



SAFETY DATA SHEET COCONUT DIETHANOLAMINE REVISION 3, DATE 23 JUL 19

1. IDENTIFICATION

Product Name	Coconut diethanolamine
Other Names	Coconut diethanolamide; Coconut oil fatty acids, diethanolamide; N,N-Bis(2-hydroxyethyl) coconut oil amide; REDAMIDE CDE-LA
Uses	Personal care, shampoo, toiletries and detergent ingredient; foam booster and viscosity builder.
Chemical Family	No Data Available
Chemical Formula	Unspecified
Chemical Name	Amides, coco, N,N-bis(hydroxyethyl)
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox 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)

Schedule 5

Redox Ltd
Corporate Office Sydney
Locked Bag 15 Minto NSW 2566 Australia
2 Swettenham Road Minto NSW 2566 Australia
All Deliveries: 4 Holmes Road Minto NSW 2566 Australia

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Australia
Adelaide
Brisbane
Melbourne
Perth
Sydney

New Zealand
Auckland
Christchurch
Hawke's Bay
UK
London

Malaysia
Kuala Lumpur
USA
Los Angeles
Oakland
Mexico
Saltillo



Globally Harmonised System

Hazard Classification		Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)	
Hazard Categories		Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Irritation - Category 2A Acute Hazard To The Aquatic Environment - Category 2	
Pictograms			
Signal Word		Warning	
Hazard Statements		H315	Causes skin irritation.
		H319	Causes serious eye irritation.
		H401	Toxic to aquatic life.
Precautionary Statements	Prevention	P273	Avoid release to the environment.
		P280	Wear protective gloves/eye protection/face protection.
	Response	P302 + P352	IF ON SKIN: Wash with plenty of water/...
		P332 + P313	If skin irritation occurs: Get medical advice/attention.
		P362	Take off contaminated clothing.
		P337 + P313	If eye irritation persists: Get medical advice/attention.
		P391	Collect spillage.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Disposal	P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

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)
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Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Health Hazards	6.3A	Substances that are irritating to the skin
		6.4A	Substances that are irritating to the eye
		6.9B	Substances that are harmful to human target organs or systems
	Environmental Hazards	9.1D	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Amides, coco, N,N-bis(hydroxyethyl)	Unspecified	68603-42-9	>=80 - <90 %
Diethanolamine	C4H11NO2	111-42-2	>=3 - <7 %
Ingredients determined not to be hazardous	Unspecified	Unspecified	Balance %

