



**SAFETY DATA SHEET  
QUICSEAL 166 – PART A  
PU-PTB**

**1. IDENTIFICATION OF THE SUBSTANCE/COMPOUND AND THE SUPPLIER**

Product Name: QUICSEAL 166 – PU-PTB (Part A)  
Product Use: Part A of a two-component polyurethane waterproofing membrane

Details of the supplier:

*QUICSEAL CONSTRUCTION CHEMICALS PTE LTD  
No. 7 Eunos Avenue 8A  
Eunos Industrial Estate  
Singapore 409460*

Emergency Contact No.: (65) 6742 4466

**2. HAZARDS IDENTIFICATION**

**GHS classification:**

Eye irritant – Category 2B

**GHS LABEL ELEMENTS**

**Symbol(s):**

No symbol required

**Signal Word**

Warning

**Hazard statements**

H320: Causes eye irritation

**Precautionary statements:**

Prevention

P264: Wash hands and forearms thoroughly after handling.

Response

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

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

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

**Components**

This product does not contain hazardous components in concentrations higher than the concentration limit according to the GHS Classification of Chemicals.

**QUICSEAL CONSTRUCTION CHEMICALS PTE LTD**

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W



#### 4. FIRST-AID MEASURES

##### **Inhalation**

Keep the patient calm. If unconscious place in stable sideways position. Protect against loss of body heat. If breathing stops, administer artificial respiration. Seek medical advice immediately and clearly identify substance.

##### **Skin contact**

Remove contaminated clothes at once. Wash off with plenty of water or water and soap immediately for 10-15 minutes. In serious cases, use emergency shower immediately. Seek medical advice immediately and clearly identify substance.

##### **Eye contact**

Rinse immediately with plenty of water for 10-15 minutes. Keep eyelids well open to rinse the whole eye surface and eyelids with water. Seek medical advice immediately and clearly identify substance. Continue to bathe eyes during transport to medical practitioner.

##### **Ingestion**

If conscious, give several small portions of water to drink. Do not induce vomiting. Seek medical advice immediately and clearly identify substance.

#### 5. FIRE-FIGHTING MEASURES

##### **General Fire Hazards**

This product poses no fire-related hazard. If material is involved in fire, avoid breathing fumes.

##### **Suitable Fire-extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### **Fire-fighting equipment**

A self-contained breathing apparatus (SCBA) is recommended to limit exposures to combustion products when fighting any fire.

##### **Further information**

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

#### 6. ACCIDENTAL RELEASE MEASURES

##### **Personal Precautions and Protective equipment**

Avoid contact with skin and eyes; Use protective clothing (gloves, goggles) and safety equipment.

##### **Environmental Precautions**

Do not release untreated material into water sources. Dried material is environment-friendly.

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

For small amounts: Absorb spillage with absorbent materials such as sand, sawdust, paper, general-purpose binder, kieselguhr). Allow to dry before disposing material in accordance with regulations.

For large amounts: Pump off product.

For residues: Rinse away with water.

### QUICSEAL CONSTRUCTION CHEMICALS PTE LTD

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W



## 7. HANDLING AND STORAGE

### Precautions for safe handling

Handle in accordance to good industrial hygiene and safety practices (i.e. gloves, goggles, and safety equipment should be used when handling chemicals; do not eat, drink, smoke when handling product). Wash hand thoroughly before eating and drinking. Any accidental contact with the product must be washed with clean water.

### Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry. Avoid exposure to temperatures above 35°C. Keep away from foodstuffs, drinks and tobacco.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Control parameters / Occupational Exposure Limits

This product does not contain components which have relevant occupational exposure limits.

### Appropriate engineering measures

There are no relevant exposure control measures necessary for this product. However, it is good practice to install exhaust ventilation system to facilitate healthy flow of fresh air in the workplace.

### Personal protective equipment

Hand Protection:	Gloves constructed of nitrile, neoprene, or PVC are recommended.
Eye Protection:	Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.
Skin Protection:	Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure.
Respiratory Protection:	Unless the product is entirely enclosed, do not handle it until you have studied the respiratory precautions issued by the appropriate authority or accident prevention association. Full mask with filter ABEK-P2 is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	White
Odour:	Smell of amine
Flash Point:	>100°C
Initial boiling point and boiling range:	Not available
Auto-ignition temperature:	Not applicable
Upper explosive limit:	53% (v/v)
Lower explosive limit:	3.2% (v/v)
Water Solubility (25°C):	Miscible
Specific Gravity:	1.13
Viscosity:	1400-1800 mPa.s

### QUICSEAL CONSTRUCTION CHEMICALS PTE LTD

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W



## 10. STABILITY AND REACTIVITY

### Stability

The product is stable in normal conditions of use and storage.

