

1. IDENTIFICATION

Product Name VARISOFT TA 100

 Other Names
 Dimethyldistearylammonium chloride; Distearyldimonium chloride

 Uses
 Organic conditioner for cosmetic formulations; Industrial use.

Chemical Family Quaternary ammonium compounds

Chemical Formula Unspecified

Chemical Name 1-Octadecanaminium, N,N-dimethyl-N-octadecyl-, chloride

Product Description No Data Available

Contact Details of the Supplier of this Safety Data Sheet

 Organisation
 Location
 Telephone

 Redox Ltd
 2 Swettenham Road
 +61-2-97333000

Minto NSW 2566 Australia

Redox Ltd 11 Mayo Road +64-9-2506222

Wiri Auckland 2104 New Zealand

Redox Inc. 3960 Paramount Boulevard +1-424-675-3200

Suite 107

Lakewood CA 90712

USA

Redox Chemicals Sdn Bhd Level 2, No. 8, Jalan Sapir 33/7 +60-3-5614-2111

Seksyen 33, Shah Alam Premier Industrial Park

40400 Shah Alam Sengalor, Malaysia

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 +64-4-9179888 Chemcall Malaysia Chemcall New Zealand 0800-243622 +64-4-9179888 National Poisons Centre New Zealand 0800-764766 CHEMTREC USA & Canada 1-800-424-9300 CN723420

CHEMINEC USA & Callada 1500-424-5500 CN72542

+1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not Scheduled



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 1

Acute Hazard To The Aquatic Environment - Category 1

Long-term Hazard To The Aquatic Environment - Category 1

Pictograms





Signal Word Danger

Hazard Statements H315 Causes skin irritation.

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements Prevention **P280** Wear protective gloves/eye protection/face protection.

P273 Avoid release to the environment.

Response P302 + P352 IF ON SKIN: Wash with plenty of water/...

P337 + P313 If eye irritation persists: Get medical advice/attention.

P391 Collect spillage.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P362 Take off contaminated clothing.

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)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
1-Octadecanaminium, N,N-dimethyl-N-octadecyl-, chloride	Unspecified	107-64-2	>60 %
Propan-2-ol	C3H8O	67-63-0	0.1 - 1 %
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, then drink plenty of water. Call a Poison Centre or doctor/physician for advice.

Eye IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting

the upper and lower lids. Immediately call a Poison Centre or doctor/physician for advice. Remove contact lenses if

present and easy to do. Continue rinsing for at least 15 minutes. Obtain immediate medical care.

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. If respiratory symptoms

persist, get medical advice/attention.

Advice to Doctor Treat symptomatically.

 $\label{thm:medical conditions Aggravated by} \ \ \mbox{No information available}.$

Exposure

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.

Flammability Conditions Combustible solid; May burn but does not ignite readily.

Extinguishing Media Use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction - Do not use full water jet.

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust

explosion hazard.

Hazardous Products of

Combustion

Fire may produce irritating, toxic and/or corrosive fumes, including carbon dioxide, carbon monoxide, nitrogen oxides (NOx), hydrogen chloride; Under certain conditions of combustion, traces of other toxic substances cannot be excluded.

Special Fire Fighting Instructions Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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 >100 °C

Lower Explosion LimitNo Data AvailableUpper Explosion LimitNo Data Available

Auto Ignition Temperature 280 °C

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. Avoid

generating dust. Avoid breathing dust and contact with eyes, skin and clothing.

Clean Up Procedures Collect material (Pick up mechanically) and place into suitable containers for disposal (see SECTION 13). Avoid dispersal of

dust in the air (i.e. clearing dusty surfaces with compressed air). Non-sparking tools should be used.

Containment Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.

Decontamination No information available.

Environmental Precautionary

Measures

Do not allow to enter drains or waterways; Do not discharge into the subsoil/soil.

Evacuation Criteria Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher

ground.

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. Minimise dust generation and accumulation. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert

atmospheres. Avoid release to the environment - Collect spillage (see SECTION 6).

Storage Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed when not in use. 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. Isopropanol vapours may accumulate in headspace of containers, appropriate precautions

should be followed when using this material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General No specific exposure standards are available for this product.

