

Otto Chemie Pvt Ltd

Tel : + 91 22 2207 00 99 fax : 00 91 22 220 77777

Email : info@ottokemi.com , Web : www.ottokemi.com

MATERIAL DATA

SAFETY SHEET

Product Name Aliquatt 336

Cat No. : A 1620

Synonyms Methyltrioctylammonium chloride, Tricaprylmethylammonium chloride; n-methyl-n,n-dioct

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

Signal Word

Danger

Hazard Statements

Toxic if swallowed

Causes severe skin burns and eye damage

Acute oral toxicity Category 3

Skin Corrosion/Irritation Category 1 C

Serious Eye Damage/Eye Irritation Category 1

Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

May cause respiratory irritation

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Ingestion

Rinse mouth

Do NOT induce vomiting

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

3. Composition/Information on Ingredients

Component CAS-No Weight %

Quaternary ammonium compounds, tri-C8-10-alkylmethyl, chlorides

63393-96-4 >75

1-Octanol 111-87-5 2-7

1-Decanol 112-30-1 3-7

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Inhalation If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove to fresh air. Immediate medical attention is required. Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point 132 °C / 269.6 °F

Method - No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Nitrogen oxides (NO_x). Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen chloride gas.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental Precautions Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods for Containment and Clean

Up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

7. Handling and storage

Handling Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

Health

3

Flammability

1

Instability

0

Storage Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed.

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

9. Physical and chemical properties

Physical State Viscous liquid Liquid

Appearance Amber

Odor Ammonia-like

Odor Threshold No information available

pH 3.5 (@ 25) 100 g/l water (25°C)

Melting Point/Range No data available

Boiling Point/Range No information available
Flash Point 132 °C / 269.6 °F
Evaporation Rate No information available
Flammability (solid,gas) Not applicable
Flammability or explosive limits
Upper No data available
Lower No data available
Vapor Pressure No information available
Vapor Density No information available
Specific Gravity 0.880
Solubility Insoluble in water
Partition coefficient; n-octanol/water No data available
Autoignition Temperature No information available
Decomposition Temperature No information available
Viscosity 1450 mPa.s at 30 °C
Molecular Weight 442

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Conditions to Avoid Heat, flames and sparks. Incompatible products. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen chloride gas

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Oral LD50 Category 3. ATE = 50 - 300 mg/kg.

Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Vapor LC50 Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Component LD50 Oral LD50 Dermal LC50 Inhalation

Quaternary ammonium compounds,

tri-C8- 10-alkylmethyl, chlorides

300-2000 mg/kg

223 mg/kg (Rat)

Not listed Not listed

1-Octanol LD50 > 3200 mg/kg (Rat) LD50 > 5 g/kg (Rabbit) Not listed

1-Decanol LD50 = 4720 mg/kg (Rat) LD50 = 3560 mg/kg (Rabbit) Not listed

Toxicologically Synergistic

Products

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component CAS-No IARC NTP ACGIH OSHA Mexico

Quaternary ammonium

compounds, tri-C8-10-alkylmethyl,

chlorides

63393-96-4 Not listed Not listed Not listed Not listed Not listed

1-Octanol 111-87-5 Not listed Not listed Not listed Not listed Not listed

1-Decanol 112-30-1 Not listed Not listed Not listed Not listed Not listed

Mutagenic Effects No information available

Reproductive Effects Contains ingredients that are suspected reproductive hazards.

Developmental Effects No information available.
Teratogenicity No information available.
STOT - single exposure Respiratory system
STOT - repeated exposure None known
Aspiration hazard No information available
Symptoms / effects, both acute and delayed
Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.
Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Endocrine Disruptor Information No information available

12. Ecological information

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component Freshwater Algae Freshwater Fish Microtox Water Flea

Quaternary ammonium

compounds, tri-C8-10-alkylmethyl, chlorides

Not listed LC50: 0.1-1 mg/L 96h Not listed EC50: 0.16 mg/L 48h

(Daphnia magna)

1-Octanol EC50: = 14 mg/L, 48h static

(Desmodesmus

subspicatus)

LC50: 17.68 mg/L, 96h static

(Oncorhynchus mykiss)

LC50: 11.4 - 12.9 mg/L, 96h

flow-through (Pimephales

promelas)

EC50 = 32.7 - 51.1 mg/L 48

h

EC50 = 3.4 mg/L 5 min

EC50 = 3.71 mg/L 30 min

EC50 = 4.73 mg/L 15 min

EC50: 15 - 26 mg/L, 24h

(Daphnia magna)

1-Decanol Not listed Pimephales promelas:

LC50=2.2-2.5 mg/L 96h

EC50 = 1.31 mg/L 5 min

EC50 = 1.47 mg/L 30 min

EC50 = 8.83 mg/L 48 h

EC50: 11 mg/L, 24h

(Daphnia magna)

EC50: 3 mg/L, 48h (Daphnia

magna)

Persistence and Degradability Soluble in water Persistence is unlikely based on information available. Insoluble in water

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility. Is not likely mobile in the environment due its low water solubility.

Component log Pow

Quaternary ammonium compounds, tri-C8- 10-alkylmethyl, chlorides 6.13

1-Octanol 2.8

1-Decanol 4.11

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN2922

Proper Shipping Name Corrosive liquid, toxic, n.o.s.

Technical Name Quaternary ammonium compounds, tri-C8- 10-alkylmethyl, chlorides

Hazard Class 8

Subsidiary Hazard Class 6.1

Packing Group III

TDG

UN-No UN2922

Proper Shipping Name Corrosive liquid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III
IATA
UN-No UN2922
Proper Shipping Name Corrosive liquid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

IMDG/IMO
UN-No UN2922
Proper Shipping Name Corrosive liquid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

15. Regulatory information

United States of America Inventory
Component CAS-No TSCA TSCA Inventory notification -Active/Inactive
TSCA - EPA Regulatory

Flags

Quaternary ammonium
compounds, tri-C8- 10-alkylmethyl,
chlorides

63393-96-4 X ACTIVE -1-Octanol 111-87-5 X ACTIVE -1-Decanol 112-30-1 X ACTIVE Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component CAS-No DSL NDSL EINECS PICCS ENCS AICS IECSC KECL

Quaternary ammonium
compounds, tri-C8- 10-alkylmethyl,
chlorides

63393-96-4 X - 264-120-7 X - X X KE-30035

1-Octanol 111-87-5 X - 203-917-6 X X X X KE-26656

1-Decanol 112-30-1 X - 203-956-9 X X X X KE-09483

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Component Massachusetts New Jersey Pennsylvania Illinois Rhode Island

1-Octanol

-- X - X

1-Decanol -- X - X

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of

the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.