

Product name: BA - 15 PPM MEHQ

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1. IDENTIFICATION

Product name: BA - 15 PPM MEHQ

Recommended use of the chemical and restrictions on use

Identified uses: This product is used in coatings, textiles, binders and adhesives.

CONTACT INFORMATION

The Chemical Supply
9595 Six Pines Dr., Ste 8210
Houston, TX 77380

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: CHEMTEL: 1-800-255-3924
(USA)
CANUTEC: 1-613-996-6666 (CANADA)
SETIQ: 1-800-099-0731 (MEXICO)

2. HAZARDS IDENTIFICATION

Hazard classification

This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Flammable liquids - Category 3

Acute toxicity - Category 4 - Inhalation

Skin irritation - Category 2

Eye irritation - Category 2A

Skin sensitisation - Category 1

Specific target organ toxicity - single exposure - Category 3

Label elements

Hazard pictograms



Signal word: **WARNING!**

Hazards

Flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation.

Precautionary statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - 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 precautionary measures against static discharge.
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/ eye protection/ face protection.

Response

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage

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

Disposal

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

no data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: n-Butyl acrylate

This product is a substance.

Component	CASRN	Concentration
Butyl acrylate	141-32-2	>= 99.5 %
Other ester adducts	Not Required	<= 0.5 %
Methyl ether of Hydroquinone	150-76-5	<= 20.0 PPM

4. FIRST AID MEASURES

Description of first aid measures

Inhalation: Move to fresh air. Oxygen or artificial respiration if needed. Call a physician immediately.

Skin contact: Remove contaminated clothing. Wash off with soap and plenty of water. Wash contaminated clothing before re-use. If skin irritation persists, call a physician. Do not take clothing home to be laundered.

Eye contact: Rinse immediately with plenty of water for at least 15 minutes. Call a physician immediately.

Ingestion: Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Consult a physician. If vomiting occurs spontaneously, keep airway clear.

Most important symptoms and effects, both acute and delayed: Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Water spray Dry powder Foam Alcohol-resistant foam Carbon dioxide (CO₂)

Unsuitable extinguishing media: no data available

Special hazards arising from the substance or mixture

Hazardous combustion products: no data available

Unusual Fire and Explosion Hazards: Vapors can travel to a source of ignition and flash back. Heat can cause polymerization. Heated containers can explode.

Advice for firefighters

Fire Fighting Procedures: EXPLOSION HAZARD. Fight advanced fires from a protected location. Cool containers/tanks with water spray.

Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

Environmental precautions: CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water. Do not allow material to contaminate ground water system.

Methods and materials for containment and cleaning up: Remove all sources of ignition. Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Contaminated monomer may be unstable. Add inhibitor to prevent polymerization. Absorbent can act as a contaminant (removes inhibitor) in liquid monomer. Avoid freestanding monomer with absorbent or add inhibitor to stabilize. Dispose of promptly.

7. HANDLING AND STORAGE

Precautions for safe handling: May cause sensitisation of susceptible persons by skin contact. For personal protection see section 8. Ground all metal containers during storage and handling.

Conditions for safe storage: Minor deviations (7C/13F) above the recommended temperature (see below) are acceptable for short periods of time (one week) for material in transit. Store in cool place. Keep away from direct sunlight. Material can burn; limit indoor storage to approved areas equipped with automatic sprinklers. Ground all metal containers during storage and handling. This product contains inhibitor to stabilize it during shipment and storage. The effectiveness of the inhibitor is dependent on the presence of dissolved oxygen. In order to maintain sufficient dissolved oxygen in the liquid to avoid polymerization, the monomer must always be stored with a vapor space oxygen concentration of 5% to 21%(air). Use monomer within 1 year to avoid loss of stability or risk of polymerization. Keep container tightly closed. Store material in containers made of the following: Stainless steel glass Aluminium Carbon steel

Storage stability

Storage temperature: <= 38 °C (<= 100 °F)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Butyl acrylate	ACGIH	TWA	2 ppm

	ACGIH	TWA	Skin Sensitizer
	OSHA P0	TWA	55 mg/m3 10 ppm
Methyl ether of Hydroquinone	ACGIH	TWA	5 mg/m3

Exposure controls

Engineering controls: Use explosion-proof local exhaust ventilation with a minimum capture velocity of 100 ft/min (0.5 m/sec) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Individual protection measures

Eye/face protection: Chemical resistant goggles must be worn. Eye protection worn must be compatible with respiratory protection system employed.