COMPONENT: Propan-2-ol (CAS No. 67-63-0):

- Safe Work Australia (SWA) Exposure Standard: TWA = 400 ppm (983 mg/m3); STEL = 500 ppm (1,230 mg/m3).

Exposure Limits No Data Available

Biological Limits No information available.

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.

- Provide sufficient ventilation to maintain exposure below the permissible exposure limits for dust and isopropanol

vapors. Isopropanol vapors will concentrate in confined areas.

Personal Protection Equipment - Respiratory protection: Wear respiratory protection in case of formation of dust/vapours. Recommended: Organic

vapour/particulate filter (A-P2) respirator (refer to AS/NZS 1715 & 1716).

- Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Goggles, or face shield if

necessary.

- Hand protection: Wear protective gloves. Recommended: Gloves made of chloroprene (e.g. Neoprene), natural latex,

nitril (NBR), butyl (IIR), fluorinated rubber (e.g. Viton); Break-through time: 480 min.

- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. No recommendation.

Special Hazards Precaustions The powdered fines of this product can present a strong dust explosion hazard. When dispersed in air, these dusts are

sensitive to both thermal and electrical ignition sources. Bulk handling equipment used for this product should be bonded

and grounded and contain explosion vents, explosion suppression systems or use an inert gas atmosphere. Avoid

generating large dust clouds during handling.

Work Hygienic Practices Do not eat, drink or smoke when working. Remove soiled or soaked clothing immediately. After work and during work

intervals the affected skin areas must be thoroughly cleaned.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical StateSolidAppearancePowderOdourCharacteristicColourWhite

pH 6 - 8 (100 g/l)
Vapour Pressure No Data Available
Relative Vapour Density No Data Available

Boiling Point 627.5 °C (Main components) **Melting Point** 62.1 - 70 °C (Main components)

Freezing Point No Data Available
Solubility Dispersible in water
Specific Gravity No Data Available

Flash Point >100 °C
Auto Ignition Temp 280 °C

Evaporation RateNo Data AvailableBulk DensityNo Data AvailableCorrosion RateNo Data AvailableDecomposition TemperatureNo Data AvailableDensity0.84 g/cm3

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 < 4% %

Additional Characteristics No information available.

Potential for Dust Explosion Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust

explosion hazard.

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

Combustible solid; May burn but does not ignite readily.

Reactions That Release Gases or

Vapours

Fire/decomposition may produce irritating, toxic and/or corrosive fumes, including carbon dioxide, carbon monoxide, nitrogen oxides (NOx), hydrogen chloride; Under certain conditions of combustion, traces of other toxic substances

cannot be excluded.

Release of Invisible Flammable

Vapours and Gases

No information available.

10. STABILITY AND REACTIVITY

General Information No information available.

Chemical Stability The product is stable under normal conditions.

Conditions to Avoid Avoid generating dust. Keep away from heat and sources of ignition.

Materials to Avoid Incompatible/reactive with strong oxidising agents.

None with proper storage and handling. Fire/decomposition may produce irritating, toxic and/or corrosive fumes,

Hazardous Decomposition

Products

including carbon dioxide, carbon monoxide, nitrogen oxides (NOx), hydrogen chloride; Under certain conditions of

combustion, traces of other toxic substances cannot be excluded.

Hazardous Polymerisation No information available.

11. TOXICOLOGICAL INFORMATION

General Information - Acute toxicity: Up to now, no symptoms are known.

- Skin corrosion/irritation: Causes skin irritation.
- Eye damage/irritation: Causes serious eye damage.
- Respiratory/skin sensitisation: Non-sensitising (Guinea pig) [OECD 406].
- Germ cell mutagenicity: Negative (bacterial reverse mutation assay (e.g. Ames test)) [OECD 471]. Negative (chromosomal aberration) [OECD 473].
- Carcinogenicity: No carcinogenic components identified. COMPONENT: Propan-2-ol (CAS No. 67-63-0) is classified by the IARC Monographs as "Not classifiable as to its carcinogenicity to humans" (Group 3).
- Reproductive toxicity: No information available.
 STOT (single exposure): No information available.
 STOT (repeated exposure): No information available.

- Aspiration toxicity: No aspiration toxicity classification.

