



# SAFETY DATA SHEET

According to Safe Work Australia

Printing date 25.08.2014

Revision: 25.08.2014

## 1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product Name:** REDENE**Other Name:** Iodophor in surfactant solution**Recommended Use of the Chemical and Restriction on Use:** Teat dip and spray for dairy cows**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

Eye Dam. 1      H318 Causes serious eye damage.



environment

Aquatic Acute 1    H400 Very toxic to aquatic life.



Acute Tox. 4      H302 Harmful if swallowed.

STOT SE 3        H335 May cause respiratory irritation.

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

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

**Precautionary Statements**

P261              Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P273              Avoid release to the environment.

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.

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

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

P330              Rinse mouth.

P391              Collect spillage.

P301+P312      IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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P310	Immediately call a POISON CENTER/doctor.
P312	Call a POISON CENTER/doctor if you feel unwell.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
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:**

9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy- 	10-30%
5634-39-9	Iodinated glycerol	<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, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

**Ingestion:**

If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

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

Inhalation: Vapour or spray/mist will cause tightness in the chest, sore throat and headache. Symptoms of painful coughing and breathing difficulties may continue for several weeks.

Skin contact: May stain the skin.

Eye contact: Vapour and liquid will stain eyes. May be severely irritating to eyes.

Ingestion: Harmful if ingested. May cause abdominal discomfort, nausea, vomiting and diarrhoea, salivation, excessive tearing, swelling of the eyelids, soreness and swelling of the salivary glands, metallic taste, skin rash, fever and enlarged lymph glands. Very large doses may cause thirst, shock, fever, suppression of urine, delirium, stupor and death.

### 5 . FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Water fog or fine water spray.

**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon.  
 No fire or explosion hazard exists.

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

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

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## 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. Ensure adequate 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. 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 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 acids and oxidising agents.

## 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Exposure Standards:

#### 7553-56-2 Iodine

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

### Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour 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.

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## 9 . PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	
<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>	About neutral
<b>Melting point/Melting range:</b>	No information available
<b>Initial Boiling Point/Boiling Range:</b>	No information available
<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
<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>	1.0-1.1 g/mL
<b>Vapour Density:</b>	No information available
<b>Evaporation Rate:</b>	No information available
<b>Solubility in Water:</b>	Miscible
<b>Partition Coefficient (n-octanol/water):</b>	No information available
<b>% Volatiles by Volume:</b>	About 75 % (mostly as water)
<b>VOC:</b>	<2 %

## 10 . STABILITY AND REACTIVITY

### Possibility of Hazardous Reactions:

Heating, or contact with strong mineral acids, may generate iodine vapour. May react with strong oxidising agents.

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

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

**Incompatible Materials:** Oxidising agents and mineral acids.

**Hazardous Decomposition Products:** May decompose slowly on exposure to light generating iodine.

## 11 . TOXICOLOGICAL INFORMATION

### Toxicity:

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

#### 9016-45-9 Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-

Oral	LD <sub>50</sub>	3000 mg/kg (mouse)
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Dermal	LD <sub>50</sub>	3000 mg/kg (mouse)
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#### 5634-39-9 Iodinated glycerol

Oral	LD <sub>50</sub>	6000 mg/kg (rat)
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#### 7553-56-2 Iodine

	LCLo	800 mg/m <sup>3</sup> /1hr (rat)
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Oral	LD <sub>50</sub>	10000 mg/kg (rabbit) 14000 mg/kg (rat)
	LDLo	28 mg/kg (human) 800 mg/kg (dog)

**Acute Health Effects****Inhalation:**

Iodine vapour will irritate the respiratory system at 0.1 ppm. Vapours will be unbearable at 0.3 ppm. Vapour or spray/mist will cause tightness in the chest, sore throat and headache. Symptoms of painful coughing and breathing difficulties may continue for several weeks. Aspiration into the lungs during swallowing or vomiting may cause serious lung injury.

**Skin:** May stain the skin.

**Eye:** Vapour and liquid will stain eyes. May be severely irritating to eyes. Risk of permanent corneal damage.

**Ingestion:**

Harmful if ingested. May cause abdominal discomfort, nausea, vomiting and diarrhoea, salivation, excessive tearing, swelling of the eyelids, soreness and swelling of the salivary glands, metallic taste, skin rash, fever and enlarged lymph glands. Very large doses may cause thirst, shock, fever, suppression of urine, delirium, stupor and death.

**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.

**Serious Eye Damage / Irritation:** Causes serious 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:**

Iodinated glycerol has shown some evidence of carcinogenic effects in rats and mice by gastric lavage, and is classified as carcinogenic and neoplastic by RTECS criteria.

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

**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause respiratory irritation.

**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:**

Repeated or prolonged exposure to this product may lead to iodism and thyroid deficiency. Iodine is a sensitiser, and for some individuals repeated exposure may lead to a rash, swelling of the vocal chords, general allergic reaction and swelling and pain in the joints.

Prolonged skin contact is likely to cause irritation, damage, and may penetrate the skin, leading to symptoms similar to poisoning by other routes. Will decrease the skin which may enhance iodine penetration.

**Existing Conditions Aggravated by Exposure:**

Sensitivity to iodine, skin disorders, eye problems, impaired respiratory function, or disease of the thyroid, lungs or kidneys.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**

**Aquatic toxicity:** Iodine and iodophors are toxic to aquatic organisms.

**Persistence and Degradability:**

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

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**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.

## 14 . TRANSPORT INFORMATION

**UN Number** Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

## 15 . REGULATORY INFORMATION

**Australian Inventory of Chemical Substances:**

9016-45-9 Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-

7732-18-5 Water

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

Poisons Schedule: 6

## 16 . OTHER INFORMATION

**Creation Date:** 25.08.2014**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:**

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 percentLD<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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