According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

SECTION 1: Identification

Product identifier

Product name: Bromobenzene Product code: BB2700

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory Chemicals Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: United States AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number: United States ChemTel Inc +1(800)255-3924 +1(813)248-0585

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 3 Skin irritation, category 2 Chronic aquatic hazard, category 2

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H226 Flammable liquid and vapor

- H315 Causes skin irritation
- H411 Toxic to aquatic life with long lasting effects

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

P233 Keep container tightly closed

P240 Ground/bond container and receiving equipment

- P241 Use explosion-proof electrical/ventilating/light/equipment
- P242 Use only non-sparking tools
- P243 Take precautionary measures against static discharge

P280 Wear protective gloves/protective clothing/eye protection/face protection

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

Page 2 of 9

P264 Wash skin thoroughly after handling

P273 Avoid release to the environment

P303+P361+P353 If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower

P370+P378 In case of fire: Use agents recommended in section 5 for extinction

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 If on skin: Wash with soap and water

P332+P313 If skin irritation occurs: Get medical advice/attention

P391 Collect spillage

P403+P235 Store in a well ventilated place. Keep cool

P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 108-86-1	Bromobenzene	>99

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Wash affected area with soap and water Seek medical attention if symptoms develop or persist

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment Specific treatment:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors Vapors can flow to distant ignition sources and flashback Liquid is volatile and may generate an explosive atmosphere

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Shut off sources of ignition Carbon monoxide and carbon dioxide may form upon combustion Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing Beware of vapors accumulating to form explosive concentrations Vapors can accumulate in low areas

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing Use spark-proof tools and explosion-proof equipment Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders) Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation. Avoid breathing mist or vapor. Do not eat, drink, smoke or use personal products when handling chemical substances.

Do not eat, drink, smoke or use personal products when handling chemical substar

Take precautionary measures against electrostatic discharges.

Use only non-sparking tools.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

No occupational exposure limits noted for the ingredient(s).

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Odor	Aromatic odor
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	- 31°C
Initial boiling point/range	155°C
Flash point (closed cup)	51°C
Evaporation rate	Not determined or not available.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

	1
Flammability (solid, gas)	Flammable liquid
Upper flammability/explosive limit	2.5 %
Lower flammability/explosive limit	0.5 %
Vapor pressure	3.3 mmHg at 20°C
