

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:

PHMB - 20D

Recommended Use of the Chemical Cationic disinfectant. Used in disinfectant preparations: general disinfection, food industry, and **Restrictions on Use** leather industry, hospitals.

Supplier: NZBN: Street Address:	Ixom Operations Pty Ltd (Incorporated in Australia) 9429041465226 166 Totara Street Mt Maunganui South New Zealand
Telephone Number:	+64 9 368 2700
Facsimile:	+64 9 368 2710
Emergency Telephone:	0 800 734 607 (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 a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

SIGNAL WORD: DANGER

Subclasses:

Subclass 6.1 Category D - Substances which are acutely toxic.

Subclass 6.1 Category E (respiratory tract irritant) - Substances that are respiratory tract irritants.

Subclass 6.3 Category A - Substances that are irritating to the skin.

Subclass 6.5 Category B - Substances that are contact sensitisers.

Subclass 6.7 Category B - Substances that are suspected human carcinogens.

Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.

Subclass 8.3 Category A - Substances that are corrosive to ocular tissue.

Subclass 9.1 Category A - Substances that are very ecotoxic in the aquatic environment.

Additives, Process Chemicals and Raw Materials (Toxic [6.7]) Group Standard 2017 Approval Number: HSR002512



Hazard Statement(s):

H302 Harmful if swallowed.

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.



Precautionary Statement(s):

Prevention:

P102 Keep out of reach of children.

- P103 Read label before use.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe 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.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P281 Use personal protective equipment as required.

Response:

- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330 Rinse mouth.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P321 Specific treatment (see First Aid Measures on the Safety Data Sheet).
- P362 Take off contaminated clothing before re-use.

P363 Wash contaminated clothing before re-use.

- P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- 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.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P391 Collect spillage.

Storage:

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

Disposal:

P501 In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Polymeric biguanide hydrochloride	27083-27-8	19-21%	H302 H317 H318 H330 H351 H372 H410
Hydrogen chloride	7647-01-0	0.1-0.3%	H331 H314
Water	7732-18-5	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.

Eye 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:

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. Effects may be delayed.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal protein foam can be used.

Hazchem or Emergency Action Code: · 3Z

Specific hazards arising from the chemical:

Non-combustible material. Environmentally hazardous.

Special protective equipment and precautions for fire-fighters:

Not combustible, however following evaporation of the water component of the material, the residual material can burn if ignited. 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. 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. Wear protective equipment to prevent skin and eye contact and breathing in 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. Wash area down with excess water. Recover the cleaning water for subsequent disposal.

7. HANDLING AND STORAGE



Precautions for safe handling: Avoid skin and eye contact and breathing in vapour, mists and aerosols. Prevent formation of aerosols. Do not mix with other chemicals. When using do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated place. Store at above 6°C. Suitable containers: stainless steel. Do not store in carbon steel, copper or iron containers. Do not store in zinc containers. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Standards: No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituent(s):

Hydrogen chloride: Ceiling 5 ppm, 7.5 mg/m³

As published by the New Zealand Workplace Health & Safety Authority.

WES - Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace 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.

Appropriate engineering controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

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, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.



Wear overalls, chemical goggles and impervious gloves. If determined by a risk assessment an inhalation risk exists, wear a suitable mist 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: Colour: Odour: Solubility:	Clear to Slightly Opalescent Liquid Colourless Odourless Miscible with water. Miscible with aliphatic alcohols and glycol. Immiscible with hydrocarbon solvents.
Specific Gravity:	1.039 - 1.046 @20°C
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	40 hPa
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not applicable
Autoignition Temperature (°C):	Not applicable
Boiling Point/Range (°C):	102 - 105
Decomposition Point (°C):	200 - 230
pH:	4.0 - 5.0
Viscosity:	4.5-5.2 mm2/s @20°C
Freezing Point/Range (°C):	<6

10. STABILITY AND REACTIVITY

Reactivity:	No known reactivity hazards.
Chemical stability:	Stable at ambient temperatures.
Possibility of hazardous reactions:	None known.
Conditions to avoid:	Avoid exposure to direct sunlight. Avoid temperatures above 50 °C.
Incompatible materials:	Incompatible with anionic compounds, metals, cationic metal solutions.
Hazardous decomposition products:	None known.

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:

Ingestion:	Swallowing may result in irritation of the gastrointestinal tract.
Eye contact:	A severe eye irritant. Contamination of eyes can result in permanent injury.
Skin contact:	Contact with skin will result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.
Inhalation:	Breathing in mists or aerosols will produce respiratory irritation.

Acute toxicity:

Oral LD50 (rat): >2000 mg/kg Dermal LD50 (rat): >2000 mg/kg Inhalation LC50 (rat): 1.85 mg/L



Chronic effects: Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways.
Persistence/degradability:	Not readily biodegradable.
Bioaccumulative potential:	No information available.
Mobility in soil:	No information available.
Aquatic toxicity:	Very toxic to aquatic organisms. May cause long lasting harmful effects to aquatic life.
96hr LC50 (fish): 96hr EC50 (algae):	1-10 mg/L 1-10 mg/L (72 h)

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor. Neutralisation should be considered before disposal.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.



UN No:	3082
Transport Hazard Class:	9 Miscellaneous Dangerous Goods
Packing Group:	
Proper Shipping Name or	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS
Technical Name:	POLYMERIC BIGUANIDE HYDROCHLORIDE)
Hazchem or Emergency Action	• 3Z
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:	3082
Transport Hazard Class:	9 Miscellaneous Dangerous Goods
Packing Group:	III
Proper Shipping Name or	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS
Technical Name:	POLYMERIC BIGUANIDE HYDROCHLORIDE)
IMDG EMS Fire:	F-A
IMDG EMS Spill:	S-F



Marine Pollutant Air Transport Yes

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:	3082
Transport Hazard Class:	9 Miscellaneous Dangerous Goods
Packing Group:	III
Proper Shipping Name or Technical Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS POLYMERIC BIGUANIDE HYDROCHLORIDE)

15. REGULATORY INFORMATION

Classification:

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

Subclasses:

Subclass 6.1 Category D - Substances which are acutely toxic.
Subclass 6.1 Category E (respiratory tract irritant) - Substances that are respiratory tract irritants.
Subclass 6.3 Category A - Substances that are irritating to the skin.
Subclass 6.5 Category B - Substances that are contact sensitisers.
Subclass 6.7 Category B - Substances that are suspected human carcinogens.
Subclass 6.9 Category B - Substances that are harmful to human target organs or systems.
Subclass 8.3 Category A - Substances that are corrosive to ocular tissue.
Subclass 9.1 Category A - Substances that are very ecotoxic in the aquatic environment.

Additives, Process Chemicals and Raw Materials (Toxic [6.7]) Group Standard 2017 Approval Number: HSR002512

Hazard Statement(s):

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

16. OTHER INFORMATION

Supplier Safety Data Sheet; 11/2012.

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

Reason(s) for Issue:

5 Yearly Revised Primary SDS Change in Hazardous Chemical Classification Change in Handling & Storage Requirements Change in Personal Protection Requirements



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.