1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	: Butyl Acrylate 15 ppm MEHQ
Chemical Name	: Butyl Acrylate
Product Description	: Monomer for Polymer Product
CAS No.	: 141-32-2
Supplier	: TASNEE
Contact	: BUChemicalsMarketing@tasnee.com
Address	: Business Gate, Building # C3, King Khalid Int`l Airport Road, P.O. Box 26707, Riyadh 11496, Kingdom of Saudi Arabia
Emergency Tel. Contact at KSA	: +966 (13) 359 7111
Non-emergency Tel.	: +966 (11) 222 2205

2. HAZARD IDENTIFICATION

2.1 Hazard Classification

According to Regulation (EU) 1272/2008

Flammable liquids Category 3	: H226 Flammable liquid and vapour
Skin irritation - Category 2	: H315 Causes skin irritation
Eye Irritation - Category 2	: H319 Causes serious eye irritation
Skin sensitization - Category 1	: H317 May cause an allergic skin reaction
Specific target organ toxicity - single exposure - Category 3	: H335 May cause respiratory irritation.

According to EU Directives 67/548/EEC or 1999/45/EC

R10	: Flammable
Irritant - R36/37/38	: Irritating to Eyes, Respiratory System and Skin
R43	: May Cause Sensitization by Skin Contact.

2.2 LABELLING

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS] :
Hazard pictograms

Signal word: WARNING

Precautionary Statements

P210	: Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P240	: Ground/bond container and receiving equipment.
P280	: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303 + P361 + P353	: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P235	: Store in a well-ventilated place. Keep cool.

2.3 Other Hazards
No data Available

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Chemical Listing No.	Content (W/W)	Hazard Classification(1)	Hazard Classification(2)
n-Butyl Acrylate	CAS No. : 141-32-2	95.0 - ≤100.0%	Flam. Liq. : 3 - H226 Eye Irrit. : 2 - H319 STOT SE : 3 - H335 Skin Irrit. : 2 - H315 Skin Sens. : 1 - H317	R10 Xi - R36/37/38 R43

Classification(1) : According to EU Regulation 1272/2008 (H-Statement)
Classification(2) : According to EU Directives 67/548/EEC or 1999/45/EC (R-Phrases)

4. FIRST-AID MEASURES

4.1 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 : Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician immediately.
If vomiting occurs spontaneously, keep airway clear.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed
No information available.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed
No information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Suitable Extinguishing Media:
Water spray
Dry powder
Foam
Alcohol-resistant foam
Carbon dioxide (CO2)

5.2 Special Hazards Arising from the Substance or Mixture Thermal Decomposition:
Not applicable

5.3 Specific Hazards During Firefighting
Vapors can travel to a source of ignition and flash back. Heat can cause polymerization. Heated containers can explode.

5.4 Advice for Firefighters
Special Protective Equipment for Firefighters: Wear self-contained breathing apparatus and protective suit.

5.5 Further Information
Explosion Hazard: Fight advanced fires from a protected location. Cool containers / tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 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

6.2 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.

6.3 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.

6.4 Reference to Other Sections
No information available.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling
May cause sensitization of susceptible persons by skin contact. For personal protection see section 8. Ground all metal containers during storage and handling.

7.2 Conditions for Safe Storage, Including Any Incompatibilities Storage Conditions:
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 temperature: ≤ 38 °C

7.3 Specific End Uses
No information available.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Components with Workplace Exposure Control Parameters

Component	Regulations	Type of Listing	Control Limits
n-Butyl Acrylate	EH40 WEL EH40 WEL ACGIH ECTLV ECTLV	TWA STEL TWA TWA STEL	5 mg/m3 1 ppm 26 mg/m3 5 ppm 2 ppm 11 mg/m3 2 ppm 53 mg/m3 10 ppm

