1. IDENTIFICATION

Product Name	**Nonyl Phenol Tech 8 (8 - 8.5 EO)**
Other Names	2-(Nonylphenyl)-.omega.-hydroxypoly(oxy-1,2-ethanediyl); Ethoxylated nonylphenol; Glycols, polyethylene, mono (nonylphenyl) ether; Nonylphenol, ethylene oxide, condensate; Nonylphenoxypolyethoxy ethanol; PEG-8 Nonyl Phenyl Ether; POLY(OXY-1,2-ETHANEDIYL),.ALPHA.-(NONYLPHENYL)-.OMEGA.-HYDROXY-; Polyethylene glycol, nonylphenyl ether; Sinopol 964
Uses	No Data Available
Chemical Family	No Data Available
Chemical Formula	(C2H40)nC15H240
Chemical Name	Nonyl Phenol Tech 8 (8 - 8.5 EO)
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)	No Data Available

Safe Work Australia
Approved Criteria for Classifying Hazardous Substances (NOHSC:1008(2004))

Hazard Classification	NOT hazardous according to the criteria of Safe Work Australia [NOHSC:1008(2004)]

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Peg-8 Nonyl Phenyl Ether	No Data Available	9016-45-9	100.0 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	Rinse mouth with water. Give water to drink. Do NOT induce vomiting. If symptoms develop, seek medical attention.
Eye	Immediately flush eyes with plenty of water holding eyelids open. Seek medical attention.
Skin	Remove contaminated clothing. Flush affected area with plenty of water. If irritation persists, seek medical attention.
Inhaled	Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient.
Medical Conditions Aggravated by Exposure	No information available on medical conditions which are aggravated from exposure to this product.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, remove containers from the path of fire.
Flammability Conditions	Product is a combustible liquid.
Extinguishing Media	In case of fire, appropriate extinguishing media include water, carbon dioxide, foam, or dry chemical powder.
Fire and Explosion Hazard	Product is a combustible liquid.
Hazardous Products of Combustion	None known.
Special Fire Fighting Instructions	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit.
Flash Point	>170 °C Closed Cup
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Shut off all possible sources of ignition. Avoid accidents, clean up immediately. Increase ventilation. Avoid walking through spilled product as it is slippery when spilt. Use clean, non-sparking tools and equipment.
Clean Up Procedures	Soak up spilled product using absorbent non-combustible material such as sand or soil. Avoid using sawdust or cellulose. When saturated, collect material into suitable, labelled, dry, sealable containers and hold for safe disposal.
Containment	Stop leak if safe to do so.
Environmental Precautionary Measures	Do not allow product to reach drains, sewers or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Authority.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Handling	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product vapours.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Store away from oxidizing agent. This product is classified as a 'C2' Combustible Liquid for the purpose of storage and handling in accordance with the requirements of AS1940.
Container	Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC).
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	RESPIRATOR: Not normally required (AS1715/1716). EYES: Protective goggles (AS1336/1337). HANDS: Wear rubber gloves (AS2161). CLOTHING: Standard work uniform/clothing and safety footwear (AS3765/2210).
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Liquid
Odour	Light Characteristic Odour
Colour	No Data Available
pH	5 - 7 (1%)
Vapour Pressure	No Data Available

Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Soluble in water 30°C
Specific Gravity	1.040 - 1.060 Water = 1
Flash Point	>170 °C Closed Cup
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No Data Available
Potential for Dust Explosion	Product is a liquid.
Fast or Intensely Burning Characteristics	No Data Available
Flame Propagation or Burning Rate of Solid Materials	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	No Data Available
Reactions That Release Gases or Vapours	No Data Available
Release of Invisible Flammable Vapours and Gases	No Data Available

10. STABILITY AND REACTIVITY

General Information	Combustible liquid.
Chemical Stability	Product is stable under normal conditions of use, storage and temperature. Combustible liquid.
Conditions to Avoid	No Data Available
Materials to Avoid	Incompatible with strong oxidizing agents.
Hazardous Decomposition Products	There are no known hazardous decomposition products.
Hazardous Polymerisation	No Data Available

