

Trade name Weberfloor PUC MF (Part A)

## 1 IDENTIFICATION OF HAZARDOUS CHEMICAL AND OF THE SUPPLIER

### Product identifier

Trade name: Weberfloor PUC MF (Part A)

Substance: Polyurethane Self-Smoothing Screed

CAS No: Mixture

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

#### Manufacturer/Supplier:

Saint-Gobain (Singapore) Pte Ltd

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Phone: +65 6330 8288

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Saint-Gobain Weber (M) Sdn Bhd

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42300 Bandar Puncak Alam, Selangor D E, Malaysia

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## 2 HAZARDS IDENTIFICATION

### Hazard Classification

No classification

### Hazard Pictograms

No symbol

### Signal Word

No signal word

### Hazard Statements

Not applicable

### Precautionary Statements

Not applicable

## 3 COMPOSITION AND INFORMATION OF THE INGREDIENTS

Chemical Name	CAS Number	%
H <sub>2</sub> O	7732-15-5	58
Triglyceride	8001-79-4	32
Di-isonoyl phthalate	28553-12-0	8
Propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol	25265-77-4	2

## 4 FIRST AID MEASURES

### Description of first aid measures

#### After inhalation:

Remove to fresh air. If breathing has stopped, institute artificial respiration. Seek medical advice if symptoms persist.

#### After skin contact:

Wash skin thoroughly with soap and water. Remove contaminated clothing. If symptoms persist, seek medical advice.

#### After eye contact:

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Rinse eyes immediately with plenty of clean water for at least 15 minutes and seek medical advice if irritation persists.

**After swallowing:**

Do not induce vomiting. Dilute with water. Seek medical attention immediately.

**5 FIRE-FIGHTING MEASURES**

**Extinguishing media**

In case of fire, use water spray (fog) foam, CO<sub>2</sub> or dry chemical.

**Fire Fighting Instruction**

Fire fighters should wear self-contained breathing apparatus and full protective gear.

**Self Ignition**

Not self igniting.

**6 ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Wear personal protection equipment

**Environmental precautions**

Limit leakages with earth or sand. Do not discharge into the subsoil/soil.

**Methods and materials for containment and cleaning up**

Take up with absorbing materials (e.g sand, universal binder). Dispose as hazardous waste.

**7 HANDLING AND STORAGE**

**Handling**

Ensure adequate ventilation at the workplace. Avoid open flames and sources of ignition.

**Storage**

Keep away from food and drink. Store in a cool dry area and keep container tightly sealed. Incompatible materials.

**8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Engineering controls:** Use with adequate local exhaust ventilation.

**Hygiene Measures:** Remove contaminated clothing immediately after work. Launder clothing that is soiled with this material before reuse, or else discard. Inform individuals responsible for the cleaning of potential hazards associated with the handling of these contaminated clothing. No smoking, eating, or drinking at the workplace. Wash hands thoroughly after handling this material. Keep workplace clean.

**Respiratory Protection:** General room ventilation is required.

**Hand Protection:** Chemical resistance gloves/ PVC gloves.

**Eye/Face Protection:** Safety goggles with side shields.

**Skin Protection:** Light protective clothing.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Odour:</b>	Typical
<b>Colour:</b>	White Emulsion
<b>Chemical Type:</b>	Liquid
<b>Flammability:</b>	N/A
<b>Boiling Point:</b>	N/A
<b>Melting Point:</b>	N/A
<b>Explosion Hazard:</b>	N/A
<b>Vapour Pressure (25°C):</b>	N/A

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Trade name Weberfloor PUC MF (Part A)

**Solubility:** N/A  
**Relative Density:** 1,047 g/cm<sup>3</sup> @ 20°C

## 10 STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal temperature and pressure.

**Polymerization:** Will not polymerize.

**Thermal decomposition products:** Oxides of carbon.

## 11 TOXICOLOGICAL INFORMATION

### Toxicity Data:

- LD50: >20ml/kg Skin – rabbit, 7499mg/kg Oral – rat.
- LC50: 4250mg/m<sup>3</sup> Inhalation – rat.

**Effects:** No data available

**Acute toxicity level:** No data available

**Mutagenic data:** No data available

**Reproductive effects data:** No data available

## 12 ECOLOGICAL INFORMATION

### Ecotoxicity data:

Fish toxicity: 700 µg/l 96hours LC50 (Mortality) – Bluegill

Invertebrate toxicity: 5400 µg/l 7hours EC50 (Regeneration) – Flatworm

Algal toxicity: 3.4 µg/l /096year EC50 (Growth) – Dinoflagellate

Other toxic: 340 µg/l 2weeks (Population) – Aquatic community

### Fate and transport:

Bio concentration: 3500 µg/l 24day BCF (Residue) – Midge 0.18 µg/l

## 13 DISPOSAL CONSIDERATIONS

**Product:** In accordance with local regulations, take to special waste incineration plant.

**Contaminated Packaging:** If empty contaminated containers are recycled or disposed of, the receiver must inform about possible hazards.

