



**SAFETY DATA SHEET
QUICSEAL 134
PRIMER-T**

1. IDENTIFICATION OF THE SUBSTANCE/COMPOUND AND THE SUPPLIER

Product Name: QUICSEAL 134 – Primer-T
Product Use: Primer/adhesion promoter for glass and glazed surfaces

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:

Flammable liquid – Category 2
Skin Irritant – Category 2
Eye corrosive – Category 1
Specific target organ toxicant, single exposure – Category 3 (drowsiness and dizziness)

GHS LABEL ELEMENTS

Symbol(s):



Signal Word

Danger

Hazard statements:

H315: Causes skin irritation
H318: Causes serious eye damage
H225: Highly flammable liquid and vapour
H336: May cause drowsiness or dizziness

Precautionary statements:

Prevention

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P242: Use only non-sparking tools.

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



- P243: Take precautionary measures against static discharge.
 P260: Do not breathe mist/vapours/spray.
 P264: Wash hands and forearms thoroughly after handling.
 P271: Use only outdoors or in well-ventilated area.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

- P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable to 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.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P337+P313: If eye irritation persists: Get medical advice/attention.
 P362: Take off contaminated clothing and wash before reuse.
 P370: In case of fire: Use appropriate extinction (see Section 5).

Storage

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

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.	EINECS No.	Index No.	Percentage
Isopropyl alcohol	67-63-0	200-661-7	--	Proprietary
Aminopropyltriethoxysilane	919-30-2	213-048-4	--	Proprietary

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.

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.

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



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. Because rapid absorption may occur through lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treat as early as possible using cortisone spray. Medical checks necessary up to a latency period of at least 24 hours. In the event of 1st degree burns use corticoidexterna. In the case of 2nd degree burns, use symptomatic treatment.

5. FIRE-FIGHTING MEASURES**General fire hazards**

This product is classified as FLAMMABLE LIQUID. See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Suitable Fire-extinguishing media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO₂, water spray, fire fighting foam, and other gaseous agents.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Fire-fighting equipment / instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Fire-fighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

Hazardous combustion products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

Further information

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



6. ACCIDENTAL RELEASE MEASURES

Emergency measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

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

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Methods and materials for containment and cleaning up

Carefully contain and stop the source of the spill, if safe to do so.

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Conditions for safe storage, including any incompatibilities

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labelled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition. Store in a well-ventilated area. Avoid storage near incompatible materials. Keep away from strong acids and strong oxidizers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters / Occupational Exposure Limits

For component: Isopropyl alcohol, CAS No.: 67-63-0

Singapore Permissible Exposure Level (PEL), short term: 500 ppm / 1230 mg/m³

Singapore Permissible Exposure Level (PEL), long term: 400 ppm / 983 mg/m³

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



Appropriate engineering measure

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Lethal concentration may exist in areas with poor ventilation.

Personal protective equipmentEye/face Protection

Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator. Eye wash fountain should be located in immediate work area.

Skin Protection

Safety shower should be located in immediate work area. Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Any plastic or rubber glove which provides a water-proof barrier should provide adequate skin protection.

Respiratory Protection

Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator.

For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained air supply.

In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Transparent reddish
Odour:	Alcohol-like
Flash Point:	12°C
Initial boiling point and boiling range:	82°C
Freezing / Melting point:	-89°C
Auto-ignition temperature:	Not available
Flammability Limits:	2.0% - 12.7% (v/v)
Vapor pressure:	44 hPa (20°C)
Vapor density:	2.1 (air = 1)
Water Solubility:	Miscible in all proportions
Solubility in other solvents:	Miscible with alcohols, ethers, and many organic solvents
Specific Gravity:	Approx. 0.8

10. STABILITY AND REACTIVITY**Chemical stability**

The product is flammable. The liquid and vapour is readily combustible.

Possibility of hazardous reactions

Small quantities of peroxides can form on prolonged storage. Exposure to light and/or air significantly increases the rate of peroxides. If evaporated to a residue, the mixture of peroxides and isopropanol may explode when exposed to heat or shock.

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



Conditions to avoid

Solvent may cause high pressure under excessive heat. This may lead to pressure build up in closed containers. Avoid ignition sources such as flames or spark producing equipment. Avoid moisture.

