

TRULUX SAFETY DATA SHEET

Provides critical information about hazardous chemicals.

1.1 COMPANY IDENTIFICATION

Company's Name: Trulux Pty Ltd
Email address: info@trulux.com.au
Website: www.trulux.com.au
Contact number: +61 (02) 9975 2655
Address: C3/ 1-3 Rodborough Rd, Frenchs Forest NSW 2086 Australia

1.2 PRODUCT IDENTIFICATION

Trade name: Geogard 221
Reference number: RMTR-0256A
Classification: Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

1.3 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Identified uses: Raw Material
Uses advised against: No further information available.

1.4 DETAILS OF THE SUPPLIER OF THE SUBSTANCE INFORMATION SHEET

Supplier's Company: Trulux Pty Ltd
Website: www.trulux.com.au
Address: C3/ 1-3 Rodborough Rd, Frenchs Forest NSW 2086 Australia

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1.5 EMERGENCY CONTACTS – INSTITUTIONAL CENTRES

Australia

Poisons Information Centre 13 11 26

2 HAZARDS IDENTIFICATION

GHS classification of the substance/mixture:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Acute Toxicity - Oral: Category 4

Acute Toxicity - Inhalation: Category 4

Eye Damage/Irritation: Category 2A

Signal Word:

WARNING

Hazard Statement:

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

Pictogram:

Exclamation mark



Precautionary statement -

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Prevention:

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash contaminated 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.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement - Response:

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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.

P330 Rinse mouth.

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

Precautionary statement - Disposal: Dispose of contents/container according to local regulations.

3 COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (%)
Benzoyl alcohol	100-51-6	50 - 90 %
Water	7732-18-5	1 - 10 %
3-Acetyl-6-methyl-2H-pyran-2,4-(3H)-dione	520-45-6	1 - 10 %

Other Information: There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 FIRST AID MEASURES

Advice to Doctor: Treat symptomatically.

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First Aid Measures:	You should call a doctor or Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. Have the Safety Data Sheet with you when you call.
Inhalation:	Move to fresh air. Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice. If breathing is irregular or stopped, administer artificial respiration. Keep respiratory tract clear.
Ingestion:	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Skin contact:	After contact with skin, wash immediately with plenty of soap and water. If on clothes, remove clothes. In the case of skin irritation or allergic reactions see a physician.
Eye contact:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

5 FIRE FIGHTING MEASURES

Fire Fighting Measures:	Use water spray to cool unopened containers.
Suitable extinguishing media:	Water spray, Alcohol-resistant foam, Dry chemical.
Unsuitable extinguishing media:	High volume water jet.
Special Protective Equipment for FireFighters:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

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Special hazards arising from the substance or mixture:	Heating or fire can release toxic gas.
Advice for firefighters:	In the event of fire, wear self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protective equipment. Ensure adequate ventilation. Use respirator when performing operations involving potential exposure to vapour of the product.
Environmental precautions:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/ national regulations.

7 HANDLING AND STORAGE

Precautions for safe handling:	Avoid formation of aerosol. Do not breathe vapours/dust. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage, including any incompatibilities:	Keep container tightly closed. Keep in a well-ventilated place. Electrical installations / working materials must comply with the technological safety standards. To maintain product quality, do

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not store in heat or direct sunlight. No decomposition if stored and applied as directed.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Controls, Personal Protection:

The following Australian and New Zealand Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: AS/NZS 1715,

Protective Gloves: AS/NZS 2161,

Industrial Clothing: AS 2919,

Industrial Eye Protection: AS/NZS 1336 and AS/NZS 1337,

Occupational Protective Footwear: AS/NZS 2210.

Occupational: Benzyl alcohol 100-51-6

Exposure Limit Values: TWA: 10 ppm, 44.20 mg/m³

Exposure Controls:

- Respiratory Protection In the case of vapour formation use a respirator with an approved filter.
- Hygiene Measures Avoid contact with skin, eyes and clothing. when using do not eat, drink or smoke.
- Body Protection Choose body protection according to the amount and concentration of the dangerous substance at the work place. No special clothing is required.
- Hand Protection Wear protective gloves i.e. Nitrile rubber.
Break through time: > 480 min
- Eye Protection Tightly fitting safety goggles.

