# Material Safety Data Sheet
## Butyl acrylate, 99+%, stabilized with 20 ppm MEHQ

ACC# 96764

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Butyl acrylate, 99+%, stabilized with 20 ppm MEHQ
**Catalog Numbers:** AC215860000, AC215860010, AC215860025, AC403460000, AC403460010
**Synonyms:** 2-Propenoic acid, butyl ester; Butyl 2-propenoate.
**Company Identification:**

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

**For information in North America, call:** 800-ACROS-01
**For emergencies in the US, call CHEMTREC:** 800-424-9300

## Section 2 - Composition, Information on Ingredients

| CAS# | Chemical Name | Percent | EINECS/ELINCS |
|---|---|---|---|
| 141-32-2 | Butyl acrylate | >99 | 205-480-7 |
| 150-76-5 | Hydroquinone monomethyl ether | .002 | 205-769-8 |

## Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: 39 deg C.
**Warning! Flammable liquid and vapor.** Causes eye, skin, and respiratory tract irritation. May cause allergic skin reaction. Light sensitive.
**Target Organs:** Respiratory system, eyes, skin.

### Potential Health Effects

**Eye:** Causes eye irritation.
**Skin:** Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May be harmful if absorbed through the skin. n-Butyl acrylate causes sensitization and cross-sensitization with other acrylates.
**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.
**Inhalation:** Causes respiratory tract irritation. May cause central nervous system effects such as nausea and headache.
**Chronic:** No information found.

## Section 4 - First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid.
**Skin:** In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical aid if symptoms occur. Wash clothing before reuse.
**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Flammable liquid and vapor. May polymerize explosively when involved in a fire. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.
**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Water may be ineffective. Do NOT use straight streams of water.
**Flash Point:** 39 deg C ( 102.20 deg F)
**Autoignition Temperature:** 279 deg C ( 534.20 deg F)
**Explosion Limits, Lower:**1.3%
**Upper:** 9.9%
**NFPA Rating:** (estimated) Health: 2; Flammability: 2; Instability: 2

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.
**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm

sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Use water spray to disperse the gas/vapor. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor or mist. Pure vapor will be uninhibited and may polymerize in vents or other confined spaces.
**Storage:** Keep away from sources of ignition. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not store under inert atmosphere.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
**Exposure Limits**

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|---|---|---|---|
| Butyl acrylate | 2 ppm TWA | 10 ppm TWA; 55 mg/m3 TWA | none listed |
| Hydroquinone monomethyl ether | 5 mg/m3 TWA | 5 mg/m3 TWA | none listed |

**OSHA Vacated PELs:** Butyl acrylate: 10 ppm TWA; 55 mg/m3 TWA Hydroquinone monomethyl ether: 5 mg/m3 TWA
**Personal Protective Equipment**
**Eyes:** Wear chemical splash goggles and face shield.
**Skin:** Wear appropriate gloves to prevent skin exposure.
**Clothing:** Wear appropriate clothing to prevent skin exposure.
**Respirators:** 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.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid
**Appearance:** clear, colorless
**Odor:** fruity odor - strong odor
**pH:** Not available.
**Vapor Pressure:** 5.45 mm Hg @ 25 deg C
**Vapor Density:** 4.4 (air=1)
**Evaporation Rate:**Not available.
**Viscosity:** Not available.
**Boiling Point:** 145 deg C
**Freezing/Melting Point:**-64 deg C
**Decomposition Temperature:**Not available.
**Solubility:** Insoluble.
**Specific Gravity/Density:**.8900g/cm3
**Molecular Formula:**C7H12O2
**Molecular Weight:**128.17

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable. However, it may undergo explosive polymerization if uninhibited. May polymerize on exposure to light. Polymerization may occur upon heating. Stable only if stored and handled under recommended conditions. The stability of the product depends upon the availability of both dissolved oxygen and MEHQ inhibitor(CAS=150-76-5). The presence of oxygen is necessary for the MEHQ to function effectively The product should never be stored under an inert gas atmosphere, but should always be stored under an atmosphere containing 5-21% oxygen by volume. This material is a monomer and may polymerize under certain conditions if the stabilizer is lost.
**Conditions to Avoid:** Light, ignition sources, moisture, excess heat, loss of inhibitor.
**Incompatibilities with Other Materials:** Strong oxidizing agents, catalytic metals, organotin catalysts, strong acids, amines, peroxides, strong bases, halogens.
**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.
**Hazardous Polymerization:** May occur.

