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Material Safety Data Sheet

ALKAQUAT DMB-451 80%

Date Prepared: 1/18/05

Supersedes Date: 6/18/04

1. PRODUCT AND COMPANY DESCRIPTION

Rhodia Canada Inc HOME, PERSONAL CARE & INDUSTRIAL INGREDIENTS 3265 Wolfedale Road Mississauga ON L5C 1V8

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CANUTEC at 613-996-6666 (call collect) or Rhodia CAERS (Communication and Emergency Response System) at 800-916-3232.

For Product Information:

(905) 270-5534

Product Use: HOUSEHOLD, INDUSTRIAL & INSTITUTIONAL, PAINTS, INDUSTRIAL CLEANERS.

Chemical Name or Synonym:

ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE

Prepared By:

Product Safety Service Center, Mississauga, Ontario, (905) 270-5534.

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS Reg Number | WHMIS Hazard | Percentage |
|-------------------------------------------|----------------|-----------------|------------|
| N-ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE | 68424-85-1 | Y | 80 |
| ETHANOL | 64-17-5 | Y | 14 |
| METHANOL | 67-56-1 | Y | 3 |
| ALKYLDIMETHYL AMINE | 68439-70-3 | Y | 1 |
| WATER | 7732-18-5 | Ν | 2 |

3. HAZARDS IDENTIFICATION

A. EMERGENCY OVERVIEW:

Physical Appearance and Odor:

colorless to pale yellow / liquid, alcohol-like odor.

Warning Statements:

WARNING!! FLAMMABLE LIQUID. TOXIC IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. SEVERE SKIN AND EYE IRRITANT. RESPIRATORY TRACT IRRITANT.

B. POTENTIAL HEALTH EFFECTS:

Acute Eye:

Severe irritant. Can cause redness, irritation, tissue destruction.

Acute Skin:

Harmful if absorbed through skin. Severe irritant. Can cause redness, swelling, blisters, inflammation, irritation.

Acute Inhalation:

Harmful if inhaled. Vapors can cause headache, nausea, respiratory tract irritation.

Acute Ingestion:

Toxic if ingested. Causes nausea, diarrhea, abdominal cramps, loss of coordination, blindness, shortness of breath, burns to mouth and esophagus.

Chronic Effects:

This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

4. FIRST AID MEASURES

FIRST AID MEASURES FOR ACCIDENTAL:

Eye Exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

Skin Exposure:

In case of contact, immediately wash with plenty of soap and water for at least 5 minutes. Seek medical attention. Remove contaminated clothing and shoes. Clean contaminated clothing and shoes before re-use.

Inhalation:

If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

Ingestion:

If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention. Do not leave victim unattended.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Skin contact may aggravate existing skin disease.

NOTES TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically. No specific antidote available.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

Flash Point:

< 27 C (80 F). Flammability Class: FLAMMABLE.

Method Used: Closed cup

| Flammability Limits (vol/vol%): | Lower: | Upper: |
|---------------------------------|--------|--------|
| | 3.3 | 36 |

Extinguishing Media:

Recommended (small fires): dry chemical, carbon dioxide, Recommended (large fire): alcohol foam, universal foam, water spray, Not recommended: water jet (frothing possible).

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Unusual Fire and Explosion Hazards:

Product will burn under fire conditions. Vapors may travel a considerable distance to a source of ignition and flash back along vapor trail. Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat.

Hazardous Decomposition Materials (Under Fire Conditions):

oxides of nitrogen oxides of carbon

6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Containment of Spill:

Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:

Absorb with an inert absorbent. Sweep up and place in an appropriate closed container (see Section 7: Handling and Storage). Clean up residual material by washing area with water. Collect washings for disposal.

Environmental and Regulatory Reporting:

Do not flush to drain.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 5 to 25 C (41 to 77 F)

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Handling:

Avoid breathing vapors and mists. Do not get on skin or in eyes. Use nonsparking tools and grounded/bonded equipment and containers when transferring.

Storage:

Store in tightly closed containers. Store in an area that is dry, well-ventilated, away from combustible material, away from ignition sources, away from incompatible materials (see Section 10. Stability and Reactivity).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

| ETHANOL | | Notes | TWA | STEL |
|----------|-------|------------|-----------------------|------------------------|
| METHANOL | ACGIH | | 1000 ppm | |
| | ACGIH | Notes S | TWA 200 ppm | STEL 250 ppm |

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Respiratory Protection:

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

For reasonably foreseeable industrial end uses of this material, respiratory protection should not be necessary.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Skin Protection:

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- (3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance:

colorless to pale yellow / liquid.