11. TOXICOLOGICAL INFORMATION

General Information	No toxicological information available for this product.
EyeIrritant	May cause eye irritation.
Ingestion	No adverse effects, but large amounts may cause nausea and vomiting.
Inhalation	Inhalation of mist may cause irritation.
SkinIrritant	Skin contact may result in slight irritation.
Carcinogen Category	No Data Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

(9.1B FISH - NZ EPA CCID)
ACUTE
SPECIES: Lepomis macrochirus Bluegill Sunfish
TYPE OF EXPOSURE: Static
DURATION: 96 hr
ENDPOINT: LC50
VALUE: 1300 ug/l (= 1.3 mg/l)
REFERENCE SOURCE: Ref no: 854. Macek, K.J., and S.F. Krzeminski (1975) Susceptibility of Bluegill Sunfish (Lepomis macrochirus) to Nonionic Surfactants. Bull.Environ.Contam.Toxicol. 13(3):377-384 [ECOTOX]

CHRONIC
SPECIES: Medaka
TYPE OF EXPOSURE:
DURATION:
ENDPOINT: NOEC
VALUE: 8.2 µg L-1 (=0.0082 mg/l)
REFERENCE SOURCE: ALKYLPHENOLS & ETHOXYLATES RESEARCH COUNCIL
COMMENTS ON THE JAPAN ENVIRONMENTAL HEALTH DEPARTMENT, MINISTRY OF THE ENVIRONMENT REPORT ON THE TEST RESULTS OF ENDOCRINE DISRUPTING EFFECTS OF NONYLPHENOL ON FISH (DRAFT) Submitted January 3, 2002

Bioccumulative: No
BCF values of <0.2 to <1.4 were measured in carp at polyethylene glycol nonylphenyl ether concentrations of 2.0 and 0.2 mg/l, respectively. According to a classification scheme(3), these BCF values indicate that bioconcentration of this mixture in aquatic organisms is low(SRC). Nonylphenol, nonylphenol monoethoxylate, and nonylphenol diethoxylate are more lipophilic and may bioconcentrate in aquatic organisms to a greater extent than higher oligomers(3).
[(1) Chemicals Inspection and Testing Institute; Biodegradation and Bioaccumulation Data of Existing Chemicals Based on the CSCL Japan. Japan Chemical Industry Ecology - Toxicology and Information Center. ISBN 4-89074-101-1 (1992) (2) Franke C et al; Chemosphere 29: 1501-14 (1994) (3) Kvestak R, Ahel M; Ecotoxicol Environ Safety 28: 25-34 (1994)]**PEER REVIEWED**
[HSDB]

Rapidly Degradable: No
AQUATIC FATE: Primary biodegradation tests with sediment and river water(1,2), indicate that primary degradation of polyethylene glycol linear nonylphenyl ether in water will be important (97% to 99% in 30 days). Biodegradation screening studies on the aerobic biodegradation of mixtures of branched and linear polyethylene glycol nonylphenyl ethers indicate rapid primary degradation to nonylphenol diethoxylate and nonylphenol ethoxylate under aerobic conditions and nonylphenol under anaerobic conditions(3-5).
[(1) Yoshimura K et al; J Amer Oil Chem Soc 63: 1590-96 (1986) (2) Ruiz Cruz PJ,Dobarganes Garcis MC; Grasas y Aceites 29: 1-8 (1978) (3) Fischer WK, Gerike P; Water Res 9: 1137-41 (1975) (4) Ahel M et al; Comm Eur Communities, Eur 10388, Org Micropollut Aquat Environ pp. 412-28 (1986) (5) Kravetz L et al; Tenside Detergents 21: 1-6 (1984)]**PEER REVIEWED**
[HSDB]

(9.1B CRUSTACEAN - NZ EPA CCID)
SPECIES: Daphnia pulex Water flea
TYPE OF EXPOSURE: Static
DURATION: 48 hr
ENDPOINT: LC50
VALUE: 4800 ug/l (= 4.8 mg/l)
REFERENCE SOURCE: Ref no: 2877. Benijts-Claus, C., and G. Persoone (1975) Toxicity of Three Herbicides in the Aquatic Ecosystem (La Toxicite de Trois Herbicides sur LEcosysteme Aquatique). La Tribune Du Ceredeau

