

Safety Data Sheet **ALIQUAT 336**

SDS no. 8AWTT17D • Version 1.0 • Date of issue: 2023-10-09

SECTION 1: Identification

GHS Product identifier

Product name ALIQUAT 336

Other means of identification

ALIQUAT 336 TG
Tricaprylyl methyl ammonium chloride
Aliphatic quarternary ammonium salt
ALIQUAT 336 TG

Recommended use of the chemical and restrictions on use

Solvent extraction: used to recover or purify the following ionic complexes: Cadmium, Cobalt, Iron, Molybdenum, the Rare Earths, Tungsten, Uranium, Vanadium and Zinc; used in acid purification; used to recover acids/acid salts or to remove certain heavy metals from wastewater; used to control foaming during treatment of wastewaters containing anionic surfactants; adhesion promoter and surface curing aid for fluorocarbon elastomers; anti-static agent for textile fabrics and carpeting; decolourisation and deodourisation of fermentation broths.

Additional information: * Aliquat® 336 is a registered trade name of Henkel Corp. USA

Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia
Telephone	08 8440 2000
email	www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, oral, Cat. 3
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1
- Serious eye damage/eye irritation, Cat. 1
- Flammable liquids, Cat. 4
- Toxic to reproduction, Cat. 2
- Skin corrosion/irritation, Cat. 1C
- Specific target organ toxicity following repeated exposure, Cat. 2

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H227	Combustible liquid
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs [Heart] through prolonged or repeated exposure [route]
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physician
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use agents recommended in Section 5 of SDS for extinction
P391	Collect spillage.
P403	Store in a well-ventilated place.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Components

Component	CAS no.	Concentration
Quaternary ammonium compounds, tri-C8-10-alkylmethyl, chlorides (EC no.: 264-120-7)	63393-96-4	75 - 100 % (weight)
CLASSIFICATIONS: Hazardous to the aquatic environment, long-term (chronic), Cat. 1; Hazardous to the aquatic environment, short-term (acute), Cat. 1; Acute toxicity, oral, Cat. 3; Serious eye damage/eye irritation, Cat. 1; Skin corrosion/irritation, Cat. 1C; Toxic to reproduction, Cat. 2. HAZARDS: H301 - Toxic if swallowed; H314 - Causes severe skin burns and eye damage; H318 - Causes serious eye damage; H361 - Suspected of damaging fertility or the unborn child [effect, route]; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects.		
1-Octanol (EC no.: 203-917-6)	111-87-5	1 - 7 % (weight)
CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 2A. HAZARDS: H319 - Causes serious eye irritation.		
Decyl alcohol (EC no.: 203-956-9)	112-30-1	7 % (weight)
CLASSIFICATIONS: Hazardous to the aquatic environment, long-term (chronic), Cat. 3; Serious eye damage/eye irritation, Cat. 2A. HAZARDS: H319 - Causes serious eye irritation; H412 - Harmful to aquatic life with long lasting effects.		
Amines, tri-C8-10-alkyl (EC no.: 272-347-8)	68814-95-9	3 % (weight)
CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 2A; Skin corrosion/irritation, Cat. 2; Specific target organ toxicity following repeated exposure, Cat. 1; Toxic to reproduction, Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 2. HAZARDS: H315 - Causes skin irritation; H319 - Causes serious eye irritation; H360 - May damage fertility or the unborn child [effect, route]; H372 - Causes damage to organs [organs] through prolonged or repeated exposure [route]; H411 - Toxic to aquatic life with long lasting effects.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	First Aid Facilities: Maintain eyewash fountain and drench facilities in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately, avoid becoming a casualty. Make patient comfortable, keep warm and at rest until fully recovered. If breathing is difficult (or develops a bluish skin discolouration), supply oxygen by a qualified person. Apply artificial respiration with a respiratory medical device if not breathing. Do not use mouth to mouth resuscitation. Immediately medical attention is required. Immediately administer a corticosteroid from a controlled/metered dose inhaler.
In case of skin contact	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Seek medical attention.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. Give water to drink. DO NOT INDUCE VOMITING. Seek medical advice.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small fire: Use dry chemical, CO₂ or water spray. If safe to do so, move undamaged containers from fire area.
Large fire: Use dry chemical, CO₂, foam or water spray - Do not use water jets.
Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.

