Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **PERFORM 15:23**

Recommended Use of the Chemical and Restrictions on Use: Cleaning agent, disinfectants and general biocidal products, water treatment, oxidising agents.

Supplier: Ixom Operations Pty Ltd
ABN: 51 600 546 512
Street Address: Level 8, 1 Nicholson Street
East Melbourne Victoria 3002
Australia

Telephone Number: +61 3 9906 3000
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:
Organic peroxides - Type F
Acute Oral Toxicity - Category 4
Acute Dermal Toxicity - Category 4
Acute Inhalation Toxicity - Category 3
Skin Corrosion - Sub-category 1A
Eye Damage - Category 1
Specific target organ toxicity (single exposure) - Category 3

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:
Acute Aquatic Toxicity - Category 2

SIGNAL WORD: DANGER

Hazard Statement(s):
H242 Heating may cause a fire.
H302+H312 Harmful if swallowed or in contact with skin.
H331 Toxic if inhaled.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H401 Toxic to aquatic life.

Precautionary Statement(s):

Prevention:
P102 Keep out of reach of children.
P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P220 Keep and store away from clothing, incompatible materials, combustible materials.
P234 Keep only in original container.
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.
P273 Avoid release to the environment.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

Response:
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P301+P312 IF SWALLOWED: 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.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 Wash contaminated clothing before re-use.
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
P322 Specific measures (see First Aid Measures on Safety Data Sheet).
P304+P312 IF INHALED: 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.
P311 Call a POISON CENTER or doctor/physician.
P370+P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.
P391 Collect spillage.

Storage:
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P420 Store away from other materials.

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

Poisons Schedule (SUSMP): S6 Poison.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Hydrogen peroxide	7722-84-1	10-<30%	H271 H332 H302 H314
Acetic acid	64-19-7	10-<30%	H226 H290 H314
Peracetic acid	79-21-0	10-<30%	H226 H242 H332 H312 H302 H314 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 at once.

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 spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor.

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

Indication of immediate medical attention and special treatment needed:
Treat symptomatically. Can cause corneal burns. Formation of a toxic lung oedema is possible if product continues to be inhaled despite acute irritative effect. Prophylaxis of a toxical lung oedema with inhalative steroids (Dexamethasone aerosol dosing spray, f.ex. auxilosone). If the substance has been swallowed: aspiration hazard, risk of gaseous embolisms. In case of excessive strain on the stomach due to gas evolution, insert siphon tube. Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear. If necessary, suck away leftover substance. Do not administer activated charcoal, since risk of release of large amounts of gas from hydrogen peroxide. Following severe exposure, the patient should be kept under medical supervision for at least 48 hours.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Hazchem or Emergency Action Code: 2W

Specific hazards arising from the chemical:
Organic peroxide. Heating may cause a fire.

Special protective equipment and precautions for fire-fighters:
Evacuate area. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Keep containers cool with water spray. Material evolves oxygen on heating.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:
Shut off all possible sources of ignition. Clear area of all unprotected personnel. 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). DO NOT use combustible material. Collect in properly labelled containers, with loose fitting lids, for disposal.

7. HANDLING AND STORAGE

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:
Avoid skin and eye contact and breathing in vapour. Use away from sources of heat and ignition. Avoid contamination with other materials. Do not return unused product to original container. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities:
Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Store away from foodstuffs. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Peracetic acid: STEL = 0.4 ppm (ACGIH 2015)

Acetic acid: 8hr TWA = 25 mg/m^3 (10 ppm), 15 min STEL = 37 mg/m^3 (15 ppm)
Hydrogen peroxide: 8hr TWA = 1.4 mg/m^3 (1 ppm)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

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, 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. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.
If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Colourless
Odour:	Pungent
Solubility:	Miscible with water.
Specific Gravity:	1.1
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	ca. 32 hPa (calculated @25°C)
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not available
Autoignition Temperature (°C):	270-430
Boiling Point/Range (°C):	ca. 105 (calculated)
Decomposition Point (°C):	>=55 (SADT)
pH:	<1.5
Partition Coefficient:	log Pow: -1.25 (calculated)
Freezing Point/Range (°C):	ca. -42 (calculated)

10. STABILITY AND REACTIVITY

Reactivity: Heating may cause a fire.

