

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: PROTECTOL GA 50

Recommended Use of the Chemical For biocidal applications. For industrial use only. and Restrictions on Use

Supplier: Ixom Operations Ptv Ltd

51 600 546 512 ABN:

Street Address: Level 8, 1 Nicholson Street

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 Inhalation Toxicity - Category 3 Acute Oral Toxicity - Category 3 Skin Corrosion - Sub-category 1B Eye Damage - Category 1 Skin Sensitisation - Category 1 Respiratory Sensitisation - Category 1 Acute Aquatic Toxicity - Category 1

SIGNAL WORD: DANGER











Hazard Statement(s):

H301+H331 Toxic if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H400 Very toxic to aquatic life.

Product Name: PROTECTOL GA 50 Issued: 12/01/2015 Substance No: 000000008997



Precautionary Statement(s):

Prevention:

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.

P285 In case of inadequate ventilation wear respiratory protection.

P273 Avoid release to the environment.

Response:

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

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

P311 Call a POISON CENTER or doctor/physician.

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.

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

P304+P341 IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

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.

P391 Collect spillage.

Storage

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

P405 Store locked up.

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
Glutaraldehyde	111-30-8	30-60%	H301 H314 H317 H330 H334 H335 H411
Non hazardous component(s)	=	to 100%	-

4. FIRST AID MEASURES

Substance No: 000000008997

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.

Product Name: PROTECTOL GA 50 Issued: 12/01/2015



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. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Can cause corneal burns. Delayed pulmonary oedema may result. Glutaraldehyde may transiently worsen reversible airways obstruction including asthma or reactive airways disease. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Probable mucosal damage may contraindicate the use of gastric lavage. No known specific antidote.

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:

Non-combustible material. Corrosive substance. Toxic substance.

Special protective equipment and precautions for fire-fighters:

Decomposes on heating emitting toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Isolate spill or leak area immediately. 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. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Deactivate with sodium bisulfite (2-3 parts by weight per part of active substance glutaraldehyde). Collect and seal in properly labelled containers or drums 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, mists and aerosols. Avoid aerosol formation. Keep out of reach of children.

Product Name: PROTECTOL GA 50 Issued: 12/01/2015 Substance No: 000000008997



Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Shelf life: Use within 18 months. Do not store in: Aluminium. Carbon steel. Copper. Mild steel. Iron. 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):

Glutaraldehyde: Peak Limitation = 0.41 mg/m³ (0.1 ppm), Sen

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

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

`Sen' Notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance and should not be further exposed to the substance.

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, RUBBER BOOTS, AIR MASK, GLOVES (Long), APRON.

* Not required if wearing air supplied mask.















Product Name: PROTECTOL GA 50

Substance No: 000000008997

Issued: 12/01/2015 Version: 4



Wear overalls, chemical goggles, full face shield, elbow-length impervious gloves, splash apron or equivalent chemical impervious outer garment, and rubber boots. Use with adequate ventilation. If determined by a risk assessment an inhalation risk exists, wear an air-supplied mask 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

Clear Liquid Physical state: Colour: Colourless **Odour:** Fruity

Miscible in water. Solubility:

Specific Gravity: 1.129 @20°C (water = 1)

Relative Vapour Density (air=1): 1.1 (literature) Vapour Pressure (20 °C): 0.3 mmHa Not applicable Flash Point (°C): Flammability Limits (%): Not applicable **Autoignition Temperature (°C):** Not applicable

Boiling Point/Range (°C): 100.7 pH: 3.1-4.5

Viscosity: 15.4 cP @25°C (Dynamic)

Partition Coefficient: log Pow = -0.333

Freezing Point/Range (°C): -18

10. STABILITY AND REACTIVITY

Reactivity: No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability: Stable under normal ambient and anticipated storage and handling conditions of

temperature and pressure.

Possibility of hazardous

reactions:

Reacts exothermically with strong alkalis.

Conditions to avoid: Avoid temperatures above 50 °C.

Incompatible materials: Incompatible with amines, ammonia, strong acids, strong alkalis, strong oxidising

agents, aluminium, carbon steel, copper, iron, mild steel.

Hazardous decomposition

products:

Oxides of carbon.

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.

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

Contamination of eyes can result in permanent injury.

Product Name: PROTECTOL GA 50 Issued: 12/01/2015 Substance No: 000000008997



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: Breathing in mists or aerosols will produce respiratory irritation. A respiratory

sensitiser. Can cause possible allergic reactions, producing asthma-like

symptoms.

Acute toxicity:

Oral LD50 (rat): 200 mg/kg

Dermal LD50 (rabbit): >2000 mg/kg

Skin corrosion/irritation: Corrosive (rabbit). A skin sensitiser (guinea pig).

Serious eye damage/irritation: Corrosive (rabbit).

Chronic effects: The substance was mutagenic in various cell culture test systems; however, these results could not be confirmed in tests with mammals. In long-term animal studies in which the substance was given in the drinking water in high concentrations, a carcinogenic effect was not observed. No teratogenic effects were observed in animal studies.

Reproductive toxicity: No evidence of impaired fertility was found in animal studies.

12. ECOLOGICAL INFORMATION

Ecotoxicity Avoid contaminating waterways.

Persistence/degradability: The material is readily biodegradable.

Aquatic toxicity: Very toxic to aquatic organisms.

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.





2922 UN No: **Transport Hazard Class:** 8 Corrosive 6.1 Toxic Subrisk 1:

Packing Group:

Proper Shipping Name or CORROSIVE LIQUID, TOXIC, N.O.S. (CONTAINS GLUTARALDEHYDE)

Technical Name:

Hazchem or Emergency Action 2X

Code:

Product Name: PROTECTOL GA 50 Issued: 12/01/2015 Substance No: 000000008997



Marine Transport

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

CORROSIVE LIQUID, TOXIC, N.O.S. (CONTAINS GLUTARALDEHYDE)

UN No:

Transport Hazard Class: 8 Corrosive Subrisk 1: 6.1 Toxic

Packing Group: Ш

Proper Shipping Name or

Technical Name:

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

Yes **Marine Pollutant**

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: 2922

Transport Hazard Class: 8 Corrosive 6.1 Toxic Subrisk 1:

Packing Group: Ш

Proper Shipping Name or

CORROSIVE LIQUID, TOXIC, N.O.S. (CONTAINS GLUTARALDEHYDE) **Technical Name:**

15. REGULATORY INFORMATION

Classification:

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

Classification of the chemical:

Acute Inhalation Toxicity - Category 3 Acute Oral Toxicity - Category 3 Skin Corrosion - Sub-category 1B Eye Damage - Category 1 Skin Sensitisation - Category 1 Respiratory Sensitisation - Category 1 Acute Aquatic Toxicity - Category 1

Hazard Statement(s):

H301+H331 Toxic if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H400 Very 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

Supplier Safety Data Sheet; 11/2014.

PROTECTOL is a registered trademark of BASF.

Product Name: PROTECTOL GA 50 Issued: 12/01/2015 Substance No: 000000008997



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 to Transport Information Change in UN number: 2927 to 2922

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.

Product Name: PROTECTOL GA 50 Issued: 12/01/2015
Substance No: 00000008997 Version: 4

Page 8 of 8