

# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: BAN Phase Separation Reagent  
Cat. No: BN 191

Molecular Research Center, Inc.  
5645 Montgomery Rd.  
Cincinnati, Ohio 45212  
USA 1-888-841-0090

Product Name: BAN Phase Separation Reagent  
Chemical Formula: BrC<sub>6</sub>H<sub>4</sub>OCH<sub>3</sub>  
Molecular Weight: 187.03  
Synonyms: 1-Bromo-4-methoxybenzene; p-Bromoanisole; p-Anisyl bromide.

NFPA RATINGS: (estimated)      Health=1      Fire=1      Reactivity=0  
HMIS RATINGS: estimated (scale 0-4)      Health=1      Fire=1      Reactivity=1      PPE=H

CHEMTREC EMERGENCY NUMBER: Only in the event of an emergency involving a spill, leak, fire exposure or accident. USA: 1-800-424-9300; International: 1-703-527-3887

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No	Percent
4-Bromoanisole	104-92-7	>98 %
	EINECS No.	
	203-252-1	

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## 3. HAZARD IDENTIFICATION

**EMERGENCY OVERVIEW:** A clear to colorless to pale yellow liquid. Caution! May cause eye, skin or respiratory tract irritation. May be harmful if absorbed through skin, if swallowed or inhaled. No information is currently listed regarding target organs, hazard symbols or risk phrases.

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## 4. FIRST AID

**EYE CONTACT:** Check for and remove any contact lenses. Flush eyes with water for 15 min., holding eyelids open. Obtain medical attention.

**SKIN CONTACT:** Flush skin with soap and water for 15 min. Remove contaminated clothing and thoroughly wash before reuse.

**INHALATION:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. Obtain medical attention. Treat symptomatically and supportively.

**INGESTION:** If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Do not induce vomiting unless directed so by medical personnel. Obtain medical attention. Loosen tight clothing such as a collar, tie belt or waistband.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** May be combustible at high temperatures. Extinguishing media appropriate to surrounding fire conditions. Small Fire: Use dry chemical powder. Large Fire: Use water spray, fog or foam. Do not use water jet. May emit toxic fumes under fire conditions (bromide). Vapors may be heavier than air and they can spread along the floor and collect in low or confined areas.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. In a fire, protective gear and a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) is recommended.

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## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PROTECTIVE EQUIPMENT FOR SPILL CONDITIONS:** Note that accidental releases may be subject to special state or local reporting requirements and other regulatory mandates. Check and comply with local laws and regulations. Use gloves and other appropriate protective covering to avoid skin contact. Ensure adequate ventilation. Use goggles, face shield or other eye protection. Contain spill with an inert adsorbent such as vermiculite, sand or earth. Place spill material in a suitable container and hold for disposal. Avoid breathing vapor, mist or gas.

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## 7. HANDLING AND STORAGE

Store in a cool, dry place in sealed containers. Ensure good ventilation at the workplace. Practice good laboratory techniques when handling this substance. After using the chemical, wash hands thoroughly. Use adequate ventilation and avoid breathing vapor, mist or gas. Empty containers pose a fire risk and any residue should be evaporated under a fume hood. Keep away from incompatibles such as oxidizing agents, metals and alkali.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

For routine operations wear safety glasses, latex gloves and a chemical apron to avoid contact with eyes, skin and clothing. Facilities utilizing this chemical should be equipped with an eyewash station and safety shower. Use adequate ventilation to keep airborne concentrations below the permissible exposure limits. (No PELS are listed for this chemical). Personal Protective Equipment: Chemical splash goggles, protective gloves and clothing to prevent eye and skin exposure.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless to pale yellow liquid
Odor:	pungent
Vapor Pressure:	not reported
Density:	1.4940 g/cm <sup>3</sup>
Boiling point:	223 C @760 mm Hg (433.4 F)
Melting point:	9-10 C (50 F)
Flash point:	94 C (201.20 F)
Solubility in water:	Immiscible

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## 10. STABILITY AND REACTIVITY

**Stable under normal temperatures and pressures.**

**INCOMPATIBILITIES:** Heat, ignition sources, strong acids, strong oxidizing agents.

**DECOMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, and hydrogen bromide gas. Hazardous polymerization reactions have not been reported.

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## 11. TOXICOLOGICAL INFORMATION

RTECS# BZ8501000 CAS# 104-92-7

Rat: Inhalation: oral LD50=3800 mg/kg; LD50 (skin) 3200 mg/kg. Mouse: oral LD50=2200 mg/kg. Inhalation LC50 20 mg/m<sup>3</sup>.

**CARCINOGENICITY:** Not listed by ACGIH, IARC, NTP or CA Prop 65.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

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## 12. ECOLOGICAL INFORMATION

**ECOTOXICITY:** Bacteria: Phytobacterium phosphoreum, EC50 2.25-2.58 mg/L; 5, 15 and 30 minutes. Microtox test, 15 C. General Notes: Do not allow product to be released into ground water or sewage system.

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## 13. DISPOSAL CONSIDERATIONS

Keep in sealed containers until final disposal. Dispose of in a manner consistent with federal, state and local regulations. Not listed as banned from land disposal according to RCRA.

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## 14. TRANSPORT INFORMATION

Not a hazardous matter for transportation.

Not regulated for domestic US DOT transport or Canada TDG.

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## 15. REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk/Safety Phrases: S24/25 Avoid contact with skin and eyes.

WGK (Water Danger/ Protection) CAS # 1104-92-7 Not available.

United Kingdom Occupational Exposure Limits

Canada: CAS# 104-92-7 is listed in Canada's DSL List. WHMIS classification D2L.

US Federal:

TSCA: CAS # 104-92-7 is listed on the TSCA inventory.

Health and Safety Reporting: The chemical is not on the health & safety reporting list.

Chemical Test Rules: This chemical is not under a chemical test rule.

Section 12b: This chemical is not listed under TSCA Section 12b.

TSCA Significant New Use Rule: This chemical is not listed under SNUR.

CERCLA Hazardous Substances and corresponding RQ's: This chemical does not have an RQ

SARA Section 302 Extremely Hazardous Substances: no listed TPQ.

SARA Codes: CAS# 104-92-7: immediate, reactive.

Section 313: Not reported under section 313.

Clean Air Act: The chemical is not classified as a hazardous air pollutant or a Class 1 or 2 ozone depletory.

Clean Water Act: This chemical is not listed as a hazardous substance, priority pollutant or a toxic pollutant under the CWA.

State: CAS # 104-92-7 is not listed or present on CA, PA, MN, MA, FL or NJ state lists.

## 16. OTHER INFORMATION

Reviewed by BW, MJ  
Creation date 11/1/07  
Revision date 2/01/09

This information is believed to be accurate and represents the 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.

### Abbreviations:

N/A	Not Applicable
N.D.A.	No data available
TLV-STEL	Threshold Limit Values (Short-Term Exposure Limit)
TLV-TWA	Threshold Limit Values (Time-Weighted Average)
OSHA PEL-TWA	OSHA Permissible Exposure Level