Chemical stability: Stable if stored and handled under recommended conditions.

Possibility of hazardous reactions:	Potential for exothermic hazard. Risk of explosion if heated under confinement. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding.
Conditions to avoid:	Avoid exposure to heat, sources of ignition, and open flame.
Incompatible materials:	Incompatible with acids , bases , metals , metal salts , reducing agents , organic materials , flammable materials .
Hazardous decomposition products:	Oxygen, which will support combustion.

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 can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract. If ingested, decomposition may occur in the stomach, leading to the production of oxygen. This may cause distension of the stomach.
Eye contact:	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
Skin contact:	Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.
Inhalation:	Breathing in mists or aerosols will produce respiratory irritation.

Acute toxicity:
Oral LD50 (rat): 652 mg/kg (11.7% PAA mixture)
Dermal LD50 (rabbit): 1957 mg/kg (11.7% PAA mixture)
Inhalation LC50 (rat): 0.5-1.3 mg/L (aerosol, 15% PAA mixture)

Skin corrosion/irritation:	Corrosive (rabbit).
Serious eye damage/irritation:	Corrosive (rabbit).
Respiratory or skin sensitisation:	Not a skin sensitiser (guinea pig).

Chronic effects:

Mutagenicity:	No information available.
Carcinogenicity:	No information available.
Reproductive toxicity:	No information available.
Specific Target Organ Toxicity (STOT) - single exposure:	May cause respiratory irritation.
Specific Target Organ Toxicity (STOT) - repeated exposure:	No information available.
Aspiration hazard:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways.

Persistence/degradability: The material is readily biodegradable.

Bioaccumulative potential: Does not bioaccumulate.

Mobility in soil: No information available.

Aquatic toxicity: Toxic to aquatic organisms.

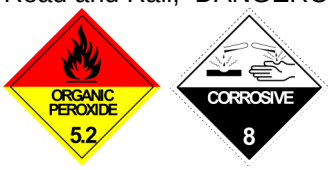
48hr EC50 (Daphnia magna): 3.2 mg/L
96hr LC50 (rainbow trout): 7.2 mg/L

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

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: 3109
Transport Hazard Class: 5.2 Organic Peroxide
Subrisk 1: 8 Corrosive
Proper Shipping Name or Technical Name: ORGANIC PEROXIDE TYPE F, LIQUID (CONTAINS PEROXYACETIC ACID, TYPE F, STABILIZED)
Hazchem or Emergency Action Code: 2W

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: 3109
Transport Hazard Class: 5.2 Organic Peroxide
Subrisk 1: 8 Corrosive
Proper Shipping Name or Technical Name: ORGANIC PEROXIDE TYPE F, LIQUID (CONTAINS PEROXYACETIC ACID, TYPE F, STABILIZED)

IMDG EMS Fire: F-J
IMDG EMS Spill: S-R

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. TRANSPORT PROHIBITED under the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air in Passenger and Cargo Aircraft; may be transported by Cargo Aircraft Only.

UN No: 3109

Transport Hazard Class:	5.2 Organic Peroxide
Subrisk 1:	8 Corrosive
Proper Shipping Name or Technical Name:	ORGANIC PEROXIDE TYPE F, LIQUID (CONTAINS PEROXYACETIC ACID, TYPE F, STABILIZED)

15. REGULATORY INFORMATION

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

Classification of the chemical:
Organic peroxides - Type F
Acute Oral Toxicity - Category 4
Acute Dermal Toxicity - Category 4
Acute Inhalation Toxicity - Category 3
Skin Corrosion - Sub-category 1A
Eye Damage - Category 1
Specific target organ toxicity (single exposure) - Category 3

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:
Acute Aquatic Toxicity - Category 2

Hazard Statement(s):
H242 Heating may cause a fire.
H302+H312 Harmful if swallowed or in contact with skin.
H331 Toxic if inhaled.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H401 Toxic to aquatic life.

Poisons Schedule (SUSMP): S6 Poison.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

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.