Acute

Ingestion Acute toxicity (Oral):

- LD50, Rat: >2,000 mg/kg (Product) [Supplier's SDS].

Other Acute toxicity (Dermal):

- LD50, Rat: >2,000 mg/kg (Product) [Supplier's SDS].

Inhalation Acute toxicity (Inhalation):

- LC50, Rat: >180 mg/l (1 h) [Supplier's SDS].

Chronic

Ingestion Repeated dose toxicity (Oral):

- NOAEL, Rat: 100 mg/kg (28 d) [Supplier's SDS].

Carcinogen Category None

12. ECOLOGICAL INFORMATION

Ecotoxicity Aquatic toxicity*:

- Acute LC50, Fish (Lepomis macrochirus): 10.1 mg/l (96 h) [Supplier's SDS].

- Acute EC50, Invertebrates (Daphnia magna (Water flea)): 0.19 mg/l (48 h) [Supplier's SDS].

- Chronic NOEC, Fish (Pimelphales promelas): 0.23 mg/l (35 d) [Supplier's SDS].
 - Chronic NOEC, Invertebrates (Daphnia magna): 0.38 mg/l (21 d) [Supplier's SDS].

- Chronic NOEC, Algae (Selenastrum capricornutum (Green algae)): 0.12 mg/l (72 h) [Supplier's SDS].

*Ecological data refer to the main component.

Persistence/Degradability Not readily biodegradable.

- Biodegradation (Product): 3 % (28 d) [OECD 301 D] - Biodegradation (Product): 95.6 % (45 d) [OECD 303A].

Mobility No information available.

Environmental FateVery toxic to aquatic life with long lasting effects - Do not allow to enter soil, waterways or waste water canal.

Bioaccumulation Potential No information available.

Environmental Impact No Data Available

13. DISPOSAL CONSIDERATIONS

General Information In accordance with local authority regulations, take to special waste incineration plant.

Special Precautions for Land Fill Contaminated packaging: If empty contaminated containers are recycled or disposed of, the receiver must be informed

about possible hazards.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name Dimethyldistearylammonium chloride

Class No Data Available
Subsidiary Risk(s) No Data Available

EPG 47 Low To Moderate Hazard Substances

UN Number No Data Available
Hazchem No Data Available
Pack Group No Data Available

Special Provision AU01

Comments UN#3077: Not regulated as DG when transported by road or rail in packagings that do not incorporate a

receptacle exceeding 500 kg(L).

Land Transport (Malaysia)

ADR Code

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dimethyldistearylammonium chloride)

Class 9 Miscellaneous Dangerous Goods and Articles

Subsidiary Risk(s) No Data Available

EPG 47 Low To Moderate Hazard Substances

 UN Number
 3077

 Hazchem
 27

 Pack Group
 III

Special Provision No Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dimethyldistearylammonium chloride)

Class 9 Miscellaneous Dangerous Goods and Articles

Subsidiary Risk(s) No Data Available

EPG 47 Low To Moderate Hazard Substances

 UN Number
 3077

 Hazchem
 2Z

 Pack Group
 III

Special Provision No Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dimethyldistearylammonium chloride)

Class 9 Miscellaneous Dangerous Goods and Articles

Subsidiary Risk(s) No Data Available

ERG 171 Substances (Low to Moderate Hazard)

 UN Number
 3077

 Hazchem
 2Z

 Pack Group
 III

Special Provision No Data Available

Sea Transport

IMDG Code

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dimethyldistearylammonium chloride)

Class 9 Miscellaneous Dangerous Goods and Articles

Subsidiary Risk(s) No Data Available

 UN Number
 3077

 Hazchem
 2Z

 Pack Group
 III

Special Provision No Data Available

EMS F-A, S-F
Marine Pollutant Yes

Air Transport

IATA DGR

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dimethyldistearylammonium chloride)

Class 9 Miscellaneous Dangerous Goods and Articles

Subsidiary Risk(s) No Data Available

 UN Number
 3077

 Hazchem
 2Z

 Pack Group
 III

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) Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code Not Assessed

National/Regional Inventories

Australia (AIIC) 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 DISTCH1000, DISTCH2000

Revision 3

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 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/I 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

Ib 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.

Itr 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

mmH20 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