## 14 TRANSPORT INFORMATION

UN NUMBER: -  
(Rail/Road) ADR/RID Shipping Data  
Proper Shipping Name: Not regulated for transport  
Hazard Class: -  
Packing Group: -  
**(Sea) IMO Shipping Data**  
Proper Shipping Name: Not regulated for transport  
Hazard Class: -  
Packing Group: -  
**(Air) ICAO/IATA Shipping Data**  
Proper Shipping Name: Not regulated for transport  
Hazard Class: -  
Packing Group: -

## 15 REGULATORY INFORMATION

**Trade name Weberfloor PUC MF (Part A)**

### Inventory Information

**Australia:** All components of this product are included in the Australian Inventory of Industrial Chemicals (AIIC) or are not required to be listed on AIIC.

**New Zealand:** This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

**European Economic Area (including EU):** This product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt and/or registered.

**United States (USA):** All components of this product are designated as "Active" on the TSCA Inventory or are not required to be listed.

**Canada:** All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS and ISHL) inventories or are not required to be listed on the Japanese inventories.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

**Philippines:** All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

**Taiwan:** All components of this product are included in the Taiwan chemical substance inventory or are not required to be listed on the Taiwan chemical substance inventory (TCSI).

**Malaysia:** Safety Data Sheet complies with the Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 & Industry Code of Practice on Chemicals Classification and Hazard Communication 2014 by Department of Occupational Safety and Health, Malaysia.

### 16 OTHER INFORMATION

None

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.

**Trade name Weberfloor PUC MF (Part B)**

## 1 IDENTIFICATION OF HAZARDOUS CHEMICAL AND OF THE SUPPLIER

### Product identifier

**Trade name: Weberfloor PUC MF (Part B)**

**Substance: Polyurethane Heavy Duty Screed**

**CAS No: Mixture**

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

#### Manufacturer/Supplier:

Saint-Gobain (Singapore) Pte Ltd

2 Venture Drive, #13-18 Vision Exchange, Singapore 608526

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## 2 HAZARDS IDENTIFICATION

### Classification

Acute toxicity, Inhalative, Category 4 (H332),

Skin irritation, Category 2 (H315),

Eye irritation, Category 2 (H319),

Sensitization of the respiratory airways, Category 1 (H334),

Sensitization of the skin, Category 1 (H317),

Carcinogenicity, Category 2 (H351)

Specific target organ toxicity (single exposure), Category 3 (H335)

Specific target organ toxicity (repeated exposure), Category 2 (H373)

### Hazard Pictograms



### Signal Word

Danger

### Hazard Statements

H315

Causes skin irritation

H319

Causes serious eye irritation

H317

May cause allergic skin reaction

H332

Harmful if inhaled

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335

May cause respiratory irritation

H351

Suspected of causing cancer

H373

May cause damage to organs through prolonged or repeated exposure

### Precautionary Statements

P201 Obtain special instructions before use.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

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P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER/ doctor if you feel unwell.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

**Other hazards**

In case of hypersensitivity of the respiratory tract (e.g. asthmatics and those who suffer from chronic bronchitis) it is inadvisable to work with the product.

Symptoms affecting the respiratory tract can also occur several hours after overexposure.

Dust, vapors and aerosols are the primary risk to the respiratory tract.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**3 COMPOSITION AND INFORMATION OF THE INGREDIENTS**

Chemical Name	CAS Number	%
Diphenylmethane-diisocyanate, isomers and homologues Acute Tox. 4 Inhalative H332 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Resp. Sens. 1 H334 Skin Sens. 1 H317 Carc. 2 H351 STOT SE 3 H335 STOT RE 2 Inhalative H373 <i>Specific threshold concentration:</i> <i>Eye Irrit. 2 H319 &gt;= 5 %</i> <i>Skin Irrit. 2 H315 &gt;= 5 % Resp. Sens. 1 H334 &gt;= 0,1 %</i> <i>STOT SE 3 H335 &gt;= 5 %</i>	9016-87-9	100%
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate Acute Tox. 4 Inhalative H332 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Resp. Sens. 1 H334 Skin Sens. 1 H317 Carc. 2 H351 STOT SE 3 H335 (Respiratory system) STOT RE 2 Inhalative H373 (Respiratory tract) Resp. Sens. 1 H334 >= 0,1 % STOT SE 3 H335 >= 5 % ATE (inhalation, dust/mist): 1,5 mg/	101-68-8	25 - < 50
o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate <i>Specific threshold concentration (GHS):</i> <i>Eye Irrit. 2 H319 &gt;= 5 %</i> <i>Skin Irrit. 2 H315 &gt;= 5 %</i> <i>Resp. Sens. 1 H334 &gt;= 0,1 %</i> <i>STOT SE 3 H335 &gt;= 5 %</i> ATE (inhalation, dust/mist): 1,5 mg/l	5873-54-1	1 - < 5
2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate <i>Specific threshold concentration (GHS):</i> <i>Eye Irrit. 2 H319 &gt;= 5 %</i> <i>Skin Irrit. 2 H315 &gt;= 5 %</i> <i>Resp. Sens. 1 H334 &gt;= 0,1 %</i> <i>STOT SE 3 H335 &gt;= 5 %</i> ATE (inhalation, dust/mist): 1,5 mg/l	2536-05-2	0,1 - < 1

