## **SOLIDFLOOR PU - Part A**



# 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Name : SOLIDFLOOR EP (SF) - Part A
Intended Use : Solvent Free Epoxy Floor Coatings
Manufacturer : Solid Green Tech Solutions Sdn. Bhd.
Lot 772 (10-14), Jalan Subang 4

Kawasan Perindustrian Sg. Penaga 47620 Subang Jaya, Selangor, Malaysia

Emergency Phone Number : +(60) 3 8081 4777 / 4776

Fax Numbers : +(60) 3 8081 4771

#### 2. HAZARDS IDENTIFICATION

#### CLASSIFICATION

Skin Irrit. 2 : Causes skin irritation.

Skin Sens. 1 : May cause sensitization by skin contact.

Eye Irrit. 2 : Causes serious eye irritation.

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

#### **HAZARD STATEMENTS**

H315	Causes	kin	irritation	
1 1, ) 1 , )	Causes	KILL	ппанон	

H319 Causes serious eye irritation

H317 May cause allergic skin reaction

H411 Toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

P280 Wear protective gloves/ protective clothing / face protection with 3 ply face mask .

P313+P333 If skin irritation or rash occurs: Get medical advice attention.

P313+P337 If eye irritation persists: Get medical advice attention.

P273 Avoid release to the environment.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

## Chemical Name CAS N

Silica Flour Calcium Carbonate Color pigment

Epoxy resin (Molecular Weight < 700)

Alkyl Gylcidyl Ether

CAS No.	%
14808-60-7	22%
1317-65-3	7%
Mixture	2%
25068-38-6	64%
68609-97-2	5%

## **SOLIDFLOOR EP (SF) - Part A**

#### 4. FIRST-AID MEASURES

#### Inhalation

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

#### **Skin Contact**

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

#### **Eye Contact**

> Rinse eyes thoroughly with water for at least 15 minutes, and seek medical advice.

#### Ingestion

> 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 CO2.

#### **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 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 absorb eat materials (e.g. sand, universal binder). Dispose of 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.

## **SOLIDFLOOR EP (SF) - Part A**

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## **Engineering Control**

> Use with adequate general and local exhaust ventilation.

#### Hygiene Measure

> Do not eat, drink, smoke or drug taking in work place. Wash hands before break or after work.

#### **Respiratory Protection**

> General room ventilation is normal adequate.

#### **Hand Protection**

> Chemical resistance gloves / PVC gloves.

#### **Eye /face Protection**

> Safety goggles with 3 ply face mask.

#### **Skin Protection**

> Light protective clothing.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Odour : Characteristic mild

Chemical Type : Liquid

Flammability : Does not ignite
Boiling Point : No data available
Melting Point : No data available
Explosion hazard : Not explosive
Vapour Pressure (25°C) : No data available
Solubility (25°C) : Soluble in water

Relative Density : 1.2 - 1.5Flash Point :  $>140^{\circ}$ C

## 10. STABILITY AND REACTIVITY

#### Stability

> Stable. Avoid static electricity discharge.

## **Hazardous Polymerization**

> Will not occur. Avoid strong acid, strong base and amines.

#### Hazardous reactions

> In fire toxic fume may be generated.



## **SOLIDFLOOR EP (SF) - Part A**

#### 11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

#### **Acute toxicity**

#### Acute oral toxicity

- > Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
- > LD50, Rat, > 15,000 mg / kg

#### Acute dermal toxicity

- > Prolonged skin contact is unlikely to result in absorption of harmful amounts.
- > LD50, Rabbit, 23,000 mg / kg

#### Acute inhalation toxicity

- > At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material, mist or aerosols may cause respiratory irritation.
- > The LC50 has not been determined.

#### Skin corrosion/irritation

- > Prolonged contact may cause skin irritation with local redness.
- > Repeated contact may cause skin irritation with local redness.

#### Serious eye damage/eye irritation

- > May cause eye irritation.
- > Corneal injury is unlikely.

#### **Sensitization**

For similar material(s):

- > Has caused allergic skin reactions in humans.
- > Has demonstrated the potential for contact allergy in mice.
- > For respiratory sensitization:
- > No relevant data found.

#### **Specific Target Organ Systemic Toxicity (Single Exposure)**

> Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Specific Target Organ Systemic Toxicity (Repeated Exposure)**

> Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.

#### 12. ECOLOGICAL INFORMATION

Ecotoxicological information on this product or its components appear in this section when such data is available.