Skin protection

Hand protection: Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Butyl-rubber. Rinse and remove gloves immediately after use. Wash hands with soap and water. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. NOTE: Material is a possible skin sensitizer. Reference: Basic Acrylic Monomer Manufacturers, Inc., "Chemical-Protective Gloves for Acrylic Acid and Acrylate Esters", September 1999.

Other protection: Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

Respiratory protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Up to 10 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Up to 50 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) full-facepiece, air-purifying respirator, OR full-facepiece, airline respirator in the pressure demand mode. Above 50 times the exposure limit or Unknown: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode, OR full-facepiece, airline respirator in the pressure demand mode with emergency escape provision. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) organic vapor cartridges and N95 filters. If oil mist is present, use R95 or P95 filters. NOTE: Contact Rohm and Haas Company for air monitoring method.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	liquid
Color	clear colorless
Odor	Pungent, sweet odor
Odor Threshold	1 ppb
pH	no data available

Melting point/range	-64 °C (-83 °F)
Freezing point	no data available
Boiling point (760 mmHg)	147 °C (297 °F)
Flash point	closed cup 37 °C (99 °F) <i>DIN 51755 Part 1</i>
Evaporation Rate (Butyl Acetate = 1)	<1
Flammability (solid, gas)	Not applicable to liquids
Lower explosion limit	1.3 % vol
Upper explosion limit	9.9 % vol
Vapor Pressure	3.3 mmHg at 20 °C (68 °F)
Relative Vapor Density (air = 1)	>1
Relative Density (water = 1)	0.9 at 20 °C (68 °F)
Water solubility	1.7 g/L at 20 °C (68 °F) <i>OECD Test Guideline 105</i>
Partition coefficient: n-octanol/water	log Pow: 2.38 <i>Measured</i>
Auto-ignition temperature	292 °C (558 °F) at 1,013 hPa
Decomposition temperature	Not applicable
Dynamic Viscosity	0.81 mPa.s at 25 °C (77 °F)
Kinematic Viscosity	no data available
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Liquid Density	0.9 g/cm ³ at 20 °C (68 °F)
Molecular weight	128.17 g/mol

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable under recommended storage conditions. See Storage, Section 7. Unstable at elevated temperatures. Hygroscopic. Inhibitor is added to this product to prevent polymerization. However, this material can undergo hazardous polymerization. See Hazardous Polymerization for conditions to avoid.

Possibility of hazardous reactions: Excessive aging, heat, contamination with polymerization catalysts, oxygen-free atmosphere, inhibitor depletion or ultraviolet light (sunlight) may cause polymerization. An uncontrolled polymerization may produce a rapid release of energy with the potential for an explosion of unvented closed containers.

Conditions to avoid: Exposure to elevated temperatures can cause product to decompose. Avoid static discharge. Avoid moisture. Do not blanket or purge with an inert gas to avoid depleting the oxygen concentration. Avoid direct sunlight or ultraviolet sources.

Incompatible materials: Avoid contact with oxidizing materials. Avoid contact with: Aldehydes. Azides. Amines. Ethers. Free radical initiators. Halides. Mercaptans. Mineral acids. Peroxides. Rust. Strong inorganic bases. Avoid contact with metals such as: Brass. Copper. Avoid unintended contact with: Silica gel. Activated carbon. Avoid contact with absorbent materials such as: Clay-based absorbents.

Hazardous decomposition products: There are no known hazardous decomposition products for this material.

11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

Acute toxicity

Acute oral toxicity

Low toxicity if swallowed. Swallowing may result in gastrointestinal irritation or ulceration. Swallowing may result in burns of the mouth and throat.

LD50, Rat, 3,150 mg/kg

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

LD50, Rabbit, > 2,000 - 3,024 mg/kg

Acute inhalation toxicity

Vapor concentrations are attainable which could be hazardous on single exposure. May cause respiratory tract irritation.

LC50, Rat, 4 Hour, vapour, 10.3 mg/l

Skin corrosion/irritation

Brief contact may cause moderate skin irritation with local redness. Prolonged contact may cause severe skin irritation with local redness and discomfort.

Serious eye damage/eye irritation

May cause pain disproportionate to the level of irritation to eye tissues.
May cause slight eye irritation.
May cause slight corneal injury.
Vapor may cause eye irritation experienced as mild discomfort and redness.

Sensitization

Skin contact may cause an allergic skin reaction.

Specific Target Organ Systemic Toxicity (Single Exposure)

May cause respiratory irritation.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

Carcinogenicity

Did not cause cancer in laboratory animals.