Specific hazards arising from the chemical

Hazards from Combustion Products: Irritating and highly toxic gases, carbon monoxide and carbon dioxide, nitrogen oxides (NO_x), hydrogen chloride gas (HCl), hydrochloric acid, ammonia, hydrogen cyanide, aldehydes, possible chlorinated compounds.

Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing.
Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up

Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum.
Seek expert advice on handling and disposal.
Avoid release to the environment.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid ingestion and inhalation of gas/fumes/vapour/spray mist. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Minimise generation and accumulation of aerosols. Keep container tightly closed. Ensure good ventilation at the workplace. Use only in a chemical fume hood. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Wash thoroughly after handling. Discard contaminated shoes. Keep away from foodstuffs. Keep container dry. Never add water to this product. Keep away from heat and all sources of ignition. Ground all equipment containing material. Empty containers pose a fire risk, evaporate the residue under a fume hood.

Conditions for safe storage, including any incompatibilities

Store in tightly closed containers, in a cool, dry, well-ventilated area away from incompatible substances. Hygroscopic. Store protected from moisture. Keep container dry. Store away from oxidising agents. Keep away from heat and all sources of ignition. Keep container tightly closed when not in use. Ground all equipment containing material. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Store at room temperature (15 to 25 °C recommended).

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous amber liquid.
Color	No data available.
Odor	Odour of ammonia.
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	77°C
Explosive properties	Forms explosive mixtures with air on intense heating.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	No data available.
Kinematic viscosity	Viscosity: dynamic 1,500.00 mPa's (30.0°C)
Solubility	Solubility in Water: Negligible (< 0.1%), 0.12 g/100g water @ 30 °C, 0.2 g/100g water @ 60 °C; easily soluble in cold water, 10 g/L @ 20 °C.
Partition coefficient n-octanol/water (log value)	6.13 (25°C; pH value 7)
Vapor pressure	<1 mm Hg (< 1.3 hPa)
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 0.8892 (15°C)
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

Surface Tension: 27 mN/m (20°C: 0993 g/l).

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Reacts with incompatible materials

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Reactions with strong oxidizing agents may be violent.

Conditions to avoid

Incompatible materials, excess heat, high temperatures, flames and sparks, exposure to moist air or water/moisture.

Incompatible materials

Strong oxidizing agents, strong bases and strong acids.

Hazardous decomposition products

Irritating and highly toxic gases, carbon monoxide and carbon dioxide, nitrogen oxides (NO_x), hydrogen chloride gas (HCl), hydrochloric acid, ammonia, hydrogen cyanide, aldehydes, possible chlorinated compounds.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Oral: LD50 (rat): 223 mg/kg;

Ingestion: Harmful if swallowed. May cause severe irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract, or ulceration, with nausea, vomiting and possible burns of mouth and throat. Risk of internal burns if ingested. Very destructive of mucous membranes.

Inhalation: Harmful if inhaled. Corrosive, causes severe respiratory tract and mucous membrane irritation and possible burns, coughing and dyspnoea.

// ----- From the Suggestion report (15/01/2024, 2:07 PM) ----- //

The ATE (oral) of the mixture is: 100 mg/kg bw

Skin corrosion/irritation

May cause severe irritation to skin and mucous membranes and possible burns. Very destructive of mucous membranes. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Serious eye damage/irritation

Causes severe eye irritation or burns. Inflammation of the eye is characterized by redness, watering, and itching. Risk of serious damage to eyes. Contact causes severe eye burns which may result in permanent tissue and corneal damage.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

Safety Data Sheet
ALIQAT 336

SDS no. 8AWTT17D • Version 1.0 • Date of issue: 2023-10-09

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

Reproductive toxicity

Assessment of reproduction toxicity:

Causes impairment of fertility in laboratory animals.

