

# Material Safety Data Sheet

## alpha-Bromo-3,5-difluorotoluene, 98%

ACC# 99264

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** alpha-Bromo-3,5-difluorotoluene, 98%**Catalog Numbers:** AC319800000, AC319800010**Synonyms:** 3,5-difluorobenzyl bromide**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
141776-91-2	alpha-Bromo-3,5-difluorotoluene	98.0	unlisted

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 81 deg C.

**Danger!** Corrosive. Causes eye and skin burns. Lachrymator (substance which increases the flow of tears). **Combustible liquid and vapor.** May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. Moisture sensitive.

**Target Organs:** None known.**Potential Health Effects****Eye:** Causes eye burns. Lachrymator (substance which increases the flow of tears).**Skin:** Causes skin burns.**Ingestion:** May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns.**Inhalation:** Causes chemical burns to the respiratory tract.**Chronic:** No information found.

### Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

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

**Ingestion:** Do not induce vomiting. 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 immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air

immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**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. Combustible liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

**Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Do NOT get water inside containers.

**Flash Point:** 81 deg C ( 177.80 deg F)

**Autoignition Temperature:** Not available.

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: 2; Instability: 0

## 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Do not get water inside containers.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Use with adequate ventilation. Do not allow contact with water. Discard contaminated shoes. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Store protected from moisture.

## 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

alpha-Bromo-3,5-difluorotoluene	none listed	none listed	none listed
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**OSHA Vacated PELs:** alpha-Bromo-3,5-difluorotoluene: 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. 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:** colorless

**Odor:** Not available.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 7.14

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 65 deg C @ 4.50mm Hg

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

**Decomposition Temperature:** Not available.

**Solubility:** Not available.

**Specific Gravity/Density:** 1.6000g/cm<sup>3</sup>

**Molecular Formula:** C<sub>7</sub>H<sub>5</sub>BrF<sub>2</sub>

**Molecular Weight:** 207.02

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stability unknown.

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

**Incompatibilities with Other Materials:** Moisture.

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

**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 141776-91-2 unlisted.

**LD50/LC50:**

Not available.

**Carcinogenicity:**

**CAS#** 141776-91-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found  
**Teratogenicity:** No information found  
**Reproductive Effects:** No information found  
**Mutagenicity:** No information found  
**Neurotoxicity:** No information found  
**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>	DOT regulated - small quantity provisions apply (see 49CFR173.4)	No information available.
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 141776-91-2 is not listed on the TSCA inventory. It is for research and development use only.

#### 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 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# 141776-91-2 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:**

C

**Risk Phrases:**

R 34 Causes burns.

**Safety Phrases:**

S 25 Avoid contact with eyes.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

**WGK (Water Danger/Protection)**

CAS# 141776-91-2: No information available.

**Canada - DSL/NDSL**

None of the chemicals in this product are listed on the DSL or 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.

**Canadian Ingredient Disclosure List**

<b>Section 16 - Additional Information</b>
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**MSDS Creation Date:** 3/18/1999

**Revision #4 Date:** 11/20/2008

*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.*