### Possibility of hazardous reactions

Exothermic reaction with isocyanates is expected.

### Incompatible materials

No substances known that should be avoided.

### Hazardous decomposition products

No hazardous decomposition products are expected if stored and handled as prescribed/indicated.

## 11. TOXICOLOGICAL INFORMATION

This product has not been tested and all the toxicological statements have been derived from the respective components' available toxicity information.

### Acute toxicity

Experimental/calculated data:

LD50, oral: >5,000 mg/kg (the product is not toxic/harmful if swallowed.)

LD50, dermal: > 5,000 mg/kg (the product is not toxic/harmful in contact with skin)

LC50, inhalation: > 20 mg/L (the product is not toxic/harmful if inhaled)

### Skin / Eye Irritation

This product causes slight eye irritation, but is not expected to cause skin irritation.

### Respiratory / Skin sensitization

The product is not expected to cause any allergic skin reaction or allergy/asthma symptoms/ breathing difficulties if inhaled.

### Germ cell mutagenicity / Carcinogenicity / Reproductive toxicity / Developmental toxicity

Based on the assessment of available information, the product is: not mutagenic in bacteria; has no known carcinogenic effect; and not expected to cause reproductive and developmental toxicity.

### Specific target organ toxicity (single and repeated exposure)

Based on the available information, there is no specific target organ toxicity expected after a single or repeated exposure to the product.

## 12. ECOLOGICAL INFORMATION

The following ecological assessment is based on the available ecotoxicity information of the product's components.

### Ecotoxicity

This product is not expected to be toxic to aquatic life based on the toxicity values to the following aquatic organisms:

Fish: LC50 (96h) > 200 mg/l, *Brachydanio rerio* (OECD Guideline 203, static)

## QUICSEAL CONSTRUCTION CHEMICALS PTE LTD

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W



Aquatic invertebrates: EC50 (48h) > 200 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)  
Aquatic plants: LC50 (72h) > 200 mg/l, *Scenedesmus subspicatus* (OECD Guideline 201)

**Additional information**

Do not release product untreated into natural waters. At the present knowledge of the product, no negative ecological effects are expected.

**13. DISPOSAL CONSIDERATIONS****Description of waste residues and information on their safe handling & methods of disposal**

Dispose of the product through licensed hazardous waste collectors under Singapore regulations. Provide the hazardous waste collector the sufficient information on the various hazards of this product.

**Disposal of any contaminated packaging**

Container can be recycled after cleaning or dispose of the container through licensed hazardous waste collectors under Singapore regulations.

**14. TRANSPORT INFORMATION**

This product is classified as NON-HAZARDOUS under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**15. REGULATORY INFORMATION****Applicable National Regulations**

This product is subject to the requirements in the following acts/regulations:

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations  
Environmental Protection and Management Act and Environmental Protection and Management  
Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives)

**International Regulations**

This product is classified as hazardous pursuant to the provision set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

**16. OTHER INFORMATION**

The information and data contained herein are believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since QUICSEAL Construction Chemicals Pte. Ltd. cannot know all of the uses to which its products may be put or the conditions of use; it makes no warranties concerning the fitness or suitability of its products for a particular use of purpose.

**QUICSEAL CONSTRUCTION CHEMICALS PTE LTD**

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W





**SAFETY DATA SHEET  
QUICSEAL 166 – PART B  
PU-PTB**

**1. IDENTIFICATION OF THE SUBSTANCE/COMPOUND AND THE SUPPLIER**

Product Name: QUICSEAL 166 – PU-PTB (Part B)  
Product Use: Part B of a two-component polyurethane waterproofing membrane

Details of the supplier:

*QUICSEAL CONSTRUCTION CHEMICALS PTE LTD  
No. 7 Eunos Avenue 8A  
Eunos Industrial Estate  
Singapore 409460*

Emergency Contact No.: (65) 6742 4466

**2. HAZARDS IDENTIFICATION**

**GHS classification:**

Acute inhalation toxicity – Category 4  
Skin irritation – Category 2  
Eye irritation – Category 2  
Skin sensitization – Category 1  
Respiratory sensitization – Category 1  
Specific target organ toxicity, single exposure – Category 3 (respiratory system)