**4 FIRST AID MEASURES**

**Description of first aid measures**

**General advice:**

Soiled, soaked clothing and shoes must be immediately removed, decontaminated and disposed of.

**After inhalation:**

Move affected person to fresh air, keep warm and let person rest. If there is difficulty breathing, seek medical advice.

**After skin contact:**

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Wash the contacted area thoroughly with a cleanser (polyethylene glycol based) or with plenty of warm water and soap. If symptoms persist, seek medical advice.

**After eye contact:**

Rinse eyes immediately with plenty of lukewarm clean water for at least 10 minutes. Contact an ophthalmologist.

**After swallowing:**

Do not induce vomiting. Seek medical examination immediately.

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

Note to physician: The product irritates the respiratory tract and may trigger sensitisation of the skin and respiratory tract. Treatment of acute irritation or bronchial constriction is primarily symptomatic. Extended medical treatment may be required depending on the degree of exposure and the severity of the symptoms.

**Indication of any immediate medical attention and special treatment needed**

Therapeutic measures: No information is available.

**5 FIRE-FIGHTING MEASURES**

**Extinguishing media**

Suitable extinguishing media: Carbon dioxide (CO<sub>2</sub>), Foam, extinguishing powder, in cases of larger fires, water spray should be used.

Unsuitable extinguishing media: High volume water jet

**Special hazards arising from the substance or mixture**

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen, isocyanate vapours and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes. Fire in the vicinity poses a risk of pressure build-up and rupture. Containers at risk of fire should be cooled with water and, if possible, removed from the danger area.

**Advice for fire-fighters**

During firefighting, a respirator with independent air supply and an airtight garment are required. Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

**6 ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Put on protective equipment (see section 8). Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

**Environmental precautions**

Do not allow it to escape into waterways, wastewater or soil.

**Methods and materials for containment and cleaning up**

Remove mechanically; cover the remainder with wet, absorbent material (e.g., sawdust, chemical binder based on calcium silicate hydrate, sand). After approximately one hour, transfer to a waste container and do not seal (evolution of CO<sub>2</sub>). Keep damp in a safe ventilated area for several days. Spill areas can be decontaminated with the following recommended decontamination solution: Decontamination solution 1: 8-10% sodium carbonate and 2% of liquid soap in water Decontamination solution 2: Liquid/yellow soap (potassium soap with ~15% anionic tenside): 20ml; Water: 700ml; Polyethylglycol (PEG 400): 350ml

**Reference to other sections:** For further disposal measures, see section 13.

**7 HANDLING AND STORAGE**

**Precautions for safe handling**

Provide sufficient air exchange and/or exhaust in work rooms.

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In all workplaces or parts of the plant where high concentrations of isocyanate aerosols and/or vapours may be generated (e.g., during pressure release, mould venting or when cleaning mixing heads with an air blast), appropriately located exhaust ventilation must be provided to prevent occupational exposure limits from being exceeded. Air should be drawn away from the personnel handling the product. The efficiency of exhaust equipment should be periodically checked. The threshold limit values noted in section 8 must be monitored.

The personal protective measures described in section 8 must be observed. Contact with skin and eyes and inhalation of vapours must be avoided under all circumstances. Keep away from food, drinks, and tobacco. Wash hands before breaks and at the end of work and use skin-protecting ointment. Keep working clothes separately. Take off all contaminated clothing immediately. Decontaminate, destroy, and dispose of soiled protective clothing (see Section 13).

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

Keep container tightly closed and dry. Further information on the storage conditions which must be observed to preserve quality can be found in our product information sheet.

**Specific end use(s)**

No information available. Wash off skin contamination immediately. Clear spills immediately. Provide hazard information and training to personnel.

**8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Provide general ventilation, suitable exact ventilation.  
Inspect and maintain equipment.  
Hygiene measures: Avoid skin and eye contact.

**Control parameters**

The product may contain traces of phenylisocyanate.