Information on: Amines, tri-C8-10-alkyl

Assessment of reproduction toxicity:

On the basis of animal study findings, an effect on fertility cannot be excluded. The results were determined in a Screening test (OECD 421/422).

Developmental toxicity

Assessment of teratogenicity:

The substance caused malformations/developmental toxicity in laboratory animals.

Information on: Amines, tri-C8-10-alkyl

Assessment of teratogenicity:

The substance caused malformations/developmental toxicity in laboratory animals. The results were determined in a Screening test (OECD 421/422).

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

Repeated oral exposure to small quantities may affect certain organs. Damages the heart.

Aspiration hazard

No data available.

Additional information

Chronic Effects: Prolonged or repeated skin contact may cause dermatitis. Chronic exposure may cause central nervous system depression. May aggravate existing skin, eye, lung and nervous system conditions.

1-Octanol: frog LDLo parenteral 1240mg/kg (1240mg/kg) PERIPHERAL NERVE AND SENSATION: SPASTIC PARALYSIS WITH OR WITHOUT SENSORY CHANGE

BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY) Archives Internationales de Pharmacodynamie et de Therapie. Vol. 50, Pg. 296, 1935.

guinea pig LD50 skin > 1gm/kg (1000mg/kg) Food and Cosmetics Toxicology. Vol. 11, Pg. 95, 1973.

Link to PubMed

mammal (species unspecified) LD50 unreported 4gm/kg (4000mg/kg) Gigiena i Sanitariya. For English translation, see HYSAAV. Vol. 51(5), Pg. 61, 1986.

mouse LD50 intravenous 69mg/kg (69mg/kg) Archives Internationales de Pharmacodynamie et de Therapie. Vol. 135, Pg. 330, 1962.

Link to PubMed

mouse LD50 oral 1790mg/kg (1790mg/kg) Hygiene and Sanitation Vol. 31(1-3), Pg. 310, 1966.

rat LCLo inhalation 5600mg/m³/4H (5600mg/m³) LUNGS, THORAX, OR RESPIRATION: STRUCTURAL OR FUNCTIONAL CHANGE IN TRACHEA OR BRONCHI

LUNGS, THORAX, OR RESPIRATION: CHRONIC PULMONARY EDEMA

BLOOD: HEMORRHAGE United States Environmental Protection Agency, Office of Pesticides and Toxic Substances. Vol. 8EHQ-1088-0762, rat LD50 oral > 3200mg/kg (3200mg/kg) Food and Cosmetics Toxicology. Vol. 11, Pg. 95, 1973.
[Link to PubMed](#)

SECTION 12: Ecological information

Toxicity

Acute Toxicity - Fish: Brachydanio rerio LC50: >0.1 - 1 mg/l/96 h. (OECD Guideline 203)

Acute Toxicity - Daphnia: EC10 0.11 mg/l (OECD Guideline 202, part 1, static)

EC50 (48h) 0.16 mg/l (OECD Guideline 202, part 1, static)

Persistence and degradability

Elimination information:

10 - 20 % BOD of COD (28 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, activated sludge, domestic)

Bioaccumulative potential

Bioconcentration factor 70 - 2349 (calculated)

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

Endocrine disrupting properties

No data available.

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Sewage disposal

Bioconcentration factor 70 - 2349 (calculated)

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 2922

Class: 8, 6.1

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. - (contains Quaternary Alkyl Ammonium Salts)

Hazchem emergency action code (EAC)

Safety Data Sheet

ALIQUAT 336

SDS no. 8AWTT17D • Version 1.0 • Date of issue: 2023-10-09

2XE

IMDG

UN Number: 2922

Class: 8, 6.1

Packing Group: II

EMS Number:

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. - (contains Quaternary Alkyl Ammonium Salts)

IATA

UN Number: 2922

Class: 8, 6.1

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. - (contains Quaternary Alkyl Ammonium Salts)

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: S6

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.

Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)