Soil; 0.015 mg/kg dw

## 8.2. Exposure controls

**Protective equipment**

**Appropriate engineering controls** Provide adequate general and local exhaust ventilation.

**Eye/face protection** The following protection should be worn: Chemical splash goggles.

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| | |
|---|---|
| **Hand protection** | Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. It is recommended that gloves are made of the following material: Wear apron or protective clothing in case of contact. Viton rubber (fluoro rubber). Nitrile rubber. Polyvinyl alcohol (PVA). 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 material. |
| **Other skin and body protection** | Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Wear apron or protective clothing in case of contact. |
| **Hygiene measures** | Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. |
| **Respiratory protection** | If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2. |

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| **Appearance** | Liquid. |
| **Colour** | Colourless. |
| **Odour** | Aromatic. |
| **Odour threshold** | Not determined. |
| **pH** | Not determined. |
| **Melting point** | Not determined. |
| **Initial boiling point and range** | > 70°C @ |
| **Flash point** | 8°C Closed cup. |
| **Evaporation rate** | Not determined. |
| **Evaporation factor** | Not determined. |
| **Flammability (solid, gas)** | Not applicable. |
| **Upper/lower flammability or explosive limits** | Not determined. |
| **Other flammability** | Not determined. |
| **Vapour pressure** | Not determined. |
| **Vapour density** | Not determined. |
| **Relative density** | 0.95 |
| **Bulk density** | Not applicable. |
| **Solubility(ies)** | Insoluble in water. |
| **Partition coefficient** | Not determined. |
| **Auto-ignition temperature** | Not determined. |
| **Decomposition Temperature** | Not determined. |
| **Viscosity** | 200 cSt @ 25°C |

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| | |
|---|---|
| **Explosive properties** | Vapours may form explosive mixtures with air. |
| **Oxidising properties** | Does not meet the criteria for classification as oxidising. |

### 9.2. Other information

| | |
|---|---|
| **Other information** | No data available. |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

| | |
|---|---|
| **Reactivity** | There are no known reactivity hazards associated with this product. |

### 10.2. Chemical stability

| | |
|---|---|
| **Stability** | Stable at normal ambient temperatures. |

### 10.3. Possibility of hazardous reactions

| | |
|---|---|
| **Possibility of hazardous reactions** | In use may form flammable/explosive vapour-air mixture. |

### 10.4. Conditions to avoid

| | |
|---|---|
| **Conditions to avoid** | Avoid heat, flames and other sources of ignition. |

### 10.5. Incompatible materials

| | |
|---|---|
| **Materials to avoid** | Strong oxidising agents. |

### 10.6. Hazardous decomposition products

| | |
|---|---|
| **Hazardous decomposition products** | Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). |

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Acute toxicity - oral**

| | |
|---|---|
| **ATE oral (mg/kg)** | 15,800.0 |

**Serious eye damage/irritation**

| | |
|---|---|
| **Serious eye damage/irritation** | Causes serious eye irritation. |

**Reproductive toxicity**

| | |
|---|---|
| **Reproductive toxicity - development** | Suspected of damaging the unborn child. |

| | |
|---|---|
| **Inhalation** | Harmful by inhalation. Vapours may cause headache, fatigue, dizziness and nausea. |
| **Ingestion** | Harmful if swallowed. Product may hydrolyse in gastro-intestinal tract and produce methanol. The potential for toxic effects due to methanol formation (eye damage and blindness, metabolic acidosis, dizziness and drowsiness, fetal toxicity and liver, kidney and heart muscle damage) should be recognized. |
| **Skin contact** | Irritating to skin. Repeated exposure may cause skin dryness or cracking. May cause sensitisation by skin contact. Repeated and/or prolonged contact may lead to dermatitis. |
| **Eye contact** | Causes serious eye damage. |
| **Acute and chronic health hazards** | Product has a defatting effect on skin. May cause allergic contact eczema. May cause sensitisation by skin contact. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. Narcotic effect. |

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**Route of exposure** Inhalation Skin absorption

**Target organs** Kidneys Respiratory system, lungs Central nervous system

**Toxicological information on ingredients.**

**TOLUENE**

**Acute toxicity - oral**

**Notes (oral $LD_{50}$)** $LD_{50}$ 636 mg/kg, Oral, Rat

**Acute toxicity - inhalation**

**Notes (inhalation $LC_{50}$)** LC50 20 mg/l, Inhalation, Rat

**Skin corrosion/irritation**

**Animal data** Moderately irritating.

**Serious eye damage/irritation**

**Serious eye damage/irritation** Slightly irritating.

**Carcinogenicity**

**IARC carcinogenicity** IARC Group 3 Not classifiable as to its carcinogenicity to humans.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** Inhalation Narcotic effect.

