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 1-888-841-0900 Fax: 513-841-0080

Product Name: BAN Phase Separation Reagent

Application: Phase separation reagent for RNAzol-RT and TRI Reagent- RT RNA extraction reagents

Synonym: 1-Bromo-4-methoxybenzene; p-Bromoanisole; p-Anisyl bromide

Chemical Formula: BrC₆H₄OCH₃ Molecular Weight: 187.03

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.

2. HAZARD IDENTIFICATION

OSHA

No known OSHA hazards

GHS - Classification

Acute toxicity, oral (Category 5)

GHS Label elements

Pictogram none Signal word none

Health Hazard

Hazard Class	Hazard category	Code	Health Hazard Statements
Acute toxicity, oral	Category 5	H303	May be harmful if swallowed

Precautionary statements

Code	Prevention precautionary statements	
P233	Keep container tightly closed.	
P264	Washthoroughly after handling	
P270	Do not eat, drink or smoke when using this product	
P281	Use personal protective equipment as required.	

EFFECTS OF OVEREXPOSURE: A clear to colorless to pale yellow liquid that 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 organ toxicity.

HMIS Classification

Health Hazard 1 Flammability 1 Physical hazards 0 PPE = H

NFPA Rating Health Hazard 0

Fire 1 Reactivity 0

3. COMPOSITION/Information on Ingredients

Component	Classification	Concentration
1-Bromo-4-methoxybenzene	CAS-No. 104-92-7 EINECS No. 203-252-1	> 98 %
	Beil.Reg-No. 1237590	

4. FIRST AID

CHEMICAL EXPOSURE

EYES: Check for and remove contact lenses. Flush with water in an eyewash station for at least 15 minutes, holding eyelids open. Do not use eye ointment. Obtain medical attention if discomfort or medical symptoms persist.

SKIN: Remove contaminated clothing and wipe off excess solution from skin. Flush area with water for 10-15 min. Use deluge safety shower to decontaminate large areas of body surface with running water and nonabrasive soap. Obtain medical attention if discomfort or symptoms persist.

INHALATION: Remove person to fresh air. Monitor for respiratory distress and start artificial respiration, if needed. Obtain medical attention if discomfort or symptoms persist.

INGESTION: If conscious and alert, rinse mouth and drink 2-4 cups 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: Chemical may be combustible at high temperatures. The extinguishing media should be appropriate to the surrounding fire conditions. Small Fire: Use dry chemical powder. Large Fire: Use water spray, fog or foam. Do not use water jet. Combustion 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.

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. If possible, prevent the chemical from entering the drain.

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.

8. EXPOSURE CONTROLS AND 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless to pale yellow liquid

Odor: pungent
Vapor Pressure: not reported
Density: 1.494 g/cm³ at 25C

Boiling point: 223 C @760 mm Hg (433.4 F)

Melting point: 9-10 C (50 F)

Flash point: 98 C (208 F)- closed cup

Solubility in water: Immiscible
Partition coefficient: log Pow: 3.05

(n-octanol/water)

10. STABILITY AND REACTIVITY

Liquid is 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.

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/m³.

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. Consult RTECS for most complete information.

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.

13. DISPOSAL CONSIDERATIONS

Keep in sealed containers until final disposal. Dispose of in a manner consistent with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

This material is not a hazardous material as defined by 49 CFR 172.101 by the U.S. DOT. (1-Bromo-4-methoxybenzene) Not regulated for domestic US DOT transport or Canada TDG.

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 11/01/07 Revision date 10/16/2023 SP

Reason for Revision: Update to Globally Harmonized System of Chemical Classification.

This information is believed to be accurate and represents the information currently available to us. However, we make no 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.