Section 1: Identification of the Material and Supplier

Product Name: **Germ Free Liquid**

Other Names: Aqueous disinfectant/surfactant solution containing sulphamic acid.

Proper shipping name (ADG Code): None assigned.

Recommended use: As a washroom cleaner for toilet bowls, urinals, chrome, stainless steel, porcelain and enamel. Use as directed on the product label.

Supplier: **Hunters Products (TAS) Pty. Ltd.,**
A.C.N. 004 601 263

HEAD OFFICE	**HOBART OFFICE**	**BURNIE OFFICE**
60 Gleadow Street,	105 Albert Road,	22 Pearl Street,
INVERMAY TAS 7248	MOONAH TAS 7009	WIVENHOE TAS 7320
Tel: 03 6331 4755	Tel: 03 6228 7955	Tel: 03 6431 9627
Fax: 03 6334 1065	Fax: 03 6228 7988	Fax: 03 6432 2083

Emergency Phone Numbers:

Transport/Fire Emergency:	**000**	(Emergency services)
Medical Emergency:	**131126**	(Poisons Information Centre)

Section 2: Hazards Identification

Not classified as hazardous according to criteria of Worksafe Australia.

Non-dangerous goods.

Risk Phrases:	R: 52/53	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Safety Phrases:	S: 2	Keep out of the reach of children.
	S: 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S: 28	After contact with skin, wash immediately with plenty of soap-suds.
	S: 61	Avoid release to the environment. Refer to special instructions / Material Safety Data Sheets.

Section 3: Composition/Information on Ingredients

Ingredients:

Sulphamic acid	[5329-14-6]	10 - 30 %
Quaternary ammonium compound		< 10 %
Surfactant		< 10 %
Other ingredients deemed not to be hazardous		< 10 %
Water	[7732-18-5]	to 100 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure, rest and keep warm. Seek medical advice.

First Aid facilities:
Recommended: Eye wash. Hand wash basin.

Advice to Doctor:
Product is an acidic mixture containing a moderate proportion of sulphamic acid, and low proportions of a quaternary ammonium salt and a surfactant. May be irritating to skin and eyes.
If swallowed, vomiting should not have been induced because of the risk of aspiration of acidic froth into the lungs. Contact Poisons Information Centre.

Aggravated medical conditions:
Pre-existing skin disorders.

Section 5: Fire Fighting Measures

HAZCHEM Code: None assigned.

Evacuate: No.

Extinguishant: Water.

Risk of violent reaction or explosion: No.

Products of combustion:	Water vapour, oxides of carbon, oxides of sulphur, oxides of nitrogen, traces of hydrogen chloride.
Protective Equipment:	Breathing apparatus and protective gloves for fire only.

Section 6: Accidental Release Measures

Emergency Procedures:
Contain.

For large spills:
Contain spillages with sand or earth. Transfer both liquid and solids to suitable container(s). Treat residues as for small spills.

For small spills:
Spillages may be neutralised by the liberal application of soda ash. If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise, absorb on inert absorbent and transfer to suitable closed container. Wash site of spillage thoroughly with water and detergent.

Section 7: Handling and Storage

Precautions for safe handling:
Avoid contact with skin and eyes.
Keep away from alkalis.

Conditions for safe storage:
Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bunded area. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from alkalis, oxidising agents. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:
Alkalis, oxidising agents.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA:	None assigned.
ES-STEL:	None assigned.
ES-PEAK:	None assigned.
Notations:	None.

Biological Limit Values: No data found.

Engineering Controls:
Avoid using active metals, such as aluminium, tin and zinc, as materials of construction.
Ensure adequate ventilation (same as outdoors) when using.
If handling industrial quantities, or if aerosol risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible.

Personal Protective Equipment:
Avoid contact with skin and eyes. Avoid breathing aerosols.
Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

Normal Use:
Eye/face protection
Gloves, rubber or plastic.

Industrial Quantities:
Face shield or safety glasses
Gloves, rubber or plastic
Plastic apron, sleeves and boots
Impervious overalls.