#### **Ecotoxicity**

#### Acute toxicity to fish

- > Material is toxic to aquatic organisms (LC50 / EC50 / IC50 between 1 and 10 mg / I in the most sensitive species).
- > LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 2 mg/l

#### Acute toxicity to aquatic invertebrates

> EC50, Daphnia magna (Water flea), static test, 48 Hour, 1.8 mg / I

## **SOLIDFLOOR EP (SF) - Part A**

#### Acute toxicity to algae/aquatic plants

> ErC50, Scenedesmus capricornutum (fresh water algae), static test, 72 Hour, Growth rate inhibition, 11 mg / I

#### Toxicity to bacteria

> IC50, Bacteria, 18 Hour, Respiration rates., > 42.6 mg / I

#### Chronic aquatic toxicity

#### Chronic toxicity to aquatic invertebrates

> MATC (Maximum Acceptable Toxicant Level), Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 0.55 mg / l

#### **Bioaccumulative potential**

#### **Bioaccumulation**

> Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

#### Partition coefficient

> n-octanol / water (log Pow): 3.242 at 25 °C Estimated.

#### 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

> ADR-UN number : 3082

> ADR-Class : 9, III

> ADR-Upper number: 90

> ADR-Shipping Name : Materia pericolosa per l'ambiente, liquida, n.a.s. (poliammina alifatica)

> ADR-Packing Group : III > IATA-Un number : 3082

> IATA-Class: 9

> IATA-Technical name : Environmentally hazardous substance, liquid, n.o.s. (aliphatic polyamine)

> IATA-Packing group : III > IMDG-Un number : 3082

> IMDG-Class : 8

> IMDG-Technical name: Environmentally hazardous substance, liquid, n.o.s. (aliphatic polyamine)

> IMDG-Packing group : III

#### 15. REGULATORY INFORMATION

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations This product is subject to the SDS, labeling, PEL and other requirements in the Act/Regulations.

#### **Workplace Classification**

This product is classified as hazardous according to Singapore Standards, Act and Regulations.

The following statutes, regulations and standards have the related prescribes on chemicals in terms of safe use, storage, transportation, loading and unloading, classification and symbol etc.

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations

## **SOLIDFLOOR EP (SF) - Part A**

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations

Environmental Protection and Management Act and Environmental Protection and Management (Hazardous Substances) Regulations

**Chemical Weapons Prohibition Act** 

Fire Safety Act and Fire Safety (Petroleum and Flammable Materials) Regulations

## 16. OTHER INFORMATION

#### NONE

The information is based on our current level of knowledge and relates to the products in the states in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

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#### **FACTORY OFFICE**

Lot 772 (10-14), Jalan Subang 4 Kawasan Perindustrian Sg. Penaga 47620 Subang Jaya, Selangor, MY

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**+**603-8081 4771

## **OUR RANGE OF PRODUCTS**

Concrete Admixtures
Waterproofing Systems
Engineering Grouts
Industrial Floor Surfaces

Concrete Repairs
Surface Treatment
Prepacked Concrete Mortar
Protective Coating

Highway Repair Liquid Floor Wall Finishing System

## **SOLIDFLOOR PU - Part B**



## IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Name : SOLIDFLOOR EP (SF) - Part B
Intended Use : Solvent Free Epoxy Floor Coatings
Manufacturer : Solid Green Tech Solutions Sdn. Bhd.
Lot 772 (10-14), Jalan Subang 4

Kawasan Perindustrian Sg. Penaga 47620 Subang Jaya, Selangor, Malaysia

Emergency Phone Number : +(60) 3 8081 4777 / 4776

Fax Numbers : +(60) 3 8081 4771

#### 2. HAZARDS IDENTIFICATION

#### CLASSIFICATION

Skin Irrit. 2 : Causes skin irritation.

Skin Sens. 1 : May cause sensitization by skin contact.

Eye Irrit. 2 : Causes serious eye irritation.

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

#### **HAZARD STATEMENTS**

H215	Caucas	ckin	irritation
	L'AUSES	SKIII	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

H319 Causes serious eye irritation

H317 May cause allergic skin reaction

H411 Toxic to aquatic life with long lasting effects.

#### PRECAUTIONARY STATEMENTS

P280 Wear protective gloves/ protective clothing / face protection with 3 ply face mask.

P313+P333 If skin irritation or rash occurs: Get medical advice attention.

P313+P337 If eye irritation persists: Get medical advice attention.

P273 Avoid release to the environment.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%
Polyamide Adduct	63428-84-2	100

## **SOLIDFLOOR EP (SF) - Part B**

#### 4. FIRST-AID MEASURES

#### Inhalation

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

#### **Skin Contact**

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

#### **Eye Contact**

> Rinse eyes thoroughly with water for at least 15 minutes, and seek medical advice.

#### Ingestion

> 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 CO2.

#### **Fire Fighting Instruction**

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

#### **Self Ignition**

> Not self igniting.

#### Flash Point

>120°C

#### 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 absorb eat materials (e.g. sand, universal binder). Dispose of 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.