**Exposure controls**

**Respiratory protection**

Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of charcoal filter and particulate filter A2-P2 (EN529) is recommended.

**Hand protection**

Suitable materials for safety gloves; EN 374:

Butyl rubber, nitrile rubber, chloroprene rubber (neoprene).

Notice: suitable materials that provide sufficient protection for industrial cleaning with Aprotic Polar Solvents (meeting the IUPAC definition): butyl rubber.

When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN374) is recommended.

Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent of the specific composition of the material a glove is fabricated from. The thickness of the glove must depending on model and type of material, generally be more than 0,35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0,35 mm. Other glove materials with a thickness of less than 0,35 mm may offer sufficient protection when only brief contact is expected.

Example:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Butyl rubber - IIR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

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Fluorinated rubber - FKM: thickness  $\geq 0,4$ mm; breakthrough time  $\geq 480$ min.  
Recommendation: contaminated gloves should be disposed of.

**Eye protection**

Use safety glasses with side shields, conforming to EN 166

**Skin and body protection**

Use protective clothing (chemically resistant).

In case of hypersensitivity of the skin it is inadvisable to work with the product.

Safety precautions for handling freshly molded polyurethane parts: see section 16

**9 PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

**Physical state:** liquid at 20 °C at 1.013 hPa

**Appearance:** liquid

**Colour:** brown

**Odour:** earthy, musty

**Odour Threshold:** not established

**pH:** not applicable

**Pour point:**  $< 0$  °C (ISO 3016)

**Boiling point/boiling range:**  $> 300$  °C at 1.013 hPa (DIN 53171)

**Flash point:** 226 °C (ISO 2719)

**Evaporation rate:** Not established

**9.2 Other information**

**Flammability (solid, gas):** Not applicable

**Burning number:** Not applicable

**Vapour pressure:** Diphenyl-methane-diisocyanate, (MDI)

$< 0,00001$  hPa at 20 °C

$< 0,0005$  hPa (50°C)

For products with a very low vapor pressure, the apparent vapor pressure may exceed the vapor pressure of the pure product due to conditions of manufacturing, storage or transportation, e.g. by solved gases like nitrogen or carbon dioxide.

1 hPa at 20 °C EG A4

12 hPa at 50 °C EG A4

17 hPa at 55 °C EG A4

**Vapour density:** Not established

**Density:** 1,238 g/cm<sup>3</sup> at 20 °C (DIN 51757)

**Miscibility with water:** Immiscible at 15 °C

**Surface tension:** Not established

**Partition coefficient not established (n-octanol/water):**

**Auto-ignition temperature:** Not applicable

**Ignition temperature:**  $> 500$  °C DIN 51794

**Decomposition temperature:** Not established

**Viscosity, dynamic:**  $\geq 200$  mPa.s at 20 °C (DIN 53019)

**Explosive properties:** Not established

**Dust explosion class:** Not applicable

**Oxidising properties:** Not established

**Other information**

The indicated values do not necessarily correspond to the product specification. Please refer to the technical information sheet for specification data.

Trade name Weberfloor PUC MF (Part B)

## 10 STABILITY AND REACTIVITY

**Reactivity:** This information is not available.

**Chemical Stability:** Polymerises at about 200 °C with evolution of CO<sub>2</sub>.

**Possibility of Hazardous Reactions:** Exothermic reaction with amines and alcohols; reacts with water forming CO<sub>2</sub>; in closed containers, risk of bursting owing to increase of pressure.

**Conditions to Avoid:** This information is not available.

**Incompatible Materials:** This information is not available.

**Hazardous Decomposition Products:** No hazardous decomposition products when stored and handled correctly.

## 11 TOXICOLOGICAL INFORMATION

Please find below the data available to us:

Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Acute toxicity, oral

diphenylmethane-diisocyanate, isomers and homologues

LD50 rat, male/female: > 2.000 mg/kg

Method: OECD Test Guideline 401

Studies of a comparable product

### Acute toxicity, dermal

diphenylmethane-diisocyanate, isomers and homologues

LD50 rabbit, male/female: > 9,400 mg/kg

Method: OECD Test Guideline 402

### Acute toxicity, inhalation

diphenylmethane-diisocyanate, isomers and homologues

LC50 rat, male/female: 0,31 mg/l, 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

The test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgment and the weight of the evidence, a modified classification for acute inhalation toxicity is justified.

Assessment: Harmful by inhalation.

Converted acute toxicity point estimate 1.5 mg/l

Test atmosphere: dust/mist

Method: Expert judgement

### Primary skin irritation

diphenylmethane-diisocyanate, isomers and homologues

Species: rabbit

Result: slight irritant

Method: OECD Test Guideline 404

### Primary mucosae irritation

diphenylmethane-diisocyanate, isomers and homologues

Species: rabbit

Result: non-irritant

Method: OECD Test Guideline 405

Toxicological studies of a comparable product.

