

Printing date 02.09.2019 Revision: 02.09.2019

### 1 Identification

**Product Name: IOPHOS** 

Other Means of Identification: Mixture

Other Name: An iodophor in phosphoric acid solution

Recommended Use of the Chemical and Restriction on Use: Dairy equipment sanitiser

**Details of Manufacturer or Importer:** 

DASCO Pty Ltd 24 - 26 Helen Street

Heidelberg Heights VIC 3081 **Phone Number:** 03 9459 7004

Emergency telephone number: National Poison Information Centre: 13 11 26

### 2 Hazard(s) Identification

### **Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



Skin Corrosion/Irritation 1B H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.

Aquatic Acute 2 H401 Toxic to aquatic life.

## Signal Word Danger

### **Hazard Statements**

H314 Causes severe skin burns and eye damage.

H401 Toxic to aquatic life.

### **Precautionary Statements**

P260 Do not breathe dusts or mists.

P264 Wash hands thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

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

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/doctor.
P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

## 3 Composition and Information on Ingredients

**Chemical Characterization: Mixtures** 

Description: Mixture of substances listed below with nonhazardous additions.

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Hazardous Components:		
CAS: 7664-38-2	Phosphoric acid  Skin Corrosion/Irritation 1B, H314; Serious Eye Damage/Irritation 1, H318; Acute Toxicity (Inhalation) 4, H332	10 - 30%
	Acute Toxicity (Inhalation) 4, H332	
CAS: 7553-56-2	Iodine  Aquatic Acute 1, H400; Acute Toxicity (Dermal) 4, H312; Acute Toxicity (Inhalation) 4, H332	<10%

### 4 First Aid Measures

#### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

#### Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

### Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

### Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

### **Symptoms Caused by Exposure:**

Inhalation: May cause respiratory irritation, coughing, shortness of breath and sneezing. May lead to chemical pneumonitis and pulmonary oedema.

Skin Contact: Causes severe skin burns and redness. May stain the skin.

Eye Contact: Causes eye damage, irritation, redness, lachrymation and blurred vision. May stain the eyes. Ingestion: May cause salivation, soreness and swelling of the salivary glands, metallic taste, fever, vomiting, diarrhoea, abdominal pain, thirst, burning sensations, shock, fever, suppression of urine, delirium, stupor and death from circulatory failure.

## **5 Fire Fighting Measures**

Suitable Extinguishing Media: Water fog or fine water spray.

### **Specific Hazards Arising from the Chemical:**

Hazardous combustion products include iodine, hydrogen iodide and oxides of phosphorous.

This product is not flammable, but may decompose in a fire.

Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

### **Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

## 6 Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Increase ventilation.

### **Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

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### Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

# 7 Handling and Storage

### **Precautions for Safe Handling:**

Reacts violently with bases.

May be corrosive to metals and wood.

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

# **Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Store in original container. Protect containers from physical damage. Protect from direct sunlight and heat.

Keep away from bases including carbonates and bicarbonates, strong acids, metals and wood.

# **8 Exposure Controls and Personal Protection**

Exposure Standards:		
CAS: 7664-38-2 Phosphoric acid		
WES STEL: 3 mg/m³ TWA: 1 mg/m³		
CAS: 7553-56-2 lodine		
WES Peak limitation: 1 mg/m³, 0.1 ppm		

### **Engineering Controls:**

Maintain air concentration below occupational exposure standards, providing adequate ventilation.

# **Respiratory Protection:**

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

### Skin Protection:

Rubber or plastic gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Impervious overalls, plastic apron, sleeves and boots should be worn when handling industrial quantities. See Australian/New Zealand Standard AS/NZS 4501 for more information.

### Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

## 9 Physical and Chemical Properties

Appearance:

Form: Frothing liquid Colour: Dark brown

Odour: Characteristic iodine odour
Odour Threshold: No information available

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**pH-Value:** <2 (Very acidic)

Melting point/freezing point: <0 °C
Initial Boiling Point/Boiling Range: >100 °C
Flash Point: Not applicable

Flammability: Product is not flammable.

Auto-ignition Temperature: No information available

Decomposition Temperature: No information available

**Explosion Limits:** 

Lower: Not applicable Upper: Not applicable

Vapour Pressure:No information availableDensity:No information available

Relative Density at 20 °C: ~1.1

Vapour Density:

Evaporation Rate:

Solubility in Water:

No information available
No information available
Miscible in all proportions
Partition Coefficient (n-octanol/water): No information available

% Volatiles by Volume: ~75 %

# 10 Stability and Reactivity

### Possibility of Hazardous Reactions:

Hazardous polymerisation will not occur.

Reacts violently with bases.