## **SOLIDFLOOR EP (SF) - Part B**

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## **Engineering Control**

> Use with adequate general and local exhaust ventilation.

#### Hygiene Measure

> Do not eat, drink, smoke or drug taking in work place. Wash hands before break or after work.

#### **Respiratory Protection**

> General room ventilation is normal adequate.

#### **Hand Protection**

> Chemical resistance gloves /PVC gloves.

#### **Eye /face Protection**

> Safety goggles with 3 ply face mask.

#### **Skin Protection**

> Light protective clothing.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Odour : Characteristic mild

Chemical Type : Liquid

Flammability : Does not ignite
Boiling Point : No data available
Melting Point : No data available
Explosion hazard : Not explosive
Vapour Pressure (25°C) : No data available
Solubility (25°C) : Soluble in water

Relative Density : 1.2 - 1.5 Flash Point :>110°C

## 10. STABILITY AND REACTIVITY

#### Stability

> Stable. Avoid static electricity discharge.

## **Hazardous Polymerization**

> Will not occur. Avoid strong acid, strong base and amines.

#### Hazardous reactions

> In fire toxic fume may be generated.



## **SOLIDFLOOR EP (SF) - Part B**

#### 11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

#### **Acute toxicity**

#### Acute oral toxicity

- > Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
- > LD50, Rat, > 15,000 mg / kg

#### Acute dermal toxicity

- > Prolonged skin contact is unlikely to result in absorption of harmful amounts.
- > LD50, Rabbit, 23,000 mg / kg

#### Acute inhalation toxicity

- > At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material, mist or aerosols may cause respiratory irritation.
- > The LC50 has not been determined.

#### Skin corrosion/irritation

- > Prolonged contact may cause skin irritation with local redness.
- > Repeated contact may cause skin irritation with local redness.

#### Serious eye damage/eye irritation

- > May cause eye irritation.
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#### **Sensitization**

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#### **Specific Target Organ Systemic Toxicity (Single Exposure)**

> Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Specific Target Organ Systemic Toxicity (Repeated Exposure)**

> Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.

#### 12. ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment. List of substances dangerous for the environment and corresponding classification:

< 5% 3-aminomethyl-3, 5, 5-trimethylcyclohexylamine

N.67 / 548 / CEE: 612-067-00-9 CAS: 2855-13-2 EINECS: 220-666-8 52 / 53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

< 5% 1, 3-Bis (aminometil) benzene (MXDA)

CAS: 1477-55-0 EINECS: 216-032-5

R52 / 53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

LC (50) trota arcobaleno / 96h: >100 mg / I

EC (50) daphnia / 48h : 16 mg / l

## **SOLIDFLOOR EP (SF) - Part B**

#### 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

> ADR-UN number : 3082

> ADR-Class : 9, III

> ADR-Upper number : 90

> ADR-Shipping Name: Materia pericolosa per l'ambiente, liquida, n.a.s. (poliammina alifatica)

> ADR-Packing Group : III > IATA-Un number : 3082

> IATA-Class: 9

> IATA-Technical name : Environmentally hazardous substance, liquid, n.o.s. (aliphatic polyamine)

> IATA-Packing group : III > IMDG-Un number : 3082

> IMDG-Class: 8

> IMDG-Technical name : Environmentally hazardous substance, liquid, n.o.s. (aliphatic polyamine)

> IMDG-Packing group : III

#### 15. REGULATORY INFORMATION

### **Symbols**

- > N Dangerous for the environment
- > Xi Irritant

#### **R Phrases**

- > R51 / 53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- > R36 / 38 Irritating to eyes and skin.
- > R43 May cause sensitization by skin contact.

#### **S Phrases**

- > S51 Use only in well-ventilated areas.
- > S61 Avoid release to the environment. Refer to special instructions / Safety data sheets.
- > S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- > S24 / 25 Avoid contact with skin and eyes.
- > S37 Wear suitable gloves.

#### Contents

> 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Where applicable, refer to the following regulatory provisions:

## **SOLIDFLOOR EP (SF) - Part B**

#### 16. OTHER INFORMATION

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold ACGIH - Treshold Limit Values - 1997 edition

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Phrases R used in paragraph 2:

R21 / 22 Harmful in contact with skin and if swallowed.

R34 Causes burns.

R43 May cause sensitization by skin contact.

R52 / 53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R20 / 22 Harmful by inhalation and if swallowed.

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SOLUTIONS SDN. BHD.

#### **FACTORY OFFICE**

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## **OUR RANGE OF PRODUCTS**

Concrete Admixtures Waterproofing Systems **Engineering Grouts** Industrial Floor Surfaces

Concrete Repairs Surface Treatment Prepacked Concrete Mortar **Protective Coating** 

Highway Repair Liquid Floor Wall Finishing System