

# Safety Data Sheet



## Hazardous Chemical, Dangerous Goods

### 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

**Product name:** Tile Clean

**Recommended use:** Tile and Ceramic Cleaner

**Supplier:** Cyndan Chemicals  
**ABN:** 31 001 670 097  
**Street Address:** Unit 1, 1 Prosperity Parade  
Warriewood  
NSW 2102  
Australia  
**Telephone:** 1800 812 309

**Emergency Telephone number:**

### 2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.



#### Signal Word

Danger

#### Hazard Classifications

Acute Toxicity - Oral - Category 2  
Acute Toxicity - Dermal - Category 1  
Acute Toxicity - Inhalation - Category 3  
Skin Corrosion/Irritation - Category 1A  
Specific Target Organ Toxicity (Single Exposure) - Category 3 Narcotic Effects

#### Hazard Statements

H300 Fatal if swallowed.  
H310 Fatal in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H331 Toxic if inhaled.  
H336 May cause drowsiness or dizziness.

#### Prevention Precautionary Statements

P102 Keep out of reach of children.  
P103 Read label before use.  
P260 Do not breathe dust, fume, gas, mist, vapours or spray.  
P262 Do not get in eyes, on skin, or on clothing.  
P264 Wash hands, face and all exposed skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective clothing, gloves, eye/face protection and suitable respirator.

#### Response Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/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 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.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment (see product label).
P322	Specific measures (see product label).
P330	Rinse mouth.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.

## Storage Precautionary Statements

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

## Disposal Precautionary Statement

P501	Dispose of contents/container in accordance with local, regional, national and international regulations.
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## Poison Schedule:

## DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

**Dangerous Goods Class:** 8

**Subrisk 1:** 6.1

## 3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
2-Propanol, 1-methoxy-	107-98-2	<10 % (w/w)
Ammonium fluoride, ((NH <sub>4</sub> )(HF <sub>2</sub> ))	1341-49-7	<5 % (w/w)
Hydrochloric acid	7647-01-0	<10 % (w/w)
Hydrofluoric acid	7664-39-3	<5 % (w/w)
Ingredients determined to be Non-Hazardous		Balance

## 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

**Inhalation:** If inhalation occurs, contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

**Skin Contact:** If skin contact occurs, immediately remove contaminated clothing. Follow instructions above, and contact the Poisons Information Centre urgently.

**Eye contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is

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wearing contact lenses.

**Ingestion:** If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre, or call a doctor at once. Give activated charcoal if instructed. Seek urgent medical attention. Note comments above about calcium gluconate treatment.

**Notes to physician:** Treat symptomatically. Can cause corneal burns. You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call. Before using this product, obtain a supply of calcium gluconate gel and leave it in an unlocked medicine cabinet near where this product will be used. Immediately remove contaminated clothing and continually flush exposed areas of skin with large volumes of water. Rinsing may be limited to 5 minutes if 0.13% benzalkonium chloride solution or 2.5% calcium gluconate gel is available, with the soaks or gel applied as soon as the rinsing is stopped. If not available, rinsing must continue until medical treatment is rendered. Immediately after thorough washing, use one of the measures below. Begin soaking the affected areas in iced 0.13% benzalkonium chloride solution. Use ice cubes, not shaved ice, in order to prevent frostbite. If immersion is not practical, towels should be soaked with iced 0.13% benzalkonium chloride solution and used as compresses for the burned area. Compresses should be changed every 2 to 3 minutes. Soaks or compresses should be continued until pain is relieved or until more definitive medical treatment is provided. Relief of the pain is an indication of the success of treatment; therefore, local anaesthetics should be avoided. It is recommended the applier wear chemical protective gloves (e.g. butyl rubber gloves). Gently massage a liberal quantity of calcium gluconate gel if available or prepare at site by adding 10 mL of 10% calcium gluconate injectable solution to 30 mL of KY jelly or other water soluble gel. Do not use calcium chloride as it causes skin necrosis. Apply gel every 15 minutes and massage continuously until pain subsides and/or redness disappears or until medical attention becomes available. It is recommended the applier wear chemical protective gloves, (e.g. butyl rubber gloves). Medical attention must be provided immediately. Exposure to low concentrations may be followed by a delayed onset of symptoms; seek immediate medical attention for all exposures to any concentration of hydrofluoric acid.

## 5. FIRE FIGHTING MEASURES

**Hazchem Code:** 2X

**Suitable extinguishing media:** If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

**Specific hazards:** Non-combustible material.

**Fire fighting further advice:** Not applicable.

## 6. ACCIDENTAL RELEASE MEASURES

### SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

### LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

**Dangerous Goods – Initial Emergency Response Guide No:** 37

## 7. HANDLING AND STORAGE

**Handling:** Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

**Product Name:** Tile Clean

**Reference No:** 5600

**Issued:** 2017-01-22

**Version:** 1.0

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**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Class 8 Corrosive, Division 6.1 Toxic Substance as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Hydrogen chloride	5 Peak limitation	7.5 Peak limitation	-	-	-
Hydrogen fluoride (as F)	3 Peak limitation	2.6 Peak limitation	-	-	-
Propylene glycol monomethyl ether	100	369	150	553	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Biological Limit Values:** As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

