



**SAFETY DATA SHEET
QUICSEAL 604
TILEMIX (TYPE II)**

1. INFORMATION OF THE SUBSTANCE/COMPOUND AND THE SUPPLIER

Product Name: QUICSEAL 604 – Tilemix (Type II)
Product Use: Water-based latex adhesive admixture

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

This product is not classified as hazardous according to GHS criteria.

GHS Label Elements and Precautionary Statements

This product does not require a hazard warning label in accordance with GHS criteria.

Other hazards which do not result in classification

No specific dangers known, if the regulation/notes for storage and handling are considered.
May be irritating to eyes and respiratory tract in a closed confined area.
No chronic hazard is expected when good industrial and personal hygiene is practiced.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterization/Description: Water-based dispersion/mixture

Components

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

4. FIRST-AID MEASURES

Eye Contact

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Seek medical attention.

Skin Contact

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

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 Co.Reg. No.: 198201286W



Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

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

The product is non-flammable (water-borne system). If material is involved in fire, do not breathe fumes.

Suitable Fire-extinguishing Media

Use the appropriate fire extinguishing media for surrounding fire (water, foam, dry powder, CO₂)

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.

7. HANDLING AND STORAGE**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.

Storage

Store product protected from freezing and away from direct sunlight.

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 Co.Reg. No.: 198201286W



8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with occupational exposure limits

This product has a component which contains trace amounts of the following substance with its relevant occupational exposure limits:

Ammonia, CAS No. 7664-41-7:

Singapore OEL: TWA = 17 mg/m³ ; 25 ppm / STEL = 24 mg/m³ ; 35 ppm

ACGIHTLV: TWA = 25 ppm / STEL = 35 ppm

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:

Suitable chemical resistant gloves (EN 374) also with prolonged , direct contact

Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm).

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:

Safety goggles with side shield (frame goggles) (e.g. EN 166)

General safety and hygiene measures:

Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------|------------------------------------|
| Physical state: | Liquid |
| Appearance: | Milky white liquid |
| Flash Point: | Not flammable (water-borne system) |
| Boiling Point: | 100°C |
| Melting Point: | Not Applicable |
| Oxidising Properties: | Not Applicable |
| Flammability Limits: | None allocated |
| Water Solubility: | Soluble in water |
| Solid Content: | Approx. 16% |
| Specific Gravity: | Approx. 1.02 |

10. STABILITY AND REACTIVITY

Stability

The product is stable in normal conditions of use and storage. However, avoid extreme temperatures which can cause polymer decomposition.

Possibility of hazardous reactions

No hazardous reactions are foreseeable under normal conditions of use and storage.

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 Co.Reg. No.: 198201286W



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 classified as orally toxic)

LD50, dermal: > 5,000 mg/kg (the product is not classified as dermally toxic)

LC50, inhalation: > 20 mg/L (the product is classified as non-toxic if inhaled)

Irritation / corrosion

The product is not irritating to the eyes or skin. If the product adheres to skin, irritation may occur when it dries.

Experimental/calculated data:

Skin: Species: rabbit / Result: non-irritant / Method: OECD Guideline 404

Eye: Species: rabbit / Result: non-irritant / Method: OECD Guideline 405

Respiratory / Skin sensitization

The product is not expected to cause respiratory or skin sensitization.

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.

Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

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) > 100 mg/l, *Brachydanio rerio* (OECD Guideline 203, static)

Aquatic invertebrates: EC50 (48h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Aquatic plants: LC50 (72h) > 100 mg/l, *Scenedesmus subspicatus* (OECD Guideline 201)

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 Co.Reg. No.: 198201286W



Persistence and degradability

Elimination information: >70% DOC reduction (OECD 302B; ISO 9888; 88/302/EEC, part C)
Easily eliminated from water.

Bioaccumulation potential

Based on structural properties, the polymer component is not biologically available. Accumulation in organisms is not expected.

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**Disposal of container**

Allow liquid to dry in the container. Peel-off dried material and dispose. The container may be used for other function after thorough washing.

Disposal of material

Dried material can be disposed off in authorized landfill site in accordance to national 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**Labelling requirements according to EEC Directives**

This product is not subject to labeling in accordance with EEC Directives.

Handle in accordance with good industrial hygiene and safety practice.

National legislation/regulations

According to the data available to us, the product is not hazardous under the relevant Singapore Legislation.

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 Co.Reg. No.: 198201286W





**SAFETY DATA SHEET
QUICSEAL 602
THIN SET POWDER**

1. INFORMATION OF THE SUBSTANCE/COMPOUND AND THE SUPPLIER

Product Name: QUICSEAL 602 – Thin Set Powder
Product Use: Cement-based powder mix

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:

Skin Corrosion/Irritation - Category 2
Serious Eye Damage/Eye Irritation - Category 2
Specific Target Organ Toxicity Repeated Exposure - Category 3

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

Warning

Hazard Statements

H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Precautionary Measures

Prevention

P261: Avoid breathing dust.
P264: Wash hands and forearms thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection.

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 Co.Reg. No.: 198201286W



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.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

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

P362: Take off contaminated clothing and wash before reuse.