May be corrosive to metals and wood.

Contact with carbonates or bicarbonates may generate carbon dioxide.

Contact with acids may generate iodine gas.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Physical damage to container, direct sunlight and heat.

Incompatible Materials: Bases including carbonates and bicarbonates, strong acids, metals and wood.

Hazardous Decomposition Products: lodine, hydrogen iodide and oxides of phosphorous.

# 11 Toxicological Information

### **Toxicity:**

LD <sub>50</sub> /LC	LD <sub>50</sub> /LC <sub>50</sub> Values Relevant for Classification:		
CAS: 70	CAS: 7664-38-2 Phosphoric acid		
Oral	LD <sub>50</sub>	1530 mg/kg (rat)	
Dermal	LD <sub>50</sub>	2740 mg/kg (rabbit)	
CAS: 7	CAS: 7553-56-2 lodine		
Oral	LD <sub>50</sub>	14000 mg/kg (rat)	
	LDLo	28 mg/kg (human)	
	TDLo	26 mg/kg/1 year (human) (woman)	

### **Acute Health Effects**

### Inhalation:

May cause respiratory irritation, coughing, shortness of breath and sneezing. May lead to chemical pneumonitis and pulmonary oedema.

**Skin:** Causes severe skin burns and redness. May stain the skin.

Eye: Causes eye damage, irritation, redness, lachrymation and blurred vision. May stain the eyes.

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### Ingestion:

May cause salivation, soreness and swelling of the salivary glands, metallic taste, fever, vomiting, diarrhoea, abdominal pain, thirst, burning sensations, shock, fever, suppression of urine, delirium, stupor and death from circulatory failure.

Skin Corrosion / Irritation: Causes severe skin burns.
Serious Eye Damage / Irritation: Causes eye damage.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

### Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

## **Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

### **Chronic Health Effects:**

Chronic exposure to iodine vapour may cause tremors, insomnia, rapid heart beat, weight loss, salivation, nasal discharge, sneezing, conjunctivitis, fever, laryngitis, bronchitis, stomatitis and skin rashes. Iodine is a sensitiser, and for some individuals a subsequent exposure may cause a rash, swelling of the vocal chords, general allergic reaction and pain and swelling in the joints.

May cause thyroid hyperactivity and swelling of lymph glands.

### **Existing Conditions Aggravated by Exposure:**

Persons with kidney, lung or thyroid disfunction should consult a physician before using this product.

Additional toxicological information: No information available

### 12 Ecological Information

**Ecotoxicity:** This product contains phosphates which may contribute to the development of algal blooms.

### Aquatic toxicity:

Toxic to aquatic life with long lasting effects.

CAS: 766	CAS: 7664-38-2 Phosphoric acid	
EC <sub>50</sub>	270 mg/l (activated sludge inhibition)	
EC₅₀/48 h	>100 mg/l (daphnia)	
EC₅₀/72 h	>100 mg/l (scenedesmus subspicatus)	
LC₅₀/96 h	138 mg/l (mosquito fish)	

### Persistence and Degradability:

The surfactant used in this product is not considered to be readily biodegradable.

**Bioaccumulative Potential:** No further relevant information available.

Mobility in Soil: No further relevant information available.

Other adverse effects: No further relevant information available.

# 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations. (Contd. on page 6)

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### **Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

# 14 Transport Information

**UN Number** 

ADG, IMDG, IATA UN1760

**Proper Shipping Name** 

ADG, IMDG, IATA CORROSIVE LIQUID, N.O.S. (phosphoric acid, iodine)

**Dangerous Goods Class** 

**ADG Class:** 8 Corrosive substances.

Packing Group:

ADG, IMDG, IATA

**EMS Number:** F-A,S-B

Hazchem Code: 2X

Special Provisions: 223, 274

Limited Quantities: 5L

Packagings & IBCs - Packing Instruction: P001, IBC03, LP01

Portable Tanks & Bulk Containers - Instructions: T7

Portable Tanks & Bulk Containers - Special

**Provisions:** TP1, TP28

# 15 Regulatory Information

Australian Inventory of Chemical Substances:		
CAS: 7664-38-2	Phosphoric acid	
CAS: 7553-56-2	lodine	
CAS: 7732-18-5	Water	

# Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

# 16 Other Information

Date of Preparation or Last Revision: 02.09.2019

Last Revision of MSDS: 01.09.2009

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

### Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC<sub>50</sub>: Lethal concentration, 50 percent

LD₅o: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Inhalation) 4: Acute toxicity - Category 4

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Skin Corrosion/Irritation 1B: Skin corrosion/irritation – Category 1B Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1 Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1 Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

#### Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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