**Engineering Measures:** Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

**Personal Protection Equipment:** OVERALLS, GLOVES, FACE SHIELD, RESPIRATOR.

Wear overalls, gloves, face shield, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**Hygiene measures:** Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form:** Clear Liquid  
**Colour:** Colourless  
**Odour:** Mild sharp odour

**Solubility:** Miscible  
**Vapour Pressure (20 °C):** 2.37 @20C (water)  
**Autoignition Temperature (°C):** Not flammable  
**Melting Point/Range (°C):** ~0  
**Boiling Point/Range (°C):** ~100  
**pH:** <1.0 (expected value)  
**% Volatile by Volume:** Water component

(Typical values only - consult specification sheet)  
N Av = Not available, N App = Not applicable

## 10. STABILITY AND REACTIVITY

**Chemical stability:** KEEP IN ORIGINAL CONTAINER. HIGHLY REACTIVE with most materials, including glass. Stable under normal ambient conditions of transport, storage, handling and usage.

**Conditions to avoid:** KEEP COOL <30C. KEEP AWAY FROM COMBUSTIBLE MATERIALS. Keep containers dry, use and store in well ventilated areas.

**Incompatible materials:** All bases, zinc, tin, aluminium, alloys of these metals, and glass

**Hazardous decomposition products:** During fire conditions, after evaporating to dryness, this product may release oxides of carbon, nitrogen, hydrogen chloride, hydrogen fluoride, and hydrogen cyanide.

**Hazardous reactions:** No known hazardous polymerisations

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

### Acute Effects

**Inhalation:** Toxic if inhaled. Hydrogen fluoride causes pulmonary oedema; most dead test rats showed oedema and/or pulmonary haemorrhage above the LC50. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

**Skin contact:** Fatal in contact with skin. Can be absorbed through the skin with resultant toxic effects. 1-methoxypropan-2-ol showed no mortality in rabbits. Hydrogen Fluoride: 100uL of 49% hydrogen fluoride caused full dermal burns which took 37.4 days to heal; 59% burns progressed beneath the platysma layer.

**Ingestion:** Fatal if swallowed. Ammonium hydrogen fluoride symptoms include dyspnoea, ataxia, reduced circulation, and decreased spontaneous motility.

**Eye contact:** Hydrogen chloride is highly corrosive to the eyes; at 7279ppm test rats had their eyes destroyed.

### Acute toxicity

**Inhalation:** This material has been classified as a Category 3 Hazard. Acute toxicity estimate (based on

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ingredients): 2.0 - 10 mg/L

LC50 (Rat): 18,200ppm (hydrogen fluoride)

**Skin contact:** This material has been classified as a Category 1 Hazard. Acute toxicity estimate (based on ingredients): <50 mg/Kg

LD50 (Rabbit): >15,800 mg/kg (1-methoxypropan-2-ol)

**Ingestion:** This material has been classified as a Category 2 Hazard. Acute toxicity estimate (based on ingredients): 5 - 50 mg/Kg

LD50 (Rat): 5,900 mg/kg (1-methoxypropan-2-ol)

LD50 (Rat): 130mg/kg (ammonium hydrogenfluoride)

**Corrosion/Irritancy:** Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as a Category 1A Hazard (irreversible effects to skin).

**Sensitisation:** Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

**Aspiration hazard:** This material has been classified as non-hazardous.

**Specific target organ toxicity (single exposure):** This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in depression of the central nervous system.

## Chronic Toxicity

**Mutagenicity:** This material has been classified as non-hazardous.

**Carcinogenicity:** This material has been classified as non-hazardous.

**Reproductive toxicity (including via lactation):** This material has been classified as non-hazardous.

**Specific target organ toxicity (repeat exposure):** This material has been classified as non-hazardous.

## 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

**Acute aquatic hazard:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

**Long-term aquatic hazard:** This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log K<sub>ow</sub> < 4.

**Ecotoxicity:** No information available.

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

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Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

## 14. TRANSPORT INFORMATION

### ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".



**UN No:** 2922  
**Dangerous Goods Class:** 8  
**Subrisk 1:** 6.1  
**Packing Group:** II  
**Hazchem Code:** 2X  
**Emergency Response Guide No:** 37

**Proper Shipping Name:** CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROCHLORIC ACID, HYDROFLUORIC ACID)

**Segregation Dangerous Goods:** Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

### MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.



**UN No:** 2922  
**Dangerous Goods Class:** 8  
**Subrisk 1:** 6.1  
**Packing Group:** II

**Proper Shipping Name:** CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROCHLORIC ACID, HYDROFLUORIC ACID)

### AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



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**UN No:** 2922  
**Dangerous Goods Class:** 8  
**Subrisk 1:** 6.1  
**Packing Group:** II

**Proper Shipping Name:** CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROCHLORIC ACID, HYDROFLUORIC ACID)

## 15. REGULATORY INFORMATION

**This material is not subject to the following international agreements:**

Montreal Protocol (Ozone depleting substances)  
The Stockholm Convention (Persistent Organic Pollutants)  
The Rotterdam Convention (Prior Informed Consent)  
Basel Convention (Hazardous Waste)  
International Convention for the Prevention of Pollution from Ships (MARPOL)

## 16. OTHER INFORMATION

Reason for issue: Format change

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.