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9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form:	Liquid.
Appearance:	Yellow.
Flash Point:	> 96 °C
Water solubility:	Slightly soluble

10 STABILITY AND REACTIVITY

Reactivity:	No decomposition if stored and applied as directed.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to Avoid:	Heat.
Incompatible Materials:	Strong acids and strong bases. Oxidizing agents.
Hazardous Decomposition Products:	Nitrogen oxides (NO _x), Carbon oxides, No decomposition if used as directed.

11 TOXICOLOGICAL INFORMATION

Toxicology Information

- Oral
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Acute toxicity estimate: 1,596 mg/kg

Method: Calculation method

- Inhalation

Acute toxicity estimate: 1.67 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: Calculation method

- Dermal

Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Acute Toxicity - Oral

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (CAS-No.: 520-45-6) LD50 (Rat): 1,480 mg/kg

Method: OECD Test Guideline 401

Benzyl alcohol (CAS-No.: 100-51-6) LD50 (Rat): 1,610 mg/kg

Remarks: Literary reference

Acute Toxicity - Dermal

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (CAS-No.: 520-45-6) LD50 (Rabbit): 3,000 - 5,000 mg/kg

Benzyl alcohol (CAS-No.: 100-51-6) LD50 (Rabbit): 2,000 mg/kg

Assessment: The component/mixture is minimally toxic after single contact with skin.

Remarks: Literary reference

Remarks: Dermal absorption possible

Acute Toxicity - Inhalation

Benzyl alcohol (CAS-No.: 100-51-6) LC50 (Rat): > 4.178 mg/l

Exposure time: 4 h Test atmosphere: dust/mist

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Assessment: The substance or mixture has no acute inhalation toxicity

Inhalation

Benzyl alcohol (CAS-No.: 100-51-6)

High concentration of vapours may induce unconsciousness.

Respiratory sensitisation

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (CAS-No.: 520-45-6)

Test Type: Local Lymph Node Assay

Species: Mouse

Method: OECD Test Guideline 429

Result: not sensitizing

Benzyl alcohol (CAS-No.: 100-51-6)

Test Type: Magnusson & Kligman

Species: Guinea pig

Result: not sensitizing Remarks: Literary reference

Skin Sensitisation

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (CAS-No.: 520-45-6)

Test Type: Local Lymph Node Assay

Species: Mouse

Method: OECD Test Guideline 429

Result: not sensitizing

Benzyl alcohol (CAS-No.: 100-51-6)

Test Type: Magnusson & Kligman

Species: Guinea pig

Result: not sensitizing

Remarks: Literary reference

Remarks: May cause sensitisation of susceptible persons by skin contact

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Germ cell mutagenicity

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (CAS-No.: 520-45-6)

- Genotoxicity in vitro:

Test Type: Ames test

Species: Salmonella typhimurium

Result: negative

Test Type: Chromosome aberration test in vitro

Species: Human lymphocytes

Method: OECD Test Guideline 473

Result: negative

GLP: yes

Test substance: Information given is based on data obtained from similar substances.

Test Type: gene mutation test

Species: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 490

Result: negative GLP: yes

Test substance: Information given is based on data obtained from similar substances.

Benzyl alcohol (CAS-No.: 100-51-6)

- Genotoxicity in vitro

Test Type: Ames test R

Result: negative

Test Type: gene mutation test

Species: mouse lymphoma cells

Result: equivocal

Test Type: Chromosome aberration test in vitro

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Result: positive Genotoxicity in vivo

Test Type: In vivo micronucleus test

Species: Mouse

Application Route: ip

Dose: 50 -100-200 mg/kg

Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive Toxicity

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (CAS-No.: 520-45-6)

- Effects on fertility

Test Type: Pre-/postnatal development

Species: Rat

Application Route: Oral

General Toxicity - Parent: LOAEL: 100 mg/kg body weight

General Toxicity F1: NOAEL: 100 mg/kg body weight

Benzyl alcohol (CAS-No.: 100-51-6)

Species: Mouse, female

Application Route: Oral

Dose: 10d

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Fertility: NOAEL: 550 mg/kg food

Aspiration Hazard

No aspiration toxicity classification.

