

## Material Safety Data Sheet

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 Version 1.2  
 According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

## 1 - Product and Company Information

Product Name	ALIQUAT 336
Product Number	205613
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154 Australia
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## 2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number	
METHYLTRIOCTYLAMMONIUM CHLORIDE	63393-96-4	264-120-7	None	
Ingredient Name	Percent	CAS #	EC no	Annex I Index Number
METHYLTRIOCTYLAMMONIUM CHLORIDE	>= 80 <= 90	63393-96-4	264-120-7	None
Symbols: Xn-N				
R-Phrases: 22-38-41-50/53				
Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.				
IMPURITIES:	None	None	None	
1-DECANOL	< 6	112-30-1	203-956-9	None
Symbols: Xn-N				
R-Phrases: 20-36/37/38-51/53				
Harmful by inhalation. Irritating to eyes, respiratory system and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.				
1-OCTANOL	< 5	111-87-5	203-917-6	None
Symbols: Xi				
R-Phrases: 36/38				
Irritating to eyes and skin.				
Formula	C25H54CLN			
Molecular Weight	404.17 AMU			
Synonyms	Adogen 464 * Aliquat 7402 * Aliquat N 263 * Aliquat 336 * Aliquat 336S * Disperstat A * Disperstat W			

## 3 - Hazards Identification

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**SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT**  
Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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#### 4 - First Aid Measures

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##### AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

##### AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

##### AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

##### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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#### 5 - Fire Fighting Measures

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##### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

##### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

##### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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#### 6 - Accidental Release Measures

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**PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL**  
Evacuate area.

##### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

##### METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

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#### 7 - Handling and Storage

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##### HANDLING

**Directions for Safe Handling:** Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

##### STORAGE

**Conditions of Storage:** Keep tightly closed.

SPECIAL REQUIREMENTS: Hygroscopic.

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## 8 - Exposure Controls / Personal Protection

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### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

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## 9 - Physical and Chemical Properties

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Appearance	Physical State: Liquid	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Flash Point	113 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	0.884 g/cm <sup>3</sup>	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	<= 5 %	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Hydrogen chloride gas, Nitrogen oxides Carbon monoxide, Carbon dioxide.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

ACUTE TOXICITY

LD50  
Oral  
Rat  
223 mg/kg

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Nausea, headache, and vomiting. Narcotic effect. Exposure can cause: Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.  
Skin Absorption: May be harmful if absorbed through the skin.  
Eye Contact: Causes severe eye irritation.  
Inhalation: May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.  
Ingestion: Harmful if swallowed.

TARGET ORGAN INFORMATION

Nerves. Liver. Kidneys.

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12 - Ecological Information

ELIMINATION

Classification: Not significantly biodegradable.

ECOTOXICOLOGICAL EFFECTS

Test Type: EC50 Daphnia  
Species: Daphnia magna  
Time: 48 h  
Value: 0.010 - 0.040 mg/l

Test Type: LC50 Fish  
Species: Onchorhynchus mykiss (Rainbow trout)  
Time: 96 h  
Value: 0.180 - 0.320 mg/l

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13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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14 - Transport Information

RID/ADR

UN#: 2810  
Class: 6.1  
PG: III  
Proper Shipping Name: Toxic liquid, organic, n.o.s.

**IMDG**

UN#: 2810  
Class: 6.1  
PG: III  
Proper Shipping Name: Toxic liquid, organic, n.o.s.  
Marine Pollutant: No  
Severe Marine Pollutant: No  
Technical Name: Required

**IATA**

UN#: 2810  
Class: 6.1  
PG: III  
Proper Shipping Name: Toxic liquid, organic, n.o.s.  
Inhalation Packing Group I: No  
Technical Name: Required

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**15 - Regulatory Information****CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES****INDICATION OF DANGER: Xn-N**

Harmful. Dangerous for the environment.

**R-PHRASES: 22-38-41-50/53**

Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-PHRASES: 26-39-60-61**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

**COUNTRY SPECIFIC INFORMATION****Germany**

WGK: 3 (Self classification)

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**16 - Other Information****WARRANTY**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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