Odor: alcohol-like odor.

pH: 6 to 9 at 10 wt/wt%.

Specific Gravity: 0.96 at 25 C (77 F).

Water Solubility: soluble

Melting Point Range: Not Available

Boiling Point Range: > 76 C (169 F) at 760 mmHg

Vapor Pressure: Not Available

Vapor Density: Not Available

Percent Volatiles by Volume: 20

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions described in Section 7.

Conditions To Be Avoided:

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heat open flame spark static electricity

Materials/Chemicals To Be Avoided:

strong oxidizing agents strong reducing agents

The Following Hazardous Decomposition Products Might Be Expected:

Decomposition Type: thermal oxides of nitrogen oxides of carbon

Hazardous Polymerization Will Not Occur.

Avoid The Following To Inhibit Hazardous Polymerization: none known

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation:

Toxicological Information and Interpretation: eye - eye irritation, rabbit. Severely irritating. Data for ethyl alcohol.

Acute Skin Irritation:

Toxicological Information and Interpretation:

skin - skin irritation, rabbit. Severely irritating. Data for alkyl dimethyl benzyl ammonium chloride.

Acute Dermal Toxicity:

No test data found for product.

Acute Respiratory Irritation:

No test data found for product.

Acute Inhalation Toxicity:

No test data found for product.

Acute Oral Toxicity:

Toxicological Information and Interpretation:

LD50 - lethal dose 50% of test species, 426 mg/kg, rat. Data for alkyl dimethyl benzyl ammonium chloride.

Chronic Toxicity:

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be "probable" or "suspected" human carcinogens.

No additional test data found for product.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

No data found for product.

Chemical Fate Information:

No data found for product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Waste Management options should first consider possible re-use or recycling opportunities. Some provinces have active "Waste Exchange" networks for re-use and recycling of wastes. Contact your local waste management companies to explore available options. All waste management activities must obey local, provincial and federal regulations. Possible disposal methods include the following:

This product may be used directly as a fuel stock with appropriate emissions control equipment.

Container Handling and Disposal:

Any containers or equipment used should be decontaminated immediately after use.

14. TRANSPORTATION INFORMATION

Transportation Status: IMPORTANT! Statements below provide additional data on listed DOT classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

TDG Status:

Hazard Class..... 3 (8) Shipping Name: FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. Technical Shipping Name: ETHANOL, QUATERNARY AMMONIUM COMPOUND ID Number...... UN2924 Packing Group.... III

IMO Status:

Hazard Class..... 3 (8) Shipping Name: FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. Technical Shipping Name: ETHANOL, QUATERNARY AMMONIUM COMPOUNDS ID Number...... UN2924 Packing Group.... III

IATA Status:

Hazard Class..... 3 (8) Shipping Name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. Technical Shipping Name: ETHANOL, QUATERNARY AMMONIUM COMPOUND ID Number...... UN2924 Packing Group.... III

15. REGULATORY INFORMATION

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| Inventory Status | |
|------------------------|--------|
| Inventory | Status |
| UNITED STATES (TSCA) | Y |
| CANADA (DSL) | Y |
| EUROPE (EINECS/ELINCS) | Y |
| AUSTRALIA (AICS) | Y |
| JAPAN (MITI) | N |
| SOUTH KOREA (KECL) | Y |

Y = All ingredients are on the inventory.

E = All ingredients are on the inventory or exempt from listing.

P = One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.

N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

Inventory Issues:

All functional components of this product are listed on the TSCA Inventory.

WHMIS Classification:

B-2 : FLAMMABLE LIQUID D-1B : TOXIC MATERIAL D-2B : TOXIC MATERIAL E : CORROSIVE MATERIAL

This product has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings--NFPA(R):

- 3 Health Hazard Rating--Serious
- 3 Flammability Rating--Serious
- **0** Instability Rating--Minimal

National Paint & Coating Hazardous Materials Identification System--HMIS(R):

- 3 Health Hazard Rating--Serious
- 3 Flammability Rating--Serious
- **0** Reactivity Rating--Minimal

Reason for Revisions:

Change and/or addition made to Section 14.

Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists OSHA - Occupational Safety and Health Administration TLV - Threshold Limit Value PEL - Permissable Exposure Limit TWA - Time Weighted Average STEL - Short Term Exposure Limit NTP - National Toxicology Program IARC - International Agency for Research on Cancer ND - Not determined **RPI - Rhodia Established Exposure Limits**

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.

** End of MSDS Document **