Chronic Effects

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (CAS-No.: 520-45-6)

Repeated dose toxicity

Species: Rat, male and female

NOAEL: 78 mg/kg

Exposure time: 2 y

Species: Rat, male : 300 mg/kg

NOAEL : > 100 mg/kg

Exposure time: 34 d

Number of exposures: 5 days/week

Serious eye damage/irritation

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione (CAS-No.: 520-45-6)

Species: Chicken eye

Result: No eye irritation

Exposure time: 4 h

Assessment: No eye irritation

Method: OECD Test Guideline 438

GLP: yes

Benzyl alcohol (CAS-No.: 100-51-6)

Causes serious eye irritation based on HCIS data

Skin corrosion/irritation

3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione(CAS-No.: 520-45-6)

Species: Rabbit

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Exposure time: 4 h

Method: DOT

Result: No skin irritation

Benzyl alcohol (CAS-No.: 100-51-6)

Species: Rabbit

Exposure time: 4 h

Method: OECD Test Guideline 404

Result: No skin irritation

12 ECOLOGICAL INFORMATION

Ecotoxicity - The following ecotoxicological data refer to: Benzyl alcohol(CAS-No.: 100-51-6)

Ecotoxicity Toxicity to fish LC50 (Leuciscus idus (Golden orfe)): 646 mg/l

Exposure time: 48 h

Method: DIN 38412 Part 15

LC50 (Pimephales promelas (fathead minnow)): 460 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 400 mg/l

Exposure time: 24 h

Test Type: Immobilization

Method: DIN 38412 L11

Remarks: Literary reference

Toxicity to algae IC50 (Pseudokirchneriella subcapitata (green algae)): 770mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

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NOEC (Pseudokirchneriella subcapitata (green algae)): 310mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)

NOEC (Daphnia magna (Water flea)): 51 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Toxicity to microorganisms EC50 (Pseudomonas putida): 658 mg/l

Exposure time: 16 h

Remarks: Literary reference EC50 (Photobacterium phosphoreum): 71 mg/l

Exposure time: 30 min

Remarks: Literary reference

Persistence and degradability

Biodegradability Test Type: Closed Bottle test

Result: Readily biodegradable.

Biodegradation: > 90.0 %

Exposure time: 30 d

Method: OECD Test Guideline 301D

Remarks: Literary reference

Bioaccumulative potential

Bioconcentration factor (BCF): 4

Remarks: Literary reference

Does not bioaccumulate.

Mobility in soil

Distribution among environmental compartments: Adsorption/Soil

Remarks: Literary reference

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Bioaccumulative Potential

Components: 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione:

Partition coefficient: n-octanol/water : log Pow: 0.778

Method: QSAR

Benzyl alcohol:

Partition coefficient: n-octanol/water : log Pow: 1.1

Other Adverse Effects

Ozone-Depletion Potential Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone Depleting Substances (40 CFR 82, Subpt. A, App A & B)

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

13 DISPOSAL CONSIDERATIONS

Disposal Considerations: Dispose of waste according to applicable local, state and federal regulations. Do not dispose of waste into sewer.

14 TRANSPORT INFORMATION

Transport Information

Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Not regulated for transport of Dangerous Goods: ADG7, UN, IATA, IMDG.

15 REGULATORY AND OTHER INFORMATION

Safety, health and environmental regulations specific for the mixture or substance:

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Poisons Schedule

Not Scheduled.

AICS (Australia)

All components of this material are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

16 OTHER INFORMATION

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition or other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user.

This sheet completes the technical sheets but it does not replace them. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied is made and Trulux Pty Ltd assumes no legal responsibility or liability whatsoever resulting from its use. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product.

This listing must not be considered exhaustive. It does exonerate the user from ensuring that other legal obligations than those mentioned do not exist, relating to the use and storage of the product for which he solely is responsible.

The information and recommendations contained herein are to the best of the manufacturer's knowledge and belief accurate and reliable as of the date indicated. No representation warranty or guarantee, however, is made with regards to accuracy, reliability or completeness. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to satisfy itself as to the suitability and completeness of such information for its own particular use.

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