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**Sensitisation**

diphenylmethane-diisocyanate, isomers and homologues  
Skin sensitisation according to Magnusson/Kligmann (maximizing test):

Species: Guinea pig

Result: negative

Classification: Does not cause skin sensitization.

Method: OECD Test Guideline 406

Studies of a comparable product.

Skin sensitization (local lymph node assay (LLNA)):

Species: Mouse

Result: positive

Classification: May cause sensitization by skin contact.

Method: OECD Test Guideline 429

Toxicological studies of a comparable product.

Studies of a comparable product.

Respiratory sensitization

Species: rat

Result: positive

Classification: May cause sensitization by inhalation

**Subacute, subchronic and prolonged toxicity**

diphenylmethane-diisocyanate, isomers and homologues

NOAEL: 0,2 mg/m<sup>3</sup>

LOAEL (Lowest observable adverse effect level): 1 mg/m<sup>3</sup>

Application Route: Inhalative

Species: rat, male/female

Dose Levels: 0 - 0,2 - 1 - 6 mg/m<sup>3</sup> Exposure duration: 2 a

Frequency of treatment: 6 hours a day, 5 days a week

Target Organs: Lungs, Nasal inner lining

Test substance: as aerosol Method: OECD Test Guideline 453

Findings: Irritation to nasal cavity and to lungs.

Studies of a comparable product.

**Carcinogenicity**

diphenylmethane-diisocyanate, isomers and homologues Species: rat, male/female

Application Route: Inhalative Dose Levels: 0 - 0,2 - 1 - 6 mg/m<sup>3</sup> Test substance: as aerosol Exposure duration: 2 a

Frequency of treatment: 6 hours/day, 5 days/week Method: OECD Test Guideline 453

Occurrence of tumors in the highest dose group.

**Reproductive toxicity/Fertility**

diphenylmethane-diisocyanate, isomers and homologues No data available.

**Reproductive toxicity/Teratogenicity**

diphenylmethane-diisocyanate, isomers and homologues NOAEL (teratogenicity): 12 mg/m<sup>3</sup>

NOAEL (maternal): 4 mg/m<sup>3</sup>

NOAEL (developmental toxicity): 4 mg/m<sup>3</sup> Species: rat, female

Application Route: Inhalative Dose Levels: 0 - 1 - 4 - 12 mg/m<sup>3</sup>

Frequency of treatment: 6 hours/day (Exposure duration: 10 days (day 6 - 15 p.c.))

Test period: 20 d

Test substance: as aerosol Method: OECD Test Guideline 414

NOAEL (developmental toxicity): 4 mg/m<sup>3</sup>

Did not show teratogenic effects in animal experiments.

**Trade name Weberfloor PUC MF (Part B)**

**Genotoxicity in vitro**

diphenylmethane-diisocyanate, isomers and homologues

Test type: Salmonella/microsome test (Ames test)

Test system: Salmonella typhimurium Metabolic activation: with/without Result: negative

Method: OECD Test Guideline 471

**Genotoxicity in vivo**

diphenylmethane-diisocyanate, isomers and homologues Test type: Micronucleus test

Species: rat, male

Application Route: Inhalative (exposure period: 3x1h/day over 3 weeks) Result: negative

Method: OECD Test Guideline 474 Studies of a comparable product.

**STOT evaluation – one-time exposure**

diphenylmethane-diisocyanate, isomers and homologues Route of exposure: Inhalative

Target Organs: Respiratory Tract May cause respiratory irritation.

**STOT evaluation – repeated exposure**

diphenylmethane-diisocyanate, isomers and homologues Route of exposure: Inhalative

Target Organs: Respiratory Tract

May cause damage to organs through prolonged or repeated exposure.

**Aspiration toxicity**

diphenylmethane-diisocyanate, isomers and homologues

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

**CMR Assessment**

diphenylmethane-diisocyanate, isomers and homologues Carcinogenicity: Suspected of causing cancer by inhalation (Carc. 2).

Mutagenicity: In vitro and in vivo tests did not show mutagenic effects. Based on available data, the classification criteria are not met.

Teratogenicity: Did not show teratogenic effects in animal experiments. Based on available data, the classification criteria are not met.

Reproductive toxicity/Fertility: Based on available data, the classification criteria are not met.

**Toxicology Assessment**

diphenylmethane-diisocyanate, isomers and homologues

Acute effects: Harmful if inhaled. The product causes irritation of eyes, skin and mucous membranes.

Sensitization: May cause sensitization by inhalation and skin contact.

**Additional information**

diphenylmethane-diisocyanate, isomers and homologues

Special properties/effects: Over-exposure entails the risk of concentration-dependent irritating effects on eyes, nose throat, and respiratory tract. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may suffer from these effects even at low isocyanate concentrations, including concentrations below the UK Workplace Exposure Limit (WEL).

