

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.

(Contd. on page 2)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 25.08.2014

Revision: 25.08.2014

Product Name: REDENE

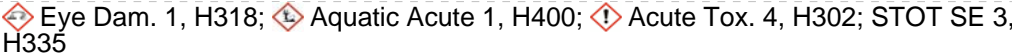
(Contd. of page 1)

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.

(Contd. on page 3)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 25.08.2014

Revision: 25.08.2014

Product Name: REDENE

(Contd. of page 2)

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 ³ , 0.1 ppm Peak limitation: 1 mg/m ³ , 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.

(Contd. on page 4)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 25.08.2014

Revision: 25.08.2014

Product Name: REDENE

(Contd. of page 3)

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	
Form:	Frothing liquid
Colour:	Dark brown
Odour:	Characteristic iodine odour
Odour Threshold:	No information available
pH-Value:	About neutral
Melting point/Melting range:	No information available
Initial Boiling Point/Boiling Range:	No information available
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 available
Density:	No information available
Relative Density at 20 °C:	1.0-1.1 g/mL
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Miscible
Partition Coefficient (n-octanol/water):	No information available
% Volatiles by Volume:	About 75 % (mostly as water)
VOC:	<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:

LD₅₀/LC₅₀ Values Relevant for Classification:		
9016-45-9 Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-		
Oral	LD ₅₀	3000 mg/kg (mouse)
Dermal	LD ₅₀	3000 mg/kg (mouse)
5634-39-9 Iodinated glycerol		
Oral	LD ₅₀	6000 mg/kg (rat)
7553-56-2 Iodine		
	LCLo	800 mg/m ³ /1hr (rat)

(Contd. on page 5)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 25.08.2014

Revision: 25.08.2014

Product Name: REDENE

(Contd. of page 4)

Oral	LD ₅₀	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.

(Contd. on page 6)



SAFETY DATA SHEET

According to Safe Work Australia

Printing date 25.08.2014

Revision: 25.08.2014

Product Name: REDENE

(Contd. of page 5)

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 Ltdwww.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

LC₅₀: Lethal concentration, 50 percentLD₅₀: 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"

The information contained in this material safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. DASCO Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.