Storage

P402 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked-up.

Disposal

P501: Dispose of contents/container in accordance with local/regional/international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

This product contains the following components classified as hazardous:

| COMPONENTS | CAS No. | EINECS No. | Index No. | Percentage |
|-------------------------|------------|------------|-----------|------------|
| Portland Cement Type II | 65997-15-1 | -- | -- | 30 - 50% |
| Silica Sand | 14808-60-7 | -- | -- | 30 - 50% |

4. FIRST-AID MEASURES**Eye Contact:**

Rinse eyes thoroughly with water for at least 15 minutes, including under lids, to remove all particles. Seek medical attention for abrasions and burns.

Skin Contact:

Wash with cool water and a pH neutral soap or a mild skin detergent. Seek medical attention for rash, burns, irritation, dermatitis, and prolonged unprotected exposures to wet product, cement mixtures or liquids from wet cement.

Inhalation:

Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Ingestion:

Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control center immediately.

Note to Physician:

Pls. see Section 11 for the details on the potential health effects of this product.

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 Co.Reg. No.: 198201286W



5. FIRE-FIGHTING MEASURES

General Fire Hazards

Avoid breathing dust. Wet product is alkaline/caustic.

Fire-fighting equipment

This product poses no fire-related hazard. A self-contained breathing apparatus (SCBA) is recommended to limit exposures to combustion products when fighting any fire.

Suitable Fire-extinguishing Media

Use extinguishing media appropriate for surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up

Place spilled material into a container. Avoid actions that cause the product to become airborne. Avoid inhalation of the powder product and contact with skin. Wear appropriate protective equipment as described in Section 8. Scrape wet product and place in container. Allow material to dry or solidify before disposal. 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.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid actions that cause the powder product to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Use PPE described in Section 8 below.

Cutting, crushing or grinding hardened product on concrete or other crystalline silica-bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression, and Personal Protective Equipment (PPE) described in Section 8 below.

Promptly remove and launder clothing that is dusty or wet with powder product. Thoroughly wash skin after exposure to dust or wet product.

Conditions for safe storage, including any incompatibilities

Keep bagged product dry until used. Stack bagged material in a secure manner to prevent falling. Bagged product is heavy and poses risks such as sprains and strains to the back, arms, shoulders and legs during lifting and mixing. Handle with care and use appropriate control measures.

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 Co.Reg. No.: 198201286W



8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls

Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits.

Personal Protective Equipment (PPE)

Respiratory Protection

Under ordinary conditions no respiratory protection is required. Wear a NIOSH-approved respirator that is properly fitted and is in good condition when exposed to dust above exposure limits.

Eye Protection

Wear ANSI-approved glasses or safety goggles when handling the dry powder or wet product to prevent contact with eyes. Wearing contact lenses when using the product, under dusty conditions, is not recommended.

Skin Protection

Wear gloves, boot covers and protective clothing impervious to water to prevent skin contact. Do not rely on barrier creams, in place of impervious gloves. Remove clothing and protective equipment that becomes saturated with wet product and immediately wash exposed areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------|---------------------------|
| Physical state: | Powder |
| Appearance: | Grey or white powder |
| Flash Point: | Not flammable |
| Boiling Point: | Not Applicable |
| Melting Point: | Not Applicable |
| Oxidising Properties: | Not Applicable |
| Flammability Limits: | None allocated |
| Water Solubility: | Slightly soluble in water |
| Solid Content: | approx. 100% |
| pH: | 11 – 12 (wet) |

10. STABILITY AND REACTIVITY

Stability

The product is stable in normal conditions of use and storage. However, keep the product dry until use. Avoid contact with incompatible materials.

Incompatible materials

Wet product is alkaline and is incompatible with acids, ammonium salts and aluminum metal. The product dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. The product reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

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 Co.Reg. No.: 198201286W



11. TOXICOLOGICAL INFORMATION

Potential Health Effects

The potential effects on human health stated below are based on our knowledge of the product and statistically derived from the cumulative data estimates of the hazardous components of the product. Do note that the product has not been actually tested.

Acute Toxicity

Acute Toxicity Estimates (ATE) based on the hazardous components of the product:

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 Corrosion

In its wet state (when mixed with water), this product causes skin irritation.

Serious Eye Damage

In its wet state, this product causes serious eye irritation.

Respiratory / Skin sensitization

This product is not expected to cause allergic skin reaction or respiratory sensitization.

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 – Repeated Exposure

Based on the available information, there is no specific target organ toxicity expected after a single or repeated exposure to the product. However, this product may cause respiratory irritation upon repeated exposure to the powder dust.

12. ECOLOGICAL INFORMATION

Elimination information

This product is non-biodegradable and is not expected to create environmental hazard unless dumped in massive quantities.

13. DISPOSAL CONSIDERATIONS

This product can be disposed off by landfill at an approved site, in accordance with local regulations

14. TRANSPORT INFORMATION

This product is not dangerous for transport under the 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.

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 Co.Reg. No.: 198201286W



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

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.

OSHA/MSHA Hazard Communication

This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.

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 Co.Reg. No.: 198201286W