Prolonged contact with the skin may cause tanning and irritant effects.

**12 ECOLOGICAL INFORMATION**

Do not allow it to escape into waterways, wastewater or soil.

**Toxicity Acute Fish toxicity**

diphenylmethane-diisocyanate, isomers and homologues

LC50 > 1,000 mg/l

**Trade name Weberfloor PUC MF (Part B)**

Test type: Acute Fish toxicity  
Species: Danio rerio (zebra fish)  
Exposure duration: 96 h  
Method: OECD Test Guideline 203

Acute toxicity for daphnia  
diphenylmethane-diisocyanate, isomers and homologues  
EC50 > 1,000 mg/l  
Test type: static test  
Species: Daphnia magna (Water flea)  
Exposure duration: 24 h  
Method: OECD Test Guideline 202  
Chronic toxicity to daphnia  
diphenylmethane-diisocyanate, isomers and homologues

Acute toxicity for algae  
diphenylmethane-diisocyanate, isomers and homologues  
ErC50 > 1,640 mg/l  
Test type: Growth inhibition  
Species: scenedesmus subspicatus  
Exposure duration: 72 h  
Method: OECD Test Guideline 201

Acute bacterial toxicity  
diphenylmethane-diisocyanate, isomers and homologues  
EC50 > 100 mg/l  
Test type: Respiration inhibition  
Species: activated sludge  
Exposure duration: 3 h  
Method: OECD Test Guideline 209

Toxicity to soil dwelling organisms  
diphenylmethane-diisocyanate, isomers and homologues  
NOEC (mortality) > 1,000 mg/kg  
Species: Eisenia fetida (earthworms)  
Exposure duration: 14 d  
Method: OECD Test Guideline 207

Toxicity to terrestrial plants  
diphenylmethane-diisocyanate, isomers and homologues

NOEC (seedling emergence) > 1,000 mg/kg  
Species: Avena sativa (oats)  
Exposure duration: 14 d  
Method: OECD Test Guideline 208

NOEC (Growth rate) > 1,000 mg/kg  
Species: Avena sativa (oats)  
Exposure duration: 14 d  
Method: OECD Test Guideline 208

NOEC (seedling emergence) > 1,000 mg/kg  
Species: Lactuca sativa (lettuce)  
Exposure duration: 14 d  
Method: OECD Test Guideline 208

**Trade name Weberfloor PUC MF (Part B)**

NOEC (Growth rate) > 1,000 mg/kg  
Species: Lactuca sativa (lettuce)  
Exposure duration: 14 d  
Method: OECD Test Guideline 208

**Ecotoxicology Assessment**

diphenylmethane-diisocyanate, isomers and homologues  
Acute aquatic toxicity: Based on available data, the classification criteria are not met.  
Chronic aquatic toxicity: There is no evidence of a chronic aquatic toxicity.  
Toxicity Data on Soil: Not expected to adsorb on soil. The substance is graded as non-critical to soil-dwelling organisms.  
Impact on Sewage Treatment: Because of the low bacterial toxicity, there is no risk of an adverse effect on the performance of biological wastewater treatment plants.

**Persistence and degradability**

**Biodegradability**  
diphenylmethane-diisocyanate, isomers and homologues  
Test type: aerobic  
Inoculum: activated sludge  
Biodegradation: 0 %, 28 d, i.e. not inherently degradable  
Method: OECD Test Guideline 302 C  
According to the results of tests of biodegradability this product is not readily biodegradable.

**Stability in water**

diphenylmethane-diisocyanate, isomers and homologues  
Test type: Hydrolysis  
Half life: 20 h at 25 °C  
The substance hydrolyzes rapidly in water.  
Studies of a comparable product.

**Photodegradation**

diphenylmethane-diisocyanate, isomers and homologues  
Test type: Phototransformation in air  
Temperature: 25 °C  
sensitizer: OH-radicals  
Concentration sensibilisator: 500,000 1/cm<sup>3</sup>  
Half-life indirect photolysis: 0.92 d  
Method: SRC - AOP (calculation)  
After evaporation or exposure to the air, the product will be moderately degraded by photochemical processes. Studies of a comparable product.

**Bioaccumulative potential**

**Bioaccumulation**  
diphenylmethane-diisocyanate, isomers and homologues  
Bioconcentration factor (BCF): < 14  
Species: Cyprinus carpio (Carp)  
Exposure duration: 42 d  
Concentration: 0.2 mg/l  
Method: OECD Test Guideline 305 C  
An accumulation in aquatic organisms is not to be expected. The substance hydrolyses rapidly in water.  
Studies of hydrolysis products.

**Mobility in soil**

No data available.

