Section 1: Identification of the Material and Supplier

Product Name: **Iophos - lo foam**

Other Names: Acidic solution of an iodophor.

Proper shipping name (ADG Code): None assigned.

Recommended use: As a dairy equipment sanitiser.
Use as directed on the product label.

Supplier:
DASCO Pty. Ltd.,
ABN: 14 004 581 113
24 - 26 Helen Street, HEIDELBERG HEIGHTS VIC 3081
Tel: (03) 9459 7004 (business hours)
Fax: (03) 9459 9200

Emergency Phone Numbers:

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

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Non-dangerous goods.

Risk Phrases:	R: 36/38	Irritating to skin and eyes.
Safety Phrases:	S: 1/2	Keep locked up and 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: 45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Section 3: Composition/Information on Ingredients

Ingredients:

Phosphoric acid	[7664-38-2]	10 - 30 %
Surfactant	proprietary	10 - 30 %
Iodine	[7553-56-2]	< 10 %
Water	[7732-18-5]	to 100 %
Available iodine	[7553-56-2]	about 1.4 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131 126) 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 Center or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure.

First Aid facilities:

Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

Advice to Doctor:

Product is an acidified iodophor, with less than 1.5 % available iodine. Irritating to skin and eyes. Contact Poisons Information Centre.

Aggravated medical conditions:

Persons with kidney, lung or thyroid disease should consult a doctor before working with, or using, this product.

Section 5: Fire Fighting Measures

HAZCHEM Code: None assigned.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Water vapour, oxides of phosphorus, iodine, hydrogen iodide, oxides of carbon.

Protective Equipment: Breathing apparatus and protective gloves for fire only.

Section 6: Accidental Release Measures

Emergency Procedures:

Contain.
Prevent spillages from entering drains, natural waters or the environment.

For large spills:

Contain spillage using sand or earth. Transfer both liquids and solids to suitable container. Treat residues as for small spillages.

For small spills:

If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise absorb on inert absorbent, transfer to suitable container and arrange removal by disposals company.

Section 7: Handling and Storage

Precautions for safe handling:

Avoid contact with skin and eyes.
Keep away from oxidising agents, alkalis (including carbonates and bicarbonates).

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 oxidising agents, alkalis. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Oxidising agents, alkalis.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA:	Phosphoric acid		1 mg/m³
	Iodine	0.1 ppm,	1 mg/m³
ES-STEL:	Phosphoric acid		3 mg/m³
ES-PEAK:	Iodine	0.1 ppm,	1 mg/m³

Notations: None assigned by NOHSC, but see:

Iodine	Skin	[Finland, Russia]

[Skin] indicates that this material may be absorbed via unbroken skin, and any such contact may invalidate the TLV.
[Peak] indicates a ceiling concentration which should not be exceeded, even momentarily.

Biological Limit Values: No data found.

Engineering Controls:

Do not use active metals, wood or wood products as materials of construction.
Ensure adequate ventilation (same as outdoors) when using.
If handling industrial quantities, or if vapour/aerosol risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible, and at least below the TLV.

Personal Protective Equipment:

Avoid contact with skin and eyes. Do not breathe vapours or 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:	Dark brown, mobile, slightly frothing liquid.
Odour:	Smell of iodine.
pH:	1 - 2
Vapour Pressure:	No data.
Vapour Density:	No data.
Boiling Point:	> 100 °C
Melting Point:	No data.
Volatiles:	About 75 % [water]
Volatile Organic Compounds (VOC):	Nil.
Evaporation Rate:	No data.
Solubilities:	Soluble in water.
Specific Gravity/Density:	1.1 g/mL @ 20 °C
Flash Point:	None.
Flammable Limits:	None.
Dust Explosion:	Not applicable.
Auto-ignition Temperature:	No data.

Other Information:

Very acidic, will react vigorously or violently with alkalis. May react with strong oxidising agents. May generate fumes of iodine when heated. May be sensitive to light. Very slippery when spilled.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible materials, heat.

Incompatible Materials: Oxidising agents, alkalis.

Hazardous Decomposition Products: Iodine, oxides of phosphorus.

Hazardous Reactions: Will react vigorously with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide, a simple asphyxiant.

Section 11: Toxicological Information

Health Effects:

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

Acute:

Swallowed: May be harmful if swallowed. Mildly corrosive to mouth and throat. May cause salivation, lachrymation, swelling of the eyelids, soreness of the salivary glands, metallic taste, skin rash or acne.
May cause gastric upset with nausea, vomiting, abdominal discomfort or pain, diarrhoea, thirst.

Skin: May stain the skin. Mildly corrosive to skin. May cause irritation, possible skin damage and systemic symptoms similar to when swallowed.

Eyes: Irritating to eyes. Risk of tissue damage, blurred vision.

Inhaled: Concentrated vapour or aerosols may be irritating to the upper respiratory tract. May cause watering of the eyes, tightness in the chest, sore throat and headache.
Overexposure may lead to painful coughing and breathing difficulties for several weeks.
Aspiration of froth into the lungs during swallowing or vomiting may lead to serious lung injury.

Chronic: Overexposure to iodine may cause acne and thyroid disturbances. May cause thyroid disease.
Iodine may cause sensitisation in some individuals, and repeated exposure may lead to a rash, swelling of the vocal chords, swelling and pain in the joints, acne and a general allergic reaction.

LD50:	Phosphoric acid	1,530 mg/kg oral rat. 2,740 mg/kg skin, rabbit.
	Surfactant	No data found.
	Iodine	14,000 mg/kg oral, rat.
LDLo:	Phosphoric acid	220 mg/kg unreported route, man.
	Iodine	28 mg/kg oral, human.

Section 12: Ecological Information

Ecotoxicity:	Harmful to aquatic organisms.
Persistence and degradability:	No data found.
Mobility:	Readily transported by water.
Environmental Fate:	No data found.
Bioaccumulative potential:	No data found.
Other adverse environmental effects:	Contains phosphoric acid. Phosphate may contribute to the development of algal bloom.

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 drains, natural waters or the environment.
Do not use metal containers.

Special precautions for landfill or incineration:
Not suitable for incineration.
May not be suitable 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.
Special precautions for user:	Keep away from alkalis. Contain spillages.
HAZCHEM Code:	None assigned.
Material for export:	Not regulated.

Section 15: Regulatory Information

Poisons (SUSDP): Not a scheduled poison.
Phosphoric acid < 15 %, and
Iodophor with < 1.5 % available iodine.

Dangerous Goods: Not dangerous goods.

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

Agricultural and Veterinary Chemicals Act:
This product is registered with the Australian Pesticides and Veterinary Medicines Authority **(APVMA)**.

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data found.

Section 16: Other information

Date of MSDS update: September 2009
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).
NTP - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

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.