28(383):340-346 (FRE); Pestic.Abstr.9(7):526 (1976) (ABS) [ECOTOX]

Bioccumulative: No
BCF values of <0.2 to <1.4 were measured in carp at polyethylene glycol nonylphenyl ether concentrations of 2.0 and 0.2 mg/l, respectively. According to a classification scheme(3), these BCF values indicate that bioconcentration of this mixture in aquatic organisms is low(SRC). Nonylphenol, nonylphenol monoethoxylate, and nonylphenol diethoxylate are more lipophilic and may bioconcentrate in aquatic organisms to a greater extent than higher oligomers(3).
[(1) Chemicals Inspection and Testing Institute; Biodegradation and Bioaccumulation Data of Existing Chemicals Based on the CSCL Japan. Japan Chemical Industry Ecology - Toxicology and Information Center. ISBN 4-89074-101-1 (1992) (2) Franke C et al; Chemosphere 29: 1501-14 (1994) (3) Kvestak R, Ahel M; Ecotoxicol Environ Safety 28: 25-34 (1994)]**PEER REVIEWED**
[HSDB]

Rapidly Degradable: No
AQUATIC FATE: Primary biodegradation tests with sediment and river water(1,2), indicate that primary degradation of polyethylene glycol linear nonylphenyl ether in water will be important (97% to 99% in 30 days). Biodegradation screening studies on the aerobic biodegradation of mixtures of branched and linear polyethylene glycol nonylphenyl ethers indicate rapid primary degradation to nonylphenol diethoxylate and nonylphenol ethoxylate under aerobic conditions and nonylphenol under anaerobic conditions(3-5).
[(1) Yoshimura K et al; J Amer Oil Chem Soc 63: 1590-96 (1986) (2) Ruiz Cruz PJ,Dobarganes Garcis MC; Grasas y Aceites 29: 1-8 (1978) (3) Fischer WK, Gerike P; Water Res 9: 1137-41 (1975) (4) Ahel M et al; Comm Eur Communities, Eur 10388, Org Micropollut Aquat Environ pp. 412-28 (1986) (5) Kravetz L et al; Tenside Detergents 21: 1-6 (1984)]**PEER REVIEWED**
[HSDB]

Persistence/Degradability	No information available on persistence/degradability for this product.
Mobility	Water soluble
Environmental Fate	Do NOT let product reach waterways, drains and sewers.
Bioaccumulation Potential	No information available on bioaccumulation for this product.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
Special Precautions for Land Fill	Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Land Transport (Australia)
ADG Code

Proper Shipping Name	Nonyl Phenol Tech 8 (8 - 8.5 EO)
Class	C2 Combustible Liquids - Flash Point >93°C, Closed Cup, Not Excluded Flammable
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (New Zealand)
NZS5433

Proper Shipping Name	Nonyl Phenol Tech 8 (8 - 8.5 EO)
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Land Transport (United States of America)
US DOT

Proper Shipping Name	Nonyl Phenol Tech 8 (8 - 8.5 EO)
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport
IMDG Code

Proper Shipping Name	Nonyl Phenol Tech 8 (8 - 8.5 EO)
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No

Air Transport
IATA DGR

Proper Shipping Name	Nonyl Phenol Tech 8 (8 - 8.5 EO)
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	No Data Available

Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	Not Hazardous

National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Europe (EINECS)	Not Determined
Europe (REACh)	Not Determined
Japan (ENCS/METI)	Not Determined
Korea (KECI)	Not Determined
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Not Determined
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

16. OTHER INFORMATION

Related Product Codes	SUFNOK0200, SUFNOK1000, SUFNOK1100, SUFNOK2000, SUFNOK2100, SUFNOK2500, SUFNOK3000, SUFNOK5000, SUFNOK6000
Revision	3
Revision Date	24 Jun 2014
Key/Legend	**<** Less Than **>** Greater Than **AICS** Australian Inventory of Chemical Substances **atm** Atmosphere **CAS** Chemical Abstracts Service (Registry Number) **cm²** Square Centimetres **CO2** Carbon Dioxide **COD** Chemical Oxygen Demand **deg C (°C)** Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand
deg F (°F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or **L** Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight