



## SAFETY DATA SHEET

### SECTION I - IDENTIFICATION

**PRODUCT NAME:** 1-BROMO-2-NITROBENZENE  
**CAS #:** 577-19-5  
**Manufacturer's Name:** CHEM-IS-TRY, INC.  
**Address:** 160-4 LIBERTY ST.  
METUCHEN, NJ 08840  
**Telephone #:** (732) 372- 7311      Secondary Telephone No: CHEMTREC  
**FAX #:** (732) 372- 7312      (800) 424-9300  
24 Hours a Day

**Relevant identified uses of the substance or mixture and uses advised against**  
Identified uses: Laboratory chemicals, synthesis of substances

### SECTION II - HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

#### GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H302 Harmful if swallowed.  
H315 Causes skin irritation  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product  
P271 Use only outdoor or in well-ventilated area  
P280 Wear protective gloves/eye protection/ face protection.  
P301 + P312 If swallowed, call a poison center/doctor if you feel unwell  
P302 + P352 If in contact with the skin, wash with plenty of soap and water.  
P304 + P340 If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove

P337 + P313	contact lenses, if present and easy to do. Continue rinsing.
P312	If eye irritation persists: Get medical advice/ attention.
P321	Call a poison center/doctor if you feel unwell
P330	Specific treatment (see supplemental first aid instructions)
P332 + P313	Rinse mouth
P337 + P313	If skin irritation occurs, get medical attention/advice
P362	If eye irritation persists, get medical attention advice
P403 + P233	Take off contaminated clothing and wash before reuse
P405	Store in a well-ventilated place. Keep container tightly closed.
P501	Store locked up.
	Dispose of content/ containers to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS - none**

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### **SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS**

#### **Substances**

Synonyms:	1-Bromo-2-nitrobenzene
Formula:	C <sub>6</sub> H <sub>4</sub> BrNO <sub>2</sub>
Molecular Weight:	202.01 g/mol
CAS-No.:	577-19-5
EC-No.:	209-409-0

#### **Hazardous components**

Component	Classification	Concentration
<b>1-Bromo-2-nitrobenzene</b>	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H302, H315, H319, H335	≥ 99.5 %

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### **SECTION IV - FIRST AID MEASURES**

#### **Description of first aid measures**

If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact, wash off with soap and plenty of water. Consult a physician.

In case of eye contact, flush eyes with water as a precaution. Consult a physician.

If swallowed, never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **Most important symptoms and effects, both acute and delayed.**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

#### **Indication of any immediate medical attention and special treatment needed**

No data available

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### **SECTION V - FIREFIGHTING MEASURES**

#### **Extinguishing media**

##### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### **Special hazards arising from the substance or mixture**

No data available

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

No data available

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**SECTION VI - ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.  
For personal protection see section 8.

**Environmental precautions**

Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

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**SECTION VII - HANDLING AND STORAGE**

**Precautions for safe handling**

Avoid contact with the skin and eyes

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. For precautions see section 2.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C

**Specific end use(s)**

Apart from the uses mentioned in section 1, no other specific uses are stipulated

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**SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

**Personal protective equipment**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

**Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

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**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

a) Appearance:	Form: crystalline powder Color: yellow
b) Odor:	No data available
c) Odor Threshold:	No data available
d) pH:	No data available
e) Melting point/freezing point:	Melting point/range: 40 – 42 °C (104 – 108 °F) – lit.
f) Initial boiling point and boiling range:	261 °C (502°F) - lit
g) Flash point:	112 °C (234 °F) - closed cup
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper/lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Water solubility:	No data available
o) Partition coefficient: n-octanol/water	log Pow: 2.5
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available

r) Viscosity: No data available

s) Explosive properties: No data available

t) Oxidizing properties: No data available

**Other safety information**

No data available

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**SECTION X - STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

No data available

**Incompatible materials**

Strong bases, strong oxidizing agent

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions - Carbon oxides, Nitrogen oxides, Hydrogen bromide gas

Other decomposition products - No data available

In the event of fire: see section 5

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**SECTION XI - TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Acute toxicity**

No data available

Inhalation: No data available

Dermal: No data available

**Skin corrosion/irritation:**

No data available

**Serious eye damage/eye irritation:**

No data available

**Respiratory or skin sensitization:**

No data available

**Germ cell mutagenicity:**

No data available

**Carcinogenicity**

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: CY9040450

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

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**SECTION XII - ECOLOGICAL INFORMATION**

**Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

No data available

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**SECTION XIII - DISPOSAL CONSIDERATIONS****Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

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**SECTION XIV - TRANSPORT INFORMATION****DOT (US)**

UN number: 3459      Class: 6.1      Packing group: III

Proper shipping name: Nitrobromobenzenes, solid

Poison Inhalation Hazard: No

**IMDG**

**UN number: 3459      Class: 6.1      Packing group: III EMS-No: F-A, S-A**

Proper shipping name: NITROBROMOBENZENES, SOLID

**IATA**

UN number: 3459      Class: 6.1      Packing group: III

Proper shipping name: Nitrobromobenzenes, solid

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**SECTION XV - REGULATORY INFORMATION****SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute health hazards

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

1-Bromo-2-nitrobenzene	CAS-No. 577-19-5	Revision Date
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**New Jersey Right To Know Components**

1-Bromo-2-nitrobenzene	CAS-No. 577-19-5	Revision Date
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**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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**SECTION XVI - OTHER INFORMATION**

See full text of H-Statements under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
Skin Irrit,	Skin irritation

HMIS Rating	
Health hazard:	2
Chronic Health Hazard:	
Flammability:	1
Physical Hazard	0
NFPA Rating	
Health hazard:	2
Fire Hazard:	1
Reactivity Hazard:	0

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