**Environmental distribution**

**Trade name Weberfloor PUC MF (Part B)**

diphenylmethane-diisocyanate, isomers and homologues  
no data available

Endocrine disrupting properties  
No data available.

**Other adverse effects**

Isocyanate reacts with water at the interface forming CO<sub>2</sub> and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g., detergents) or by water-soluble solvents. Previous experience shows that polyurea is inert and non-degradable.

**13 DISPOSAL CONSIDERATIONS**

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

**Waste treatment methods:** After final product withdrawal, all residues must be removed from containers (drip-free, powder-free or paste-free). Once the product residues adhering to the walls of the containers have been rendered harmless, the product and hazard labels must be invalidated. These containers can be returned for recycling to the appropriate centres set up within the framework of the existing take-back scheme of the chemical industry. Containers must be recycled in compliance with national legislation and environmental regulations.

None disposal into waste water.

**14 TRANSPORT INFORMATION**

UN NUMBER:	Not dangerous for transport
<b>(Rail/Road)ADR/RID Shipping Data:</b>	Not regulated (Not dangerous for transport)
<b>(Sea)IMO Shipping Data:</b>	Not regulated (Not dangerous for transport)
<b>(Air)ICAO/IATA Shipping Data:</b>	Not regulated (Not dangerous for transport)
Packing Group:	Not dangerous for transport

**15 REGULATORY INFORMATION**

**Inventory Information**

**Australia:** All components of this product are included in the Australian Inventory of Industrial Chemicals (AIIC) or are not required to be listed on AIIC.

**New Zealand:** This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

**European Economic Area (including EU):** This product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt and/or registered.

**United States (USA):** All components of this product are designated as "Active" on the TSCA Inventory or are not required to be listed.

**Canada:** All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS and ISHL) inventories or are not required to be listed on the Japanese inventories.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

**Philippines:** All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

**Taiwan:** All components of this product are included in the Taiwan chemical substance inventory or are not required to be listed on the Taiwan chemical substance inventory (TCSI).

**Trade name Weberfloor PUC MF (Part B)**

**Malaysia:** Safety Data Sheet complies with the Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 & Industry Code of Practice on Chemicals Classification and Hazard Communication 2014 by Department of Occupational Safety and Health, Malaysia.

**16 OTHER INFORMATION**

Full text of hazardous (H) warnings referred to under sections 2, 3 and 10 of the CLP classification (1272/2008/CE).

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

For internal US delivery: Under § 172.101, Appendix A, DOT (Department of Transportation) it is requested: MDI Reportable Quantity (RQ):5000lbs (2270kg).

ISOPA Guidelines for safe loading/unloading, transport and storage of TDI and MDI. ISOPA Order No.: PSC-0005- GUIDL

Safety precautions for handling freshly molded polyurethane parts:

Depending on the production parameters, any uncovered surfaces of freshly molded polyurethane parts using this raw material may contain traces of substances (e. g. starting and reaction products, catalysts, release agents) with hazardous characteristics. Skin contact with traces of these substances must be avoided. Therefore, during demolding or other handling of fresh molded parts, protective gloves tested according to DIN-EN 374 (e.g. nitrile rubber  $\geq 1.3$  mm thick, breakthrough time  $\geq 480$  min, or according to recommendations from glove makers thinner gloves that need to be changed in compliance with breakthrough times more frequently) must be used. Depending on formulation and processing conditions, the requirements may be different from handling of the pure substances. Closed protective clothing is required for the protection of other areas of skin.

**Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

Trade name Weberfloor PUC MF (Part C)

## 1 IDENTIFICATION OF HAZARDOUS CHEMICAL AND OF THE SUPPLIER

### Product identifier

Trade name: Weberfloor PUC MF (Part C)  
Substance: Plain filler polyurethane screed  
Cas No,: Mixture

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

#### Manufacturer/Supplier:

Saint-Gobain (Singapore) Pte Ltd  
2 Venture Drive, #13-18 Vision Exchange, Singapore 608526  
Phone: +65 6330 8288  
Fax: +65 6330 8288

Saint-Gobain Weber (M) Sdn Bhd  
No 29 & 31, Jalan TIAJ 2/1, Taman Industri Alam Jaya,  
42300 Bandar Puncak Alam, Selangor D E, Malaysia  
Phone: +603 6038 9498/97/89  
Fax: +603 6038 9507

## 2 HAZARDS IDENTIFICATION

### Classification

Skin Irrit. 2: May causes skin irritation.  
Eye Dam. 1: Causes serious eye damage.  
Skin Sens. 1B: May cause respiratory irritation.

### Hazard Pictograms



### Signal Word

Danger

### Hazard Statements

H315 Causes skin irritation.  
H318 Causes serious eye irritation.  
H335 May cause respiratory irritation.