Teratogenicity

Has caused birth defects in laboratory animals only at doses toxic to the mother. Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

Reproductive toxicity

Limited data in laboratory animals suggest that the material does not affect reproduction.

Mutagenicity

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

Aspiration Hazard

Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

12. ECOLOGICAL INFORMATION

Ecotoxicological information on this product or its components appear in this section when such data is available.

Toxicity**Acute toxicity to fish**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, *Oncorhynchus mykiss* (rainbow trout), 96 Hour, 5.2 mg/l, OECD Test Guideline 203 or Equivalent

LC50, *Cyprinodon variegatus* (sheepshead minnow), 96 Hour, 2.1 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, 1.3 mg/l, OECD Test Guideline 202

Toxicity to bacteria

EC0, Bacteria (active sludge), 3 d, > 150 mg/l

Chronic aquatic toxicity**Chronic toxicity to aquatic invertebrates**

NOEC, *Daphnia magna*, semi-static test, 21 d, number of offspring, 0.136 mg/l

Persistence and degradability

Biodegradability: 10-day Window: Pass

Method: OECD Test Guideline 310 or Equivalent

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation: 80 - 90 %

Exposure time: 28 d

Physico-chemical removability

Rapidly hydrolyzed under alkaline conditions.

28-Day Hydrolysis Study:

Bioaccumulative potential

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 2.38 at 20 °C Measured

Bioconcentration factor (BCF): 17.27 Fish.

Mobility in soil

Potential for mobility in soil is high (Koc between 50 and 150).

Partition coefficient(Koc): 40 - 148 Measured

13. DISPOSAL CONSIDERATIONS

Disposal methods: After the addition of excess inhibitor, incinerate liquid and contaminated diking material in accordance with local, state, and federal regulations.

Contaminated packaging: Dispose of as unused product. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all MSDS and label warnings even after container is emptied. Do not burn, or use a cutting torch on, the empty drum. Pursue safe, legal methods for recycle of empty containers. Improper disposal or re-use of this container may be dangerous and illegal. Refer to applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT

Proper shipping name	Butyl acrylates, stabilized
UN number	UN 2348
Class	3
Packing group	III

Classification for SEA transport (IMO-IMDG):

Proper shipping name	BUTYL ACRYLATES, STABILIZED
UN number	UN 2348
Class	3
Packing group	III
Marine pollutant	No
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Proper shipping name	Butyl acrylates, stabilized
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UN number	UN 2348
Class	3
Packing group	III

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Acute Health Hazard
Chronic Health Hazard
Fire Hazard
Reactivity Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This product contains a chemical which is listed in Section 313 at or above de minimis concentrations. The following listed chemicals are present: (Quantity present is found elsewhere on this MSDS.)

Components	CASRN
Butyl acrylate	141-32-2

Pennsylvania

Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

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16. OTHER INFORMATION

Other information**MONOMER END USES**

Acrylic and methacrylic monomers are industrial chemicals and intended for industrial use only. They are not intended for direct consumer, medical, cosmetic, or personal uses. Exposure to high levels of acrylic or methacrylic monomer vapors may cause respiratory tract irritation, skin sensitization, or other effects.

DO NOT USE IN APPLICATIONS INVOLVING IMPLANTATION IN THE HUMAN BODY OR PROLONGED CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES. DO NOT USE FOR IN-SITU POLYMERIZATIONS ON, OR ADHESION TO, ANY HUMAN BODY PART. The Chemical Supply does not recommend the use of acrylic or methacrylic monomers in medical applications or artificial

fingernail extension or replacement applications. The Chemical Supply has not performed technical or clinical testing on the suitability of acrylic or methacrylic monomers in uses involving prolonged contact with human tissues or in artificial fingernail extension or replacement applications. Use of unpolymerized, liquid acrylic or methacrylic monomers in artificial fingernail extension or replacement applications may result in loosening, shedding, fungal infection of nails.

ACRYLIC AND METHACRYLIC POLYMERS ARE USED SAFELY IN A WIDE VARIETY OF APPLICATIONS, INCLUDING PERSONAL CARE AND HYGIENE PRODUCTS.

If you have any questions concerning the safe use of acrylic and methacrylic monomers, please call the manufacturer.

Hazard Rating System

H	M	I	S
Health	Flammability	Physical Hazard	
2*	2	2	

* = Chronic Effects (See Hazards Identification)

Revision

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Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
OSHA P0	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA	8-hour, time-weighted average

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Study carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to

change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.