

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: PERMACLEAN PC-11

Nalco PC11 Other name(s):

Recommended Use of the Chemical Biocide.

and Restrictions on Use

Ixom Operations Pty Ltd Supplier:

ABN: 51 600 546 512

Level 8, 1 Nicholson Street **Street Address:**

East Melbourne Victoria 3002

Australia

+61 3 9906 3000 **Telephone Number:**

Emergency Telephone: 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail: DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Acute Oral Toxicity - Category 4 Acute Inhalation Toxicity - Category 4 Skin Corrosion - Sub-category 1C Skin Sensitisation - Category 1 Specific target organ toxicity (single exposure) - Category 3 Eye Damage - Category 1

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations: Acute Aquatic Toxicity - Category 1

SIGNAL WORD: DANGER





Hazard Statement(s):

H302+H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

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Precautionary Statement(s):

Prevention:

P102 Keep out of reach of children.

P260 Do not breathe dust / fume / gas / mist / vapours / spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

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

Response:

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before re-use.

P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see First Aid Measures on Safety Data Sheet).

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

P405 Store locked up.

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Poisons Schedule (SUSMP): None allocated.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
2,2-Dibromo-3-nitrilopropionamide	10222-01-2	10-30%	H331 H301 H315 H318 H317 H400
Non hazardous component(s)	-	to 100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

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Eve Contact:

Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport promptly to hospital or medical centre.

Ingestion:

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Can cause corneal burns.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Hazchem or Emergency Action Code: 2X

Specific hazards arising from the chemical:

On burning will emit toxic fumes, including those of oxides of carbon, oxides of nitrogen.

Special protective equipment and precautions for fire-fighters:

If safe to do so, remove containers from path of fire. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. Avoid skin and eye contact. Avoid breathing in vapours. Work up wind or increase ventilation. Wear protective equipment to prevent skin and eye contact and inhalation of vapours/dusts. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. 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. For large amounts: Dike spillage. Pump off product. After cleaning, flush away any residual traces with water.

7. HANDLING AND STORAGE

Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols. When using do not eat, drink or smoke. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. Eye wash facilities and emergency shower must be available when handling this product.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place. Store away from incompatible materials described in Section 10. Equipment for storage and application should be constructed from PVC, polypropylene, HDPE, nylon, polyvinylidene difluoride, or PTFE. Keep containers closed when not in use - check regularly for leaks.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls:

Use in well ventilated areas. Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.













Wear overalls, chemical goggles, face shield, elbow-length impervious gloves, splash apron or equivalent chemical impervious outer garment, and rubber boots. If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Colour: Colourless
Odour: Mild

Solubility: Miscible with water.
Specific Gravity: 1.20-1.30 @23°C
Relative Vapour Density (air=1): Not available
Vapour Pressure (20 °C): <0.01 kPa
Flash Point (°C): 94 (COC)
Flammability Limits (%): Not available
Autoignition Temperature (°C): Not available

Boiling Point/Range (°C): >70 pH: 1.5-5.0

Viscosity: 138 mPa.s @20°C

Freezing Point/Range (°C): -50

10. STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical stability: Stable under normal conditions.

Possibility of hazardous

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reactions:

None known.

Conditions to avoid: Avoid exposure to heat. Avoid temperatures above 35°C.

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Incompatible with strong oxidising agents. Incompatible with strong alkalis. Incompatible materials:

Incompatible with reducing agents.

Hazardous decomposition

products:

Oxides of carbon. Oxides of nitrogen.

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:

Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and Ingestion:

chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes; contact can cause corneal burns.

Contamination of eyes can result in permanent injury.

Contact with skin will result in severe irritation. Corrosive to skin - may cause skin Skin contact:

burns. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic

contact dermatitis.

Inhalation: Material is irritant to the mucous membranes of the respiratory tract (airways).

Acute toxicity:

Inhalation LC50 (rat): 1.4 mg/L (4 hrs)

Chronic effects: Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Very toxic to aquatic organisms. **Aquatic toxicity:**

48hr LC50 (Daphnia magna): 4.3 mg/L 96hr LC50 (rainbow trout): 3.6 mg/L 96hr LC50 (bluegill sunfish): 8.9 mg/L 96hr LC50 (fathead minnow): 1.36 mg/L 96hr LC50 (golden orfe): 4.7 mg/L

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

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Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail: DANGEROUS GOODS.



UN No: 3265

Transport Hazard Class: 8 Corrosive

Packing Group: Ш

Proper Shipping Name or CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS

Technical Name: 2,2-DIBROMO-3-NITRILOPROPIONAMIDE)

Hazchem or Emergency Action 2X

Code:

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea: DANGEROUS GOODS.

UN No: 3265

8 Corrosive **Transport Hazard Class:**

Packing Group: Ш

Proper Shipping Name or CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS

Technical Name: 2,2-DIBROMO-3-NITRILOPROPIONAMIDE)

F-A IMDG EMS Fire: **IMDG EMS Spill:** S-B

Air Transport

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

UN No: 3265

Transport Hazard Class: 8 Corrosive

Packing Group: Ш

Proper Shipping Name or CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS

Technical Name: 2,2-DIBROMO-3-NITRILOPROPIONAMIDE)

15. REGULATORY INFORMATION

Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Acute Oral Toxicity - Category 4

Acute Inhalation Toxicity - Category 4

Skin Corrosion - Sub-category 1C

Skin Sensitisation - Category 1

Specific target organ toxicity (single exposure) - Category 3

Eye Damage - Category 1

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 1

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Hazard Statement(s):

H302+H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Poisons Schedule (SUSMP): None allocated.

16. OTHER INFORMATION

Supplier Safety Data Sheet; 03/2017.

PermaClean is a trademark.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:

5 Yearly Revised Primary SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

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