

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 68424-85-1; 64-17-5
Product Name: ADBAC 80%
Revision Date: Feb 12, 2019 **Date Printed:** Feb 12, 2019
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 905-681-5353
Fax: 905-681-5377
Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Acute aquatic toxicity - Category 2
Acute toxicity Oral - Category 4
Flammable Liquids - Category 3
Serious Eye Damage - Category 1
Skin Corrosion - Category 1B

Pictograms



Signal Word

Danger

Hazard Statements - Health

Harmful if swallowed
Causes serious eye damage
Causes severe skin burns and eye damage

Hazard Statements - Physical

Flammable liquid and vapor

Hazard Statements - Environmental

Toxic to aquatic life

Precautionary Statements - General

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.

Precautionary Statements - Prevention

- Avoid release to the environment.
- Wash/Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical, ventilating, lighting equipment.
- Use only non-sparking tools.
- Take action to prevent static discharges.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Do not breathe dust/fume/gas/mist/vapors/spray.

Precautionary Statements - Response

- IF SWALLOWED: Call a POISON CENTER or doctor, if you feel unwell.
- Rinse mouth.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- In case of fire: Use carbon dioxide, alcohol foam, water spray or dry chemical to extinguish.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a POISON CENTER or doctor.
- Rinse mouth. Do NOT induce vomiting.
- Wash contaminated clothing before reuse.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Specific treatment (see first-aid on the SDS).

Precautionary Statements - Storage

- Store in a well-ventilated place. Keep cool.
- Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/national/international regulation. Waste management should be in full compliance with national, regional and local laws.

Physical Hazards Not Otherwise Classified

No Data Available

Health Hazards Not Otherwise Classified

No Data Available

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0068424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	80% - 82%
0000064-17-5	ETHYL ALCOHOL	10% - 14%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality or to reflect batch to batch variation.

SECTION 4) FIRST-AID MEASURES

Inhalation

If experiencing respiratory symptoms: Call a POISON CENTER/doctor. Remove source of exposure or move person to fresh air and keep comfortable for breathing. Eliminate all ignition sources if safe to do so. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

Eye Contact

Rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention. If irritation occurs, seek medical attention.

Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Store contaminated clothing under water and wash before re-use or discard. Rinse skin with water/shower and mild soap for 5 minutes or until product is removed.

Ingestion

Get medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms may include stinging, tearing, redness, swelling and blurred vision. Permanent eye damage including blindness could result. Prolonged or repeated skin contact may aggravate existing skin conditions. Inhalation of mists may aggravate existing chronic respiratory conditions such as asthma, emphysema or bronchitis.

No Data Available

Indication of Any Immediate Medical Attention and Special Treatment Needed

No Data Available

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO₂)

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Container may rupture on heating.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Move undamaged containers from immediate hazard area if it can be done safely. Stop spill/release if it can be done safely. Cool containers with flooding quantities of water until well after fire is out.

Special Protective Actions

Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Evacuate and isolate hazard area and keep unauthorized personnel away. A vapor-suppressing foam may be used to reduce vapors.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing.

Environmental Precautions

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Stop spill/release if it can be done safely. Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect

absorbed material. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. All containers must be properly labelled.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. Report ventilation failures immediately. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Keep container tightly closed. Keep away from heat, and sunlight. Storage temperature range: 5-30°C. If material freezes, gently thaw prior to use. Mild agitation may be required.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear indirect-vent, impact and splash resistant goggles when working with liquids

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	CANsmg	CANspp m	CANtmg	CANtpp m	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA Carcinog en	OSHA Tables (Z1, Z2, Z3)	OSHA Skin designati on	ACGIH STEL (mg/m3)
ETHYL ALCOHOL	2355	1250	1884	1000			1900	1000		1		

Chemical Name	ACGIH STEL (ppm)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH TLV Basis	ACGIH Carcinog en	ACGIH Notations
ETHYL ALCOHOL	1000			URT irr	A3	A3

A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	7.76 lb/gal
Specific Gravity	0.93
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Appearance	amber liquid
Odor Description	mild alcoholic
Odor Threshold	N/A
pH	6-9
Melting/Freezing Point	No Data Available
Low Boiling Point	No Data Available
High Boiling Point	N/A
Flash Point	< 40 °C
Vapor Pressure	No Data Available
Vapor Density	No Data Available
Evaporation Rate	No Data Available
Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	soluble
Coefficient Water/Oil	N/A - Surface Active
Viscosity	No Data Available

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No Data Available

Stability

Stable under normal storage and handling conditions.

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point.

Hazardous Reactions/Polymerization

Hazardous polymerization will not occur.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure

Inhalation, ingestion, skin absorption

Acute Toxicity

Acute oral: LD50 Rat 430 mg/kg

Acute dermal: LD50 Rat 3560 mg/kg

Harmful if swallowed

Aspiration Hazard

No Data Available

Carcinogenicity

No Data Available

Germ Cell Mutagenicity

No Data Available

Reproductive Toxicity

No Data Available

Respiratory/Skin Sensitization

No Data Available

Serious Eye Damage/Irritation

Causes serious eye damage

Skin Corrosion/Irritation

Causes severe skin burns and eye damage

Specific Target Organ Toxicity - Repeated Exposure

No Data Available

Specific Target Organ Toxicity - Single Exposure

No Data Available

0000064-17-5 ETHYL ALCOHOL

LC50 (mouse): Approximately 21000 ppm (4-hour exposure); cited as 39 g/m3 (4-hour exposure) (1, unconfirmed)

LD50 (oral, rat): 7060 mg/kg (41); 10600 mg/kg (41); 13660 mg/kg (37)

LD50 (oral, mouse): 3450 mg/kg (1, unconfirmed)

LD50 (oral, guinea pig): 5560 mg/kg (37)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: Invertebrate (Daphnia magna): NOEL 0.0042 mg/L
Fish (bluegill Lepomis macrochirus): LC50 5.7 mg/L, 96hrs Category

Toxic to aquatic life

Mobility in Soil

No Data Available

Bio-accumulative Potential

No bioaccumulation is to be expected (log Pow<=4)

Persistence and Degradability

No Data Available

Other Adverse Effects

No Data Available

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for

ADBAC 80%

any other purposes. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information

UN number: UN2920

Proper shipping name: Corrosive liquids, flammable, n.o.s. (Quaternary ammonium compounds, Ethanol)

Hazard class: 8, 3

Packaging group: II

Transport Canada Information

UN number: UN2920

Proper shipping name: Corrosive liquids, flammable, n.o.s. (Quaternary ammonium compounds, Ethanol)

Hazard class: 8, 3

Packaging group: II

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0068424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	80% - 82%	DSL,TSCA,EU_EC_Inventory
0000064-17-5	ETHYL ALCOHOL	10% - 14%	DSL,TSCA,EU_EC_Inventory

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANtmg or CANtppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short

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