4. FIRST AID MEASURES**Description of necessary measures according to routes of exposure**

Swallowed	IF SWALLOWED: Rinse mouth. Call a Poison Centre or doctor/physician for advice. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Keep victim calm and warm - Obtain immediate medical care. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Remove contaminated clothing and shoes immediately. Flush skin with running water for at least 15 minutes. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor/physician for advice. Apply resuscitation if victim is not breathing – Do not use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device. Administer oxygen if breathing is difficult. Keep victim calm and warm - Obtain immediate medical care.
Advice to Doctor	Treat symptomatically. Ensure that attending medical personnel are aware of the identity and nature of the product(s) involved, and take precautions to protect themselves.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Avoid getting water inside containers.
Flammability Conditions	Not flammable; May burn but does not ignite readily.
Extinguishing Media	Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction - Do not use water jets as that may cause the fire to spread.
Fire and Explosion Hazard	Containers may explode when heated.
Hazardous Products of Combustion	Fire may produce irritating, toxic and/or corrosive fumes.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.
Flash Point	194 °C [PMCC]
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	Ensure adequate ventilation. ELIMINATE all ignition sources. Do not touch or walk through spilled material - Material can create slippery conditions. Avoid breathing vapours and contact with eyes, skin and clothing.
Clean Up Procedures	Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13). Never return spills to original containers for re-use.
Containment	Stop leak if safe to do so; Turn leaking containers leak-side up to prevent the escape of liquid. Dike the spilled material, where this is possible; Prevent entry into waterways, drains or confined areas.
Decontamination	Following product recovery, flush area with water.
Environmental Precautionary Measures	Prevent entry into soils, drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Use personal protective equipment as required (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours/spray and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Avoid excessive heating for prolonged periods of time. Avoid release to the environment.
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Keep away from heat and sources of ignition - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10).
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product. For COMPONENT: Diethanolamine (CAS No. 111-42-2): - Safe Work Australia (SWA) Exposure Standard: TWA = 3 ppm (13 mg/m3). - New Zealand Workplace Exposure Standard (WES): TWA = 3 ppm (13 mg/m3); Skin absorption (skin).
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	Adequate ventilation should be provided so that exposure limits are not exceeded. 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	- Respiratory protection: Not normally required. Wear respiratory protection in case of inadequate ventilation or risk of inhalation of vapours. Recommended: Organic vapour/particulate (A/P2) filter respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses or chemical goggles. - Hand protection: Wear protective gloves. Recommended: Chemical-resistant gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. No recommendation.
Special Hazards Precautions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Viscous liquid
Odour	Light, characteristic
Colour	Light yellow
pH	>9 - 11.5
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	96 °C
Melting Point	3.8 °C
Freezing Point	6 °C
Solubility	Soluble in water
Specific Gravity	~1.01 (H ₂ O = 1)
Flash Point	194 °C [PMCC]
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	690 mPa.s (@ 30 °C)
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Not flammable; May burn but does not ignite readily.
Reactions That Release Gases or Vapours	Fire/decomposition may produce irritating, toxic and/or corrosive fumes.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	No dangerous reactions known.
Chemical Stability	Stable at ambient temperature and under normal conditions of use.
Conditions to Avoid	Avoid excessive heat for prolonged periods of time.
Materials to Avoid	Incompatible/reactive with strong acids, strong bases, strong oxidizing agents and strong reducing agents.
Hazardous Decomposition Products	No decomposition if used according to specifications. Fire/decomposition may produce irritating, toxic and/or corrosive fumes.
Hazardous Polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<ul style="list-style-type: none"> - Acute toxicity: May be harmful if swallowed. - Skin corrosion/irritation: Causes skin irritation [OECD Guideline 404]. - Eye damage/irritation: Causes serious eye irritation [OECD Guideline 405]. - Respiratory/skin sensitisation: Not (skin) sensitising [OECD Guideline 406]. - Germ cell mutagenicity: Not classified. - Carcinogenicity: Not classified. - Reproductive toxicity: Not classified. - STOT (single exposure): No information available. - STOT (repeated exposure): COMPONENT: Diethanolamine (CAS No. 111-42-2): May cause damage to organs through prolonged or repeated exposure. - Aspiration toxicity: No information available.
Acute	
Ingestion	Acute toxicity (Oral): - LD50, Rat: >3,000 mg/kg bw. [OECD Guideline 401].
Other	Acute toxicity (Dermal): - LD50, Rabbit: >2,000 mg/kg bw. [Supplier's SDS].
Mutagenicity	Bacterial reverse mutation assay (e.g. Ames test): - Negative (in vitro) [EU Method B.13/14]. Chromosome aberration (Mouse): - Negative (in vitro) [OECD Guideline 474].
Carcinogenicity	Carcinogenicity (Oral): - Mouse (feed): No effects (2 years).
Reproduction	Developmental effects (Oral): - NOAEL, Rat (feed): 1,000 mg/kg bw/day [similar to OECD Guideline 414].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - LC50, Fish (Danio rerio): >4.9 mg/l (96 h). - EC50, Crustacea (Daphnia magna): >3.2 mg/l (48 h). - ErC50, Algae (Scenedesmus subspicatus): >18.6 mg/l (72 h).
Persistence/Degradability	Readily biodegradable [OECD 301]. - Biodegradation in water (Activated sludge, domestic, non-adapted): Under the test conditions, the test substance was considered to be readily biodegradable (60% degradation within 28 day) and the 10-day window criterion was met.
Mobility	No information available.
Environmental Fate	Toxic to aquatic life - Avoid release to the environment.
Bioaccumulation Potential	No information available.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container in accordance with local/regional/national regulations.
Special Precautions for Land Fill	No information available.

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

Proper Shipping Name	Coconut diethanolamine
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
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	Coconut diethanolamine
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
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	Coconut diethanolamine
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
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name	Coconut diethanolamine
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
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name	Coconut diethanolamine
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
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name	Coconut diethanolamine
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
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

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)
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15. REGULATORY INFORMATION

General Information	DIETHANOLAMINE (excluding its salts and derivatives) is listed in Schedule 5 of the SUSMP, in preparations containing 20
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SAFETY DATA SHEET COCONUT DIETHANOLAMINE REVISION 3, DATE 23 JUL 19

% or less of diethanolamine except in preparations containing 5 % or less of diethanolamine.

Poisons Schedule (Aust)

Schedule 5

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code

HSR002503

National/Regional Inventories

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

16. OTHER INFORMATION

Related Product Codes

CODIET0700, CODIET1800, CODIET1801, CODIET1802, CODIET1803, CODIET1804, CODIET1805, CODIET1806, CODIET1807, CODIET1808, CODIET1809, CODIET1810, CODIET1811, CODIET1812, CODIET1850, CODIET1856, CODIET1860, CODIET1866, CODIET2000, CODIET2001, CODIET2002, CODIET2003, CODIET2500, CODIET3000, CODIET3010, CODIET3020, CODIET3030, CODIET3040, CODIET3050, CODIET3060, CODIET3300, CODIET3500, CODIET4000, CODIET4001, CODIET4002, CODIET4003, CODIET4004, CODIET4005, CODIET4006, CODIET4007, CODIET4008, CODIET4010, CODIET4100, CODIET4200, CODIET4300, CODIET4400, CODIET4500, CODIET4600, CODIET5000, CODIET5001, CODIET5200, CODIET6000, CODIET6100, CODIET6500, CODIET6600, CODIET8000, CODIET8001, CODIET9000, CODIET9600, CODIET9700

Revision

3

Revision Date

23 Jul 2019

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