

# SAFETY DATA SHEET

According to Safe Work Australia

Printing date 27.08.2014

Revision: 27.08.2014

## 1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product Name:** IOPHOS**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:** 13 11 26 (Poisons Information Centre)

## 2 . HAZARDS IDENTIFICATION

**Hazardous Nature:**

corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

**Label Elements****Signal Word** Danger**Hazard Statements**

H314 Causes severe skin burns and eye damage.

**Precautionary Statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P264 Wash hands thoroughly after handling.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

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





P310 Immediately call a POISON CENTER/doctor.

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.**Hazardous Components:**

|           |   |        |
|-----------|---|--------|
| 7664-38-2 | Phosphoric acid<br> Skin Corr. 1B, H314  | 10-30% |
| 7553-56-2 | Iodine<br> Aquatic Acute 1, H400;  Acute Tox. 4, H312;  Acute Tox. 4, H332 | <10%   |
|           | Non-ionic surfactant  | 10-30% |

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## 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, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

**Ingestion:** If swallowed, do not induce vomiting. Seek immediate medical attention.

**Information for Doctor****Symptoms Caused by Exposure:**

**Inhalation:** Inhalation of iodine vapour may cause irritation of the nose and throat, irritation and burning of the eyes, lachrymation, coughing and shortness of breath.

**Skin Contact:** May cause redness, pain and serious skin burns. Will stain the skin.

**Eye Contact:** Iodine vapour will stain the eyes. Liquid splashed into the eyes will cause severe irritation, redness, pain and blurred vision. May cause severe, deep burns.

**Ingestion:** May cause salivation, excessive tearing, swelling of the eyelids, soreness and swelling of the salivary glands, metallic taste, skin rash, fever, enlarged lymph glands, severe 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:**

No fire or explosion hazard exists.

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

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

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

## 6 . ACCIDENTAL RELEASE MEASURES

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

Wear Safe Work Australia 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.

**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:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

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

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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 original container in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from physical damage and direct sunlight. Keep away from alkalis, oxidising agents, active metals, wood and paper products and mineral acids.

## 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Standards:****7664-38-2 Phosphoric acid**

|     |   |
|-----|---|
| NES | STEL: 3 mg/m <sup>3</sup><br>TWA: 1 mg/m <sup>3</sup> |
|-----|---|

**7553-56-2 Iodine**

|     |  |
|-----|--|
| NES | TWA: 1 mg/m <sup>3</sup> , 0.1 ppm<br>Peak limitation: 1 mg/m <sup>3</sup> , 0.1 ppm |
|-----|--|

**Engineering Controls:**

Ensure adequate ventilation of the workplace. If handling industrial quantities, or if vapour/aerosol risk exists, provide exhaust ventilation or other engineering controls to keep the airborne concentrations as low as possible, at least below occupational exposure standards.

**Personal Protective Equipment (PPE):****Respiratory Protection:**

Use a Safe Work Australia 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:**

|   |                             |
|---|-----------------------------|
| <b>Form:</b>                                | Frothing liquid             |
| <b>Colour:</b>                              | Dark brown                  |
| <b>Odour:</b>                               | Characteristic iodine odour |
| <b>Odour Threshold:</b>                     | No information available    |
| <b>pH-Value:</b>                            | <2 (Very acidic)            |
| <b>Melting point/Melting range:</b>         | <0 °C                       |
| <b>Initial Boiling Point/Boiling Range:</b> | >100 °C                     |
| <b>Flash Point:</b>                         | Not applicable              |
| <b>Flammability:</b>                        | Product is not flammable.   |
| <b>Auto-ignition Temperature:</b>           | No information available    |
| <b>Decomposition Temperature:</b>           | No information available    |

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|   |                             |
|---|-----------------------------|
| <b>Explosion Limits:</b>                        |                             |
| <b>Lower:</b>                                   | Not applicable              |
| <b>Upper:</b>                                   | Not applicable              |
| <b>Vapour Pressure:</b>                         | No information available    |
| <b>Density:</b>                                 | No information available    |
| <b>Relative Density at 20 °C:</b>               | About 1.1 g/mL              |
| <b>Vapour Density:</b>                          | No information available    |
| <b>Evaporation Rate:</b>                        | No information available    |
| <b>Solubility in Water:</b>                     | Miscible in all proportions |
| <b>Partition Coefficient (n-octanol/water):</b> | No information available    |
| <b>% Volatiles by Volume:</b>                   | About 75 %                  |
| <b>VOC:</b>                                     | Nil                         |

## 10 . STABILITY AND REACTIVITY

### Possibility of Hazardous Reactions:

Acidic mixture, will react vigorously or violently with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide, a simple asphyxiant. Reaction with strong mineral acids may generate iodine vapour. Corrosive to many common metals. Will attack wood and paper products.

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

**Conditions to Avoid:** Heat and direct sunlight.

### Incompatible Materials:

Active metals, wood and wood products, alkalis including carbonates and bicarbonates, mineral acids and oxidising agents.

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

## 11 . TOXICOLOGICAL INFORMATION

### Toxicity:

#### LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:

##### 7664-38-2 Phosphoric acid

|        |                  |                     |
|--------|------------------|---------------------|
| Oral   | LD <sub>50</sub> | 1530 mg/kg (rat)    |
| Dermal | LD <sub>50</sub> | 2740 mg/kg (rabbit) |

##### 7553-56-2 Iodine

|      |                  |                                 |
|------|------------------|---------------------------------|
| Oral | LD <sub>50</sub> | 14000 mg/kg (rat)               |
|      | LDLo             | 28 mg/kg (human)                |
|      | TDL <sub>o</sub> | 26 mg/kg/1 year (human) (woman) |

### Acute Health Effects

#### Inhalation:

Inhalation of iodine vapour may cause irritation of the nose and throat, irritation and burning of the eyes, lachrymation, coughing and shortness of breath. Aspiration of acidic froth containing available iodine into the lungs may cause severe lung irritation, chemical pneumonitis (inflammation of lung tissues), pulmonary oedema (fluid build up in lungs) which may become a medical emergency. Onset of symptoms may be delayed.

#### Skin:

Will stain the skin. May cause redness, pain and serious skin burns. Iodine absorbed through the skin may lead to symptoms similar to those of ingestion.

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**Eye:**

Iodine vapour will stain the eyes. Liquid splashed into the eyes will cause severe irritation, redness, pain and blurred vision. May cause severe, deep burns.

**Ingestion:**

Harmful if swallowed. May cause salivation, excessive tearing, swelling of the eyelids, soreness and swelling of the salivary glands, metallic taste, skin rash, fever, enlarged lymph glands, severe vomiting, diarrhoea, abdominal pain, thirst, burning sensations, shock, fever, suppression of urine, delirium, stupor and death from circulatory failure. May cause thyroid hyper function.

**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 and iodism - characterised by 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.

**Existing Conditions Aggravated by Exposure:**

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

## 12 . ECOLOGICAL INFORMATION

**Ecotoxicity:****Aquatic toxicity:**

Harmful to aquatic organisms. Contains surfactant, local concentrations will be harmful to aquatic organisms, including fish. Contains inorganic phosphate which will contribute to the development of algal blooms in natural waters.

**Persistence and Degradability:**

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

**Bioaccumulative Potential:** No information available

**Mobility in Soil:** No information available

## 13 . DISPOSAL CONSIDERATIONS

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

**Special Precautions for Landfill or Incineration:**

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

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## 14 . TRANSPORT INFORMATION

|   |  |
|---|--|
| <b>UN Number</b>  | 1760   |
| <b>Proper Shipping Name</b>                                       | CORROSIVE LIQUID, N.O.S. (phosphoric acid, iodine) |
| <b>Dangerous Goods Class</b>                                      | 8  |
| <b>Packing Group:</b>   | III  |
| <b>EMS Number:</b>  | FA SB  |
| <b>Hazchem Code:</b>  | 2X   |
| <b>Special Provisions:</b>  | 273, 274   |
| <b>Limited Quantities:</b>  | 5L   |
| <b>Packagings &amp; IBCs - Packing Instruction:</b>               | P001, IBC03, LP01                                  |
| <b>Packagings &amp; IBCs - Special Packing Provisions:</b>        | Not applicable                                     |
| <b>Portable Tanks &amp; Bulk Containers - Instructions:</b>       | T7   |
| <b>Portable Tanks &amp; Bulk Containers - Special Provisions:</b> | TP1, TP28  |

## 15 . REGULATORY INFORMATION

### Australian Inventory of Chemical Substances:

|           |                 |
|-----------|-----------------|
| 7664-38-2 | Phosphoric acid |
| 7553-56-2 | Iodine          |
| 7732-18-5 | Water           |

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**  
Poisons Schedule: 6

## 16 . OTHER INFORMATION

**Creation Date:** 27.08.2014**Last Revision of MSDS:** 01.09.2009**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)

### Abbreviations and acronyms:

ADG: Australian Dangerous Goods  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds  
 LC<sub>50</sub>: Lethal concentration, 50 percent  
 LD<sub>50</sub>: 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)

### Disclaimer

This MSDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

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