**Aspiration hazard**

**Aspiration hazard** The fluid can enter the lungs and cause damage.

**Target organs** Brain Respiratory system, lungs Mucous membranes

**n-BUTANOL**

**Acute toxicity - oral**

**Acute toxicity oral ($LD_{50}$ mg/kg)** 790.0

**Species** Rat

**ATE oral (mg/kg)** 790.0

**Acute toxicity - dermal**

**Acute toxicity dermal ($LD_{50}$ mg/kg)** 3,400.0

**Species** Rat

**ATE dermal (mg/kg)** 3,400.0

## SECTION 12: Ecological information

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

**12.1. Toxicity**

**Ecological information on ingredients.**

# FLAMEX S PRIMER

**TOLUENE**

**Acute aquatic toxicity**

| | |
|---|---|
| **Acute toxicity - fish** | $LC_{50}$, 96 hours: 24 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| **Acute toxicity - aquatic invertebrates** | $EC_{80}$, 48 hours: 11.5 mg/l, Daphnia magna<br>NOEC, : 1000 mg/l, Daphnia magna |
| **Acute toxicity - aquatic plants** | $IC_{50}$, 72 hours: 12 mg/l, Pseudokirchneriella subcapitata |

**n-BUTANOL**

**Acute aquatic toxicity**

| | |
|---|---|
| **Acute toxicity - fish** | $LC_{50}$, 96 hours: 1375 mg/l, Pimephales promelas (Fat-head Minnow) |

## 12.2. Persistence and degradability

| | |
|---|---|
| **Persistence and degradability** | There are no data on the degradability of this product. Volatile substances are degraded in the atmosphere within a few days. |
| **Stability (hydrolysis)** | Hydrolyses in water or moist air, releasing methanol and organosilicons. |

**Ecological information on ingredients.**

**TOLUENE**

| | |
|---|---|
| **Persistence and degradability** | The product is readily biodegradable. |

## 12.3. Bioaccumulative potential

| | |
|---|---|
| **Bioaccumulative potential** | The product does not contain any substances expected to be bioaccumulating. |
| **Partition coefficient** | Not determined. |

**Ecological information on ingredients.**

**TOLUENE**

| | |
|---|---|
| **Bioaccumulative potential** | BCF: 90, The product is not bioaccumulating. |

**n-BUTANOL**

| | |
|---|---|
| **Partition coefficient** | : Log pow 0.78 |

## 12.4. Mobility in soil

## 12.5. Results of PBT and vPvB assessment

| | |
|---|---|
| **Results of PBT and vPvB assessment** | This product does not contain any substances classified as PBT or vPvB. |

**Ecological information on ingredients.**

**TOLUENE**

| | |
|---|---|
| **Results of PBT and vPvB assessment** | This substance is not classified as PBT or vPvB according to current EU criteria. |

## 12.6. Other adverse effects

| | |
|---|---|
| **Other adverse effects** | None known. |

# FLAMEX S PRIMER

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not pressurise, cut, weld, drill, grind or otherwise expose containers to heat or sources of ignition.

## SECTION 14: Transport information

### 14.1. UN number

**UN No. (ADR/RID)** 1993

**UN No. (IMDG)** 1993

**UN No. (ICAO)** 1993

**UN No. (ADN)** 1993

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** FLAMMABLE LIQUID, N.O.S. (CONTAINS TOLUENE, METHYLTRIMETHOXYSILANE)

**Proper shipping name (IMDG)** FLAMMABLE LIQUID, N.O.S. (CONTAINS TOLUENE, METHYLTRIMETHOXYSILANE)

**Proper shipping name (ICAO)** FLAMMABLE LIQUID, N.O.S. (CONTAINS TOLUENE, METHYLTRIMETHOXYSILANE)

**Proper shipping name (ADN)** FLAMMABLE LIQUID, N.O.S. (CONTAINS TOLUENE, METHYLTRIMETHOXYSILANE)

### 14.3. Transport hazard class(es)

**ADR/RID class** 3

**ADR/RID classification code** F1

**ADR/RID label** 3

**IMDG class** 3

**ICAO class/division** 3

**ADN class** 3

**Transport labels**


### 14.4. Packing group

**ADR/RID packing group** II

**IMDG packing group** II

**ICAO packing group** II

**ADN packing group** II

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

# FLAMEX S PRIMER

### 14.6. Special precautions for user

| | |
|---|---|
| **EmS** | F-E, S-E |
| **ADR transport category** | 2 |
| **Emergency Action Code** | •3YE |
| **Hazard Identification Number (ADR/RID)** | 33 |
| **Tunnel restriction code** | (D/E) |

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

| | |
|---|---|
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not applicable. |

## SECTION 15: Regulatory information

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

| | |
|---|---|
| **National regulations** | Control of Substances Hazardous to Health Regulations 2002 (as amended). |
| **EU legislation** | Dangerous Substances Directive 67/548/EEC.<br>Dangerous Preparations Directive 1999/45/EC.<br>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).<br>Commission Regulation (EU) No 2015/830 of 28 May 2015. |
| **Guidance** | Respiratory protective equipment at work (HSG53).<br>Workplace Exposure Limits EH40. |

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

| | |
|---|---|
| **General information** | For professional users only. |
| **Revision comments** | NOTE: Lines within the margin indicate significant changes from the previous revision. |
| **Revision date** | 21/08/2018 |
| **Revision** | 2b |
| **Supersedes date** | 23/05/2017 |
| **Hazard statements in full** | H225 Highly flammable liquid and vapour.<br>H226 Flammable liquid and vapour.<br>H302 Harmful if swallowed.<br>H304 May be fatal if swallowed and enters airways.<br>H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H318 Causes serious eye damage.<br>H335 May cause respiratory irritation.<br>H336 May cause drowsiness or dizziness.<br>H361d Suspected of damaging the unborn child.<br>H373 May cause damage to organs through prolonged or repeated exposure. |

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