**GHS LABEL ELEMENTS**

**Symbol(s):**



**Signal Word**

Danger

**Hazard statements:**

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

**QUICSEAL CONSTRUCTION CHEMICALS PTE LTD**

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W



**Precautionary statements:**Prevention

- P261: Avoid breathing fume/mist/vapours/spray.  
 P264: Wash hands and forearms thoroughly after handling.  
 P271: Use only outdoors or in a well-ventilated area.  
 P272: Contaminated work clothing should not be allowed outside the workplace.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P285: In case of inadequate ventilation: wear respiratory protection.

Response

- P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
 P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.  
 P332+P313: If skin irritation occurs: Get medical advice/attention.  
 P337+P313: If eye irritation persists: Get medical advice/attention.  
 P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
 P362: Take off contaminated clothing and wash before reuse.

Storage

- P403+P235: Store in a well ventilated place. Keep cool.  
 P405: Store locked up.

Disposal

- P501: Dispose of contents/container in accordance with local/national regulations.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

This product contains the following components classified as hazardous:

COMPONENTS	CAS No.	Percentage
Diphenylmethane diisocyanate, isomers and homologues	9016-87-9	100%

**4. FIRST-AID MEASURES****General information**

Take person to a safe place. Observe self-protection for first aid. Always seek medical advice in the event of contact with this substance.

**Inhalation**

Keep the patient calm. If unconscious place in stable sideways position. Protect against loss of body heat. If breathing stops, administer artificial respiration. Seek medical advice immediately and clearly identify substance.

**QUICSEAL CONSTRUCTION CHEMICALS PTE LTD**

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W



**Skin contact**

Remove contaminated clothes at once. Wash off with plenty of water or water and soap immediately for 10-15 minutes. In serious cases, use emergency shower immediately. Seek medical advice immediately and clearly identify substance.

**Eye contact**

Rinse immediately with plenty of water for 10-15 minutes. Keep eyelids well open to rinse the whole eye surface and eyelids with water. Seek medical advice immediately and clearly identify substance. Continue to bathe eyes during transport to medical practitioner.

**Ingestion**

If conscious, give several small portions of water to drink. Do not induce vomiting. Seek medical advice immediately and clearly identify substance.

**Notes to physician**

Treat patient symptomatically (decontamination, vital functions).

**5. FIRE-FIGHTING MEASURES****General Fire Hazards**

This product poses no fire-related hazard. If material is involved in fire, avoid breathing fumes.

**Suitable Fire-extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Fire-fighting equipment**

A self-contained breathing apparatus (SCBA) is recommended to limit exposures to combustion products when fighting any fire.

**Hazardous combustion products**

In case of fire, formation of carbon monoxide, nitrogen oxide, isocyanate vapour, and traces of hydrogen cyanide is possible.

**Further information**

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions and protective equipment**

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

**Environmental Precautions**

Do not wash product down sewage and drainage systems or into bodies of water (e.g. streams). Dispose dry/solidified product according to national legislation and environmental regulations.

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

Cover with damp, fluid-binding material (sand, sawdust, chemical binder based on calcium silicate hydrate). Transfer to waste container after approx. 1 hour and do not seal (CO<sub>2</sub> formation). Keep damp and in the open air in a safe place for 7 to 14 days. Waste should be disposed of according to national regulations.

**QUICSEAL CONSTRUCTION CHEMICALS PTE LTD**

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W





## 7. HANDLING AND STORAGE

### Precautions for safe handling

Handle in accordance to good industrial hygiene and safety practices (i.e. gloves, goggles, and safety equipment should be used when handling chemicals; do not eat, drink, smoke when handling product). Wash hand thoroughly before eating and drinking. Any accidental contact with the product must be washed with clean water.

### Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry. Avoid exposure to temperatures above 35°C. Keep away from foodstuffs, drinks and tobacco.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Control parameters / Occupational Exposure Limits

This product contains the following substance with relevant occupational exposure limits:

Diphenylmethane diisocyanate, CAS No.: 9016-87-9

Singapore Permissible Exposure Level (PEL), long term: 0.005 ppm / 0.051 mg/m<sup>3</sup>

### Appropriate engineering measure

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure limits, particularly in confined spaces.

