

# Material Safety Data Sheet

## 1-Bromo-1-propene, 98% (cis/trans mixture)

ACC# 10204

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 1-Bromo-1-propene, 98% (cis/trans mixture)

**Catalog Numbers:** AC107330000, AC107330050, AC107330250, AC107331000

**Synonyms:** 1-Bromopropene; 1-Bromo-1-propene; 1-Bromopropylene; Propenyl bromide; 1-Propenyl bromide; Propene, 1-bromo-

**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
590-14-7	1-Bromo-1-propene (mixture of cis-and trans)	98	209-671-6

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 4 deg C.

**Warning! Flammable liquid and vapor.** Causes respiratory tract irritation. Causes eye and skin irritation. May cause digestive tract irritation. The toxicological properties of this material have not been fully investigated.

**Target Organs:** None.

#### Potential Health Effects

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Vapors may cause dizziness or suffocation.

**Chronic:** Laboratory experiments have resulted in mutagenic effects.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. 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. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Water may be ineffective. Use agent most appropriate to extinguish fire. Do NOT use straight streams of water. For large fires, use water spray, fog or regular foam. For small fires, use dry chemical, carbon dioxide, water spray or regular foam.

**Flash Point:** 4 deg C ( 39.20 deg F)

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 4; Instability: 0

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Cover with an activated carbon

adsorbent and place into a closed container for disposal. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Stop leak only if you can do so without risk.

## 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 away from heat, sparks and flame. Avoid ingestion and inhalation. Use with adequate ventilation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Flammables-area. Refrigerator/flammables. Keep refrigerated. (Store below 4°C/39°F.)

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1-Bromo-1-propene (mixture of cis-and trans)	none listed	none listed	none listed

**OSHA Vacated PELs:** 1-Bromo-1-propene (mixture of cis-and trans): No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** colorless

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 4.17

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 58.0 - 63.0 deg C @ 760.00mmH

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** -116 deg C

**Solubility:** Not available.

**Specific Gravity/Density:** 1.4130g/cm3

**Molecular Formula:** C3H5Br

**Molecular Weight:** 120.98

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, strong oxidants.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong bases.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, hydrogen bromide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### RTECS#:

CAS# 590-14-7: UC7080000

### LD50/LC50:

Not available.

### Carcinogenicity:

CAS# 590-14-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** Mutation in microorganisms; Bacteria-Salmonella typhimurium 1umol/plate

**Neurotoxicity:** No information available.

**Other Studies:**

## Section 12 - Ecological Information

No information available.

## 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
<b>Shipping Name:</b>	FLAMMABLE LIQUIDS, N.O.S.	No information available.
<b>Hazard Class:</b>	3	
<b>UN Number:</b>	UN1993	
<b>Packing Group:</b>	II	

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 590-14-7 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### 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.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### 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# 590-14-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

### 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 F

#### Risk Phrases:

R 11 Highly flammable.

R 36/37/38 Irritating to eyes, respiratory system and skin.

#### Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 24/25 Avoid contact with skin and eyes.

S 33 Take precautionary measures against static discharges.

S 9 Keep container in a well-ventilated place.

#### WGK (Water Danger/Protection)

CAS# 590-14-7: No information available.

#### Canada - DSL/NDSL

CAS# 590-14-7 is listed on Canada's NDSL List.

#### Canada - WHMIS

WHMIS: Not available.

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.

Section 16 - Additional Information

**MSDS Creation Date:** 11/11/1998

**Revision #3 Date:** 10/03/2005

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*