### Precautionary Statements

P260 Do not breathe dust.  
P280 Wear protective gloves/protective clothing/ eye protection/ face protection  
P205+351+338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P313 Get medical advice/attention.  
P501 Dispose of contents/container in accordance with local regulations. Contain Calcium oxide. When mixed with water it will form calcium hydroxide which has a corrosive effect on skin and eyes.

## 3 COMPOSITION AND INFORMATION OF THE INGREDIENTS

Chemical Name	CAS Number	%
Silicon Dioxide	601-214-2	< 10%

**Trade name Weberfloor PUC MF (Part C)**

White Cement Eye Dam. 1 H318 Skin Sens. 1B H317 Skin Irrit. 2 H315 Stot Se 3 H335	65997-15-1	< 80%
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#### 4 FIRST AID MEASURES

##### Description of first aid measures

###### After inhalation:

Move affected person to fresh air. If breathing has stopped, institute artificial respiration. Seek medical advice if symptoms persist.

###### After skin contact:

Wash the contacted area thoroughly with soap and water. Remove contaminated clothing. If symptoms persist, seek medical advice.

###### After eye contact:

Rinse eyes immediately with plenty of clean water for at least 15 minutes and seek medical advice.

###### After swallowing:

Do not induce vomiting. Dilute with water. Seek medical examination immediately.

#### 5 FIRE-FIGHTING MEASURES

##### Extinguishing media

In case of fire, use water spray (fog) foam, dry chemical or CO<sub>2</sub>.

##### Fire Fighting Instruction

Fire fighters should wear self-contained breathing apparatus and full protective gear.

##### Self Ignition

Not self igniting.

##### Flash Point

No data available.

#### 6 ACCIDENTAL RELEASE MEASURES

##### Personal Precaution

Use personal protective equipment.

##### Environmental Precaution

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

##### Methods for Cleaning Up

Take up with absorbing materials (e.g. sand, universal binder). Dispose as hazardous waste.

#### 7 HANDLING AND STORAGE

##### Handling

Ensure adequate ventilation at the workplace. Avoid open flames and sources of ignition.

##### Storage

Keep away from food and drink. Store in a cool dry area and keep container tightly sealed.

#### 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering controls:** Use with adequate general and local exhaust ventilation.

**Hygiene Measure:** Do not eat, drink, smoke or take drugs in the workplace. Wash hands before break or after work.

Trade name Weberfloor PUC MF (Part C)

**Respiratory Protection:** General room ventilation is adequate.  
**Protection of hands:** Chemical resistance gloves/PVC gloves.  
**Eye protection:** Safety goggles with side shields.  
**Skin protection:** Light protective clothing.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Odour:</b>	Odorless
<b>Chemical Type:</b>	Mixture Powder
<b>Flammability:</b>	Does not ignite
<b>Boiling Point:</b>	No data available
<b>Melting Point:</b>	>1000°C
<b>Explosion Hazard:</b>	No data available
<b>Vapour Pressure (25°C):</b>	No data available
<b>Solubility (250°C):</b>	Insoluble in water
<b>Relative Density:</b>	No data available

## 10 STABILITY AND REACTIVITY

**Stability:** No specific test data related to reactivity available for this product or its ingredients.  
**Hazardous Polymerization:** Will not occur. Avoid strong acid, strong base and amines.  
**Hazardous Reactions:** In fire, toxic fumes may be generated.

## 11 TOXICOLOGICAL INFORMATION

Proper use provided, no adverse health effects have been observed or have been come to our knowledge. Eye contact may produce an oil film over the eyeball causing a harmless reversible short lasting dimness of sight.

## 12 ECOLOGICAL INFORMATION

**Bioaccumulation:** Not available  
**Fish Toxicity:** Not available

## 13 DISPOSAL CONSIDERATIONS

**Product:** In accordance with local authority regulations, take to special waste incineration plant.  
**Contaminated packaging:** If empty contaminated containers are recycled or disposed of, the receiver must inform about possible hazards.

## 14 TRANSPORT INFORMATION

<b>UN Number</b>	-
<b>(Rail/Road)ARD/RID Shipping Data:</b>	Not regulated (Not dangerous for transport)
<b>(Sea) IMO Shipping Data:</b>	Keep from freezing (Not dangerous for transport)
<b>(Air) ICAO/IATA Shipping Data:</b>	Keep from freezing (Not dangerous for transport)
<b>Packing Group</b>	-

## 15 REGULATORY INFORMATION

**Applicable regulations:**

1. Permissible workplaces exposure standard labour
2. Labeling of hazardous chemicals

**Trade name Weberfloor PUC MF (Part C)**

3. Liberal rule, traffic regulation
4. Method and facility for industrial waste storage, cleanace and disposal

## 16 OTHER INFORMATION

None.

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.