Section 9: Physical and Chemical Properties

Appearance:	Clear, blue, mobile liquid.
Odour:	Smell of oil of wintergreen.
pH:	1 - 2 Acidic.
Vapour Pressure:	No data.
Vapour Density:	No data.
Boiling Point:	From 100 °C
Melting Point:	No data.
Volatiles:	About 82 %
Volatile Organic Compounds (VOC):	< 1 %
Evaporation Rate:	No data.
Solubilities:	Miscible with water in all proportions.
Specific Gravity/Density:	1.0 - 1.1 g/mL @ 20 °C
Flash Point:	None.
Flammable Limits:	None.
Dust Explosion:	Not applicable.
Auto-ignition Temperature:	No data.

Other Information:
Acidic mixture. Will react vigorously with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide, a simple asphyxiant. May be corrosive to mild steel and active metals. May react with strong oxidising agents. Slippery when spilled.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible materials.

Incompatible Materials: Acids, oxidising agents, some metals.

Hazardous Decomposition Products: Oxides of sulphur, oxides of nitrogen, hydrogen chloride.

Hazardous Reactions: Corrosive to mild steel and active metals.

Section 11: Toxicological Information

Health Effects:
No data available for the mixture. Information presented relates to individual ingredients.

Acute:

Swallowed: May cause burns to the mouth, throat and gastrointestinal system. Symptoms may include sore throat, a burning sensation, abdominal cramps, gastric upset, nausea, vomiting and diarrhoea.

Skin: May cause redness, pain, blisters and chemical burns. Will degrease the skin.

Eyes: May cause severe irritation, redness, pain, blurred vision, tissue damage and burns.

Inhaled: An unlikely route owing to the low volatility of most ingredients. Aspiration of froth into the lungs during swallowing or vomiting may cause chemical pneumonitis (irritation and inflammation of lung tissues) and pulmonary oedema (fluid build-up in the lungs), with the potential to become a medical emergency. Onset of symptoms may be delayed.

Chronic: Repeated skin contact may lead to irritation and burns.

LD_{50}:	Sulphamic acid	3,160 mg/kg oral, rat.
		1,312 mg/kg oral, mouse.
	Quaternary ammonium salt	240 mg/kg oral, rat.
LDLo:	Quaternary ammonium salt	266 mg/kg oral, woman.

Section 12: Ecological Information

Ecotoxicity: Harmful to aquatic organisms.

Persistence and degradability: The surfactant used in this product is not considered to be readily biodegradable.

Mobility: Readily transported by water.

Environmental Fate: No data.

Bioaccumulative potential: No data.

Other adverse environmental effects: Contains a quaternary ammonium compound, a non-biodegradable surfactant and a moderate proportion of sulphamic acid. Harmful to aquatic organisms, including fish.

Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal.

Consult appropriate local and State regulations.

Disposal methods and containers:
Avoid disposal to natural waters or the environment.
Do not use containers of mild steel, aluminium, tin, zinc or galvanised iron.

Special precautions for landfill or incineration:
Unsuitable for incineration.
May be unsuitable for some landfill sites.

Section 14: Transport Information

UN Number: None assigned.

UN Proper shipping name: None assigned.

Class and subsidiary risk: None assigned.

Packaging group: None assigned.

Special precautions for user: Contain spillages.

HAZCHEM Code: None assigned.

Material for export: Not regulated.

Section 15: Regulatory Information

Poisons (SUSDP): Schedule 6
Sulphamic acid > 10 %.

Dangerous Goods: No.

Carcinogen:	**Australia**	**IARC**	**NTP**	**RTECS**
	No.	No.	No.	No.

Agricultural and Veterinary Chemicals Act: Not applicable.

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data.

Section 16: Other information

Date of MSDS update: July 2007
Complete review and re-write of all sections.

Abbreviations:
NOHSC - National Occupational Health and Safety Commission.
ACGIH - American Conference of Governmental Industrial Hygienists.
MAK - Maximum workplace concentration - Germany, (*maximale Arbeitsplatzkonzentration*)
IARC - International Agency for Research on Cancer (France).
NPT - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

Other Available Sources of Data:
National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.
Australian Dangerous Goods Code.
Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.
Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.
List of Designated Hazardous Substances [10005] - NOHSC.
Merck Index - Merck Inc.
Sax's Dangerous Properties of Industrial Materials - Lewis.
Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.
Handbook of Reactive Chemical Hazards - Bretherick.
Hawley's Condensed Chemical Dictionary - Wiley Interscience.
AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.