### Personal protective equipment

Hand Protection:	Gloves constructed of nitrile, neoprene, or PVC are recommended.
Eye Protection:	Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.
Skin Protection:	Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure.
Respiratory Protection:	Unless the product is entirely enclosed, do not handle it until you have studied the respiratory precautions issued by the appropriate authority or accident prevention association. Full mask with filter A2-P2 is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Brown
Flash Point:	>200°C
Initial boiling point and boiling range:	Not available
Setting Point:	<0°C
Auto-ignition temperature:	Not applicable
Explosion limits:	Not applicable
Vapor pressure (20°C):	<0.00001 mbar
Water Solubility (25°C):	Not soluble
Specific Gravity:	1.23

## QUICSEAL CONSTRUCTION CHEMICALS PTE LTD

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W



## 10. STABILITY AND REACTIVITY

### Stability

The product is stable in normal conditions of use and storage. However, avoid extreme temperatures which can cause polymerization (200°C).

### Possibility of hazardous reactions

Exothermic reaction with amines and alcohols; reacts with water forming carbon dioxide in closed containers which may cause bursting due to the increase in internal pressure

### Incompatible materials

Keep away from bases, strong oxidizing agents and alcohols.

### Hazardous decomposition products

Carbon monoxide, nitrogen oxide, isocyanate vapour, and traces of hydrogen cyanide may be liberated when the product is involved in fire.

## 11. TOXICOLOGICAL INFORMATION

This product has not been tested and all the toxicological statements have been derived from the respective components' available toxicity information.

### Acute toxicity

Experimental/calculated data:

LD50, oral: > 5,000 mg/kg (the product is not harmful if swallowed.)

LD50, dermal: > 5,000 mg/kg (the product is not toxic/harmful in contact with skin)

LC50, inhalation (rat): ~ 10 – 20 mg/L, 4h (the product is harmful if inhaled)

### Eye Irritation

This product causes slight temporary reddening and swelling of the conjunctiva and slight reversible clouding of the cornea.

### Skin Irritation

In case of longer contact with skin, tanning and irritating effects are possible.

### Respiratory / Skin sensitization

The product may cause an allergic skin reaction and may cause allergy or asthma symptoms or breathing difficulties if inhaled.

### Germ cell mutagenicity / Carcinogenicity / Reproductive toxicity / Developmental toxicity

Based on the assessment of available information, the product is: not mutagenic in bacteria; has no known carcinogenic effect; and not expected to cause reproductive and developmental toxicity.

### Specific target organ toxicity (single exposure)

Aerosol/Vapour concentrations at over twice the Occupational Exposure Limit (OEL) cause irritation of the mucous membranes in the nose, throat and lungs, dryness of the throat, pressure on the chest, sometimes accompanied by breathing difficulties and headaches. Delayed appearance of the symptoms and allergic reaction in susceptible persons is possible.

## QUICSEAL CONSTRUCTION CHEMICALS PTE LTD

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W



## 12. ECOLOGICAL INFORMATION

This product is immiscible in water. The product reacts with water at the interface producing carbon dioxide and forming a solid and 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-biodegradable.

This product is not expected to cause any short-term or long-term hazard to the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

**Description of waste residues and information on their safe handling & methods of disposal**  
Dispose of the product through licensed hazardous waste collectors under Singapore regulations. Provide the hazardous waste collector the sufficient information on the various hazards of this product.

**Disposal of any contaminated packaging**

Container can be recycled after cleaning or dispose of the container through licensed hazardous waste collectors under Singapore regulations.

## 14. TRANSPORT INFORMATION

This product is classified as NON-HAZARDOUS under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

## 15. REGULATORY INFORMATION

**Applicable National Regulations**

This product is subject to the requirements in the following acts/regulations:

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations  
Environmental Protection and Management Act and Environmental Protection and Management  
Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives)

**International Regulations**

This product is classified as hazardous pursuant to the provision set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

## 16. OTHER INFORMATION

The information and data contained herein are believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since QUICSEAL Construction Chemicals Pte. Ltd. cannot know all of the uses to which its products may be put or the conditions of use; it makes no warranties concerning the fitness or suitability of its products for a particular use of purpose.

### QUICSEAL CONSTRUCTION CHEMICALS PTE LTD

No. 7 Eunos Avenue 8A Eunos Industrial Estate Singapore 409460 Tel: (65) 6742 4466 Fax: (65) 6741 4666

Website: [www.quicseal.com](http://www.quicseal.com) Co.Reg. No.: 198201286W