Incompatible materials

Strong oxidizing agents. Halogens. Aldehydes. Mineral acids.
Reacts violently with: acids. Reaction causes the formation of heat.

Hazardous decomposition products

Thermal decomposition or burning may produce: Carbon dioxide, Carbon monoxide. Under the effect of humidity, water and protic agents: ethanol.

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 (rat), oral: 5,340 mg/kg (the product may be not toxic/harmful if swallowed)

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

LC50 (4 hr exposure): > 20 mg/L (the product is not toxic/harmful if inhaled)

Skin and Eye Irritation

This product may cause skin and eye irritation due to the following components:

Isopropyl alcohol, CAS No.: 67-63-0 = Skin irritant (Category 2)

Aminopropyltriethoxysilane, CAS No.: 919-30-2 = Eye corrosive (Category 1)

Respiratory / Skin sensitization

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

Developmental / Reproductive toxicity

In animal studies, the product's components has caused birth defects has been toxic to the fetus in laboratory animals only at doses toxic to the mother. Animal studies also show that the product's components do not interfere with reproduction.

Germ cell mutagenicity

In vitro and animal mutagenicity studies of the product's components were negative.

Carcinogenicity

Animal studies show that the product's components did not cause cancer in laboratory animals. Furthermore, the product contains no known or suspected human carcinogen.

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.

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



12. ECOLOGICAL INFORMATION

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

Acute toxicity to the aquatic environment

This product is not classified as toxic to aquatic organisms (LC50/EC50/IC50 greater than 100 mg/L in most sensitive species):

Acute LC50 for fathead minnow (*Pimephales promelas*) is 8300 mg/L.

Acute LC50 for golden orfe (*Leuciscus idus*) is 9100 mg/L.

Acute LC50 for goldfish (*Carassius auratus*) is >500 mg/L.

Acute LC50 for bluegill (*Lepomis macrochirus*) is >1400 mg/L.

Acute LC50 for water flea *Daphnia magna* is 9500mg/L.

Acute immobilization EC50 for water flea (*Daphnia magna*) is 9714 mg/L.

Mobility and Bioaccumulation Potential

Bioconcentration potential is low (BCF less than 100 or log Row less than 3).

Measured log octanol/water partition coefficient (log Row) is 0.05.

Henry's Law Constant(H) is estimated to be 3.38E-06 atm.m³/mol.

Potential for mobility in soil is very high (Koc between 0 and 50).

Soil organic carbon/water partition coefficient (koc) is estimated to be 1.1.

Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):

Test system Exp. time Result Source *Pseudomonas putida* 5 h 13 mg/l (EC10) literature

Do not introduce large amounts into purification plants.

Degradation

Material is readily biodegradable. Passes OECD Test(s) for ready biodegradability.

Inhibitory concentration (IC50) in OECD Activated Sludge, respiration Inhibition Test (OECD Test No. 209) is >1000 mg/L.

Biodegradation reached in Closed Bottle Test (OECD Test No. 301 D) after 28 days: 84%.

Biodegradation reached in Modified OECD Screening Test (OECD Test No. 301 E0) after 28

days: 95%. Mean biodegradation reached in Continuous Activated Sludge

Assay (OECD Test No. 303 A): 99.9%. Method Degree of elimination Classification 7

Source DOC Die-Away Test/Modified AFNOR Test 67 % potentially biodegradable literature

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

Dried material can be disposed off in authorized landfill site in accordance to national regulations.

Container should be recycled after cleaning or dispose of the container through licensed hazardous waste collectors under Singapore regulations. Provide the hazardous waste collector the sufficient information on the various hazards of this product in this container.

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



14. TRANSPORT INFORMATION

Land Transport (ADR/RID):

Shipping Name: ISOPROPANOL
UN #: 1219
Hazard Class: 3
Packing Group: III
Classification Code: F1
Kemler Code: 33

Label:



Air Transport (IATA/ICAO):

Shipping Name: ISOPROPANOL
UN #: 1219
Hazard Class: 3
Packing Group: III

Label:



Sea transport (IMDG):

Shipping Name: ISOPROPANOL
UN #: 1219
Hazard Class: 3
Packing Group: III
Marine pollutant: No

Label:



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 Co.Reg. No.: 198201286W