8.2 Derived No Effect Level

Workers

Acute - Systemic Effects		Acute - Local Effects		Long-term - Systemic Effects		Long-term - Local Effects	
Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation	Dermal	Inhalation
N.A.	N.A.	0.28 mg/cm2	N.A.	N.A.	N.A.	N.A.	11 mg/m3

Consumers

Acute - Systemic Effects			Acute - Local Effects		Long-term - Systemic Effects			Long-term - Local Effects	
Dermal	Inhalation	Oral	Dermal	Inhalation	Dermal	Inhalation	Oral	Dermal	Inhalation
N.A.	N.A.	N.A.	0.28 mg/cm2	N.A.	N.A.	N.A.	N.A.	N.A.	1.27 mg/m3

Predicted No Effect Concentration

Compartment	PNEC
Fresh Water:	0.0038 mg/l
Marine Water:	0.0038 mg/l
Sewage Treatment Plant:	3.5 mg/l
Fresh Water Sediment:	0.0267 mg/kg d.w.
Soil:	0.0072 mg/kg d.w.

8.3 Exposure Controls

Engineering Measures : 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	: Use chemical splash goggles. Eye protection worn must be compatible with respiratory protection system employed
Skin 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 scape 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 TASNEE for air monitoring method.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties :

Appearance	: liquid
Color	: colorless clear.
Odor	: pungent, Sweet Odor
Odor Threshold	: no data available
PH	: no data available
Boiling point/range	: 147 °C
Melting point/range	: -64 °C
Flash point	: 37 °C DIN 51755 Part 1
Flammability (Solid, Gas)	: No Data Available
Ignition temperature	: 412 °C (773.60 °F)
Autoignition Temperature	: 292 °C at 1 013 hPa
Decomposition temperature	: No Data Available

Lower explosion limit	: 1.30 %(V)
Upper explosion limit	: 9.90 %(V)
Vapour pressure	: 500.0 Pa at 20 °C
Relative vapour density	: >1.0
Water solubility	: 1.7 g/l at 20 °C OECD Test Guideline 105
Partition Coefficient n-Octanol / Water	: log Pow: 2.38 at 20 °C OECD Test Guideline 107
Relative density	: 0.90 at 20 °C
Viscosity, dynamic	: 0.810 mPa.s at 25 °C
Explosive Properties	: Not Explosive
Evaporation rate	: < 1.00
Oxidizing Properties	: Not Classified as Oxidizing

9.2 Other information

Solubility in other solvents	: No data available

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

10. STABILITY AND REACTIVITY

10.1 Reactivity	: No Data Available
10.2 Chemical Stability	: No Data Available
10.3 Possibility of Hazardous Reactions	: Stable under recommended storage conditions. Inhibitor is added to this product to prevent polymerization. However, this material can undergo hazardous polymerization. See Hazardous Polymerization for conditions to avoid.
10.4 Polymerization	: Excessive aging, heat, contamination with polymerization catalysts, oxygen-free atmosphere, inhibitor depletion or ultraviolet light (sunlight) may cause polymerization. Freezing followed by improper thawing and inhibitor redistribution may cause hazardous polymerization. An uncontrolled polymerization may produce a rapid release of energy with the potential for an explosion of unvented closed containers.
10.5 Conditions to Avoid	: No Data Available
10.6 Incompatible Materials	: Avoid contact with Acids, Bases, Oxidizing Agents, Reducing Agents, UV Light, Free Radical Initiators, Organic Peroxides, Mild Steel
10.7 Hazardous Decomposition Products	: There are no known hazardous decomposition products for this material.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute oral toxicity	: LD50 rat 3,150 mg/kg
Acute inhalation toxicity	: LC50 rat 4 h 1970 ppm
Acute dermal toxicity	: LD50 rabbit >2,000-3024 mg/kg
Skin Corrosion / Irritation	: rabbit Irritating

Serious Eye Damage / Eye Irritation	: rabbit Severe Eye Irritation
Sensitization	: May cause sensitization by skin contact
Carcinogenicity	: No Data Available
Mutagenicity	: No Data Available
Reproductive Toxicity	: No Data Available
Specific Target Organ Systemic Toxicity (Single Exposure)	: May Cause Respiratory Irritation - Category 3
Specific Target Organ Systemic Toxicity (Repeated Exposure)	: No Data Available
Aspiration Hazard	: No Data Available
Teratogenicity	: Caused embryo-fetotoxic effects only at high maternal toxic doses

12. ECOLOGICAL INFORMATION

12.1 Biodegradability

Component: n-Butyl acrylate	: OECD Test Guideline 301C or Equivalent-61 %
Physico-chemical Removability	: 28-Day Hydrolysis Study - Rapidly hydrolyzed

12.2 Toxicity

Acute Toxicity to fish	: LC50 Oncorhynchus Mykiss (rainbow trout) 96 h OECD Test Guideline 203 or Equivalent 5.2 mg/l
Acute Toxicity to algae	: EC50 Algae (Desmodesmus Subspicatus) 96 h OECD Test Guideline 201 or Equivalent 5.2 mg/l
Acute Toxicity to aquatic invertebrates	: EC50 Daphnia Magna 48 h OECD Test Guideline 202 or Equivalent 8.2 mg/l
12.3 Bio-accumulative Potential Bioaccumulation	: No Data Available

12.4 Mobility in Soil

Partition coefficient n-Octanol / Water	: log Pow: 2.38 at 20 °C OECD Test Guideline 107
Distribution Among Environmental Compartments	: No Data Available
Fate and Behavior in the Environment	: No Data Available

12.5 Results of PBT and vPvB Assessment

Component: n-Butyl Acrylate	: This is not considered to be Persistent Bioaccumulating and Toxic (PBT). This is not Considered to be Very Persistent and Very Bioaccumulating (vPvB).
12.6 Other Adverse Effects Hazardous to the Ozone Layer	: No Data Available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

European Waste Catalogue (2000/532/EC) : The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact waste disposal services.

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.

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

Additional Information

Contaminated Packaging : Dispose of as unused product. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all SDS 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

14.1Classification for ROAD and Rail Transport (ADR/RID)

Proper Shipping Name : BUTYL ACRYLATES, STABILIZED

UN Number : UN 2348

Class : 3

Packing Group : III

Hazard Identification Number : 39

14.2 Classification for SEA Transport (IMO-IMDG)

Proper Shipping Name : BUTYL ACRYLATES, STABILIZED

UN Number : UN 2348

Class : 3

Packing Group : III

EmS : F-E
S-D

14.3 Classification for AIR Transport (IATA/ICAO)

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Consult Current IATA Regulations Prior to Shipping by Air.

15. REGULATORY INFORMATION

EU. EINECS (EINECS) : This product satisfies all the requirements of the European Inventory of Existing Chemical Substances (EINECS).

US Toxic Substances Control Act (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.

Chemical Safety Assessment : A Chemical Safety Assessment has been carried out for this substance.

16. OTHER INFORMATION

16.1Further Information monomer end uses

: Acrylic 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 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. TASNEE acrylic monomers are not designed or manufactured for these uses.

: TASNEE does not recommend the use of acrylic monomers in medical applications or artificial fingernail extension or replacement applications.

: TASNEE has neither sought, nor received, approval from the FDA or any other agency for these applications.

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

: Acrylic 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.

16.2 Legend

ACGIH	: American Conference of Governmental Industrial Hygienists
BAc	: Butyl Acetate
OSHA	: Occupational Safety and Health Administration
PEL	: Permissible Exposure Limit
STEL	: Short Term Exposure Limit (STEL)
TLV	: Threshold Limit Value
TWA	: Time Weighted Average (TWA)

NOTE:
The information contained in this SDS is to the best of TASNEE knowledge and believed accurate and reliable as of the date indicated, however, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own use.