# Material Safety Data Sheet 2-Bromopentane, Tech., ca. 90%

ACC# 73291

# Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Bromopentane, Tech., ca. 90%

Catalog Numbers: AC107230000, AC107230050, AC107231000, AC107235000

Synonyms: 2-Pentyl 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
107-81-3	2-Bromopentane	90	203-521-3

## Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Appearance: clear, colorless liquid. Flash Point: 20 deg C.

Highly flammable. **Warning! Caution!** Causes eye and skin irritation. Causes digestive and respiratory tract irritation. The toxicological properties of this material have not been fully investigated.

Target Organs: None known.

### **Potential Health Effects**

Eye: Causes eye irritation.

Skin: Causes skin irritation. The toxicological properties of this material have not been fully investigated.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. 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:** 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. **Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**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. 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. Will be easily ignited by heat, sparks or flame.

**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. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

**Flash Point:** 20 deg C ( 68.00 deg F) **Autoignition Temperature:** Not available.

Explosion Limits, Lower:N/A

Upper: N/A

NFPA Rating: (estimated) Health: 2; Flammability: 3; 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. A vapor suppressing foam may be used to reduce vapors.

# Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and 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. Avoid ingestion and inhalation. Wash clothing before reuse. 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. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

## 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
2-Bromopentane	none listed	none listed	none listed

OSHA Vacated PELs: 2-Bromopentane: 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 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:** strong odor **pH:** Not available.

Vapor Pressure: Not available.

Vapor Density: 5.2

**Evaporation Rate:**Not available. **Viscosity:** Not available.

**Boiling Point:** 116 deg C @ 760.00mmHg **Freezing/Melting Point:**-95 deg C

**Decomposition Temperature:**Not available. **Solubility:** miscible with organic solvents **Specific Gravity/Density:**1.2230g/cm3

Molecular Formula:C5H11Br Molecular Weight:151.05

# Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions. **Conditions to Avoid:** Incompatible materials, ignition sources, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials: Oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, hydrogen bromide.

Hazardous Polymerization: Has not been reported.

# Section 11 - Toxicological Information

RTECS#:

CAS# 107-81-3: RZ9800000

**LD50/LC50:** CAS# 107-81-3:

Inhalation, mouse: LC50 = 33 gm/m3;

Carcinogenicity:

CAS# 107-81-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available. **Teratogenicity:** No information available. **Reproductive Effects:** No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

# Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: Expected to rapidly volatilize into the atmosphere.

**Physical:** No information available. **Other:** 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	
Shipping Name:	2-BROMOPENTANE	2-BROMOPENTANE	
Hazard Class:	3	3	
UN Number:	UN2343	UN2343	
Packing Group:	II	II	
Additional Info:		FLASHPOINT 20C	

# Section 15 - Regulatory Information

## **US FEDERAL**

#### **TSCA**

CAS# 107-81-3 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 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: Nor

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

## STATE

CAS# 107-81-3 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 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 28A After contact with skin, wash immediately with plenty of water

3

#### WGK (Water Danger/Protection)

CAS# 107-81-3: No information available.

Canada - DSL/NDSL

CAS# 107-81-3 is listed on Canada's NDSL List.

## Canada - WHMIS

This product has a WHMIS classification of B2, 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**

## Section 16 - Additional Information

**MSDS Creation Date:** 9/18/1998 **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.