## Section 11 - Toxicological Information

**RTECS#:**
**CAS#** 141-32-2: UD3150000
**CAS#** 150-76-5: SL7700000
**LD50/LC50:**
CAS# 141-32-2:
Draize test, rabbit, eye: 50 mg Mild;
Draize test, rabbit, eye: 500 mg/24H Mild;
Inhalation, mouse: LC50 = 7800 mg/m3/2H;

Inhalation, rat: LC50 = 2730 ppm/4H;
Oral, mouse: LD50 = 5880 mg/kg;
Oral, rat: LD50 = 900 mg/kg;
Skin, rabbit: LD50 = 2 mL/kg;
.

CAS# 150-76-5:
Draize test, rabbit, skin: 6 gm/12D (Intermittent) Mild;
Draize test, rabbit, skin: 10%;
Oral, rat: LD50 = 1600 mg/kg;
.

**Carcinogenicity:**
CAS# 141-32-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 150-76-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.
**Teratogenicity:** Animal studies have only shown harmful effects in the offspring of animals exposed to doses which also produced significant maternal toxicity.
**Reproductive Effects:** See actual entry in RTECS for complete information.
**Mutagenicity:** No information available.
**Neurotoxicity:** No information available.
**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** Fish: Goldfish: LC50 = 5.0 mg/L; 72 Hr.; UnspecifiedWater flea Daphnia: EC50 = 4230 mg/L; 24 Hr.; UnspecifiedBacteria: Phytobacterium phosphoreum: EC50 = 30.8-37.0 mg/L; 5,15,30 minutes; Microtox test, 15 degrees C No data available.
**Environmental:** If butyl acrylate is released to soil, it will be expected to exhibit a very high mobility in soil and, therefore, it may leach to groundwater. It may hydrolyze, especially in alkaline soils based upon the hydrolyzability of ethyl acrylate. It may biodegrade in soil based upon its biodegradability in aqueous screening tests. It may volatilize from near surface soil and other surfaces.
**Physical:** If butyl acrylate is released to water, it will not be expected to adsorb to sediment or suspended particulate matter or to bioconcentrate in aquatic organisms.
**Other:** Using a reported log Kow of 2.36, a BCF of 37 has been calculated using a recommended regression-derived equation. This estimated BCF indicates that butyl acrylate will not be expected to bioconcentrate in aquatic organisms.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
**RCRA P-Series:** None listed.
**RCRA U-Series:** None listed.

## Section 14 - Transport Information

| | US DOT | Canada TDG |
|---|---|---|
| **Shipping Name:** | BUTYL ACRYLATES, STABILIZED | No information available. |
| **Hazard Class:** | 3 | |
| **UN Number:** | UN2348 | |
| **Packing Group:** | III | |

## Section 15 - Regulatory Information

### US FEDERAL

**TSCA**
CAS# 141-32-2 is listed on the TSCA inventory.
CAS# 150-76-5 is listed on the TSCA inventory.
**Health & Safety Reporting List**
None of the chemicals are on the Health & Safety Reporting List.
**Chemical Test Rules**
CAS# 150-76-5: Testing required by manufacturers, processors
**Section 12b**
CAS# 150-76-5: Section 4
**TSCA Significant New Use Rule**
None of the chemicals in this material have a SNUR under TSCA.
**CERCLA Hazardous Substances and corresponding RQs**
None of the chemicals in this material have an RQ.
**SARA Section 302 Extremely Hazardous Substances**
None of the chemicals in this product have a TPQ.
**SARA Codes**
CAS # 141-32-2: immediate, fire, reactive.
CAS # 150-76-5: immediate.
**Section 313**
This material contains Butyl acrylate (CAS# 141-32-2, >99%),which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

**Clean Air Act:**
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
CAS# 141-32-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
CAS# 150-76-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**
XI

**Risk Phrases:**
R 10 Flammable.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 43 May cause sensitization by skin contact.

**Safety Phrases:**
S 9 Keep container in a well-ventilated place.

**WGK (Water Danger/Protection)**
CAS# 141-32-2: 1
CAS# 150-76-5: 1

**Canada - DSL/NDSL**
CAS# 141-32-2 is listed on Canada's DSL List.
CAS# 150-76-5 is listed on Canada's DSL List.

**Canada - WHMIS**
This product has a WHMIS classification of B3, D2B.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**
CAS# 141-32-2 is listed on the Canadian Ingredient Disclosure List.
CAS# 150-76-5 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 6/24/1999
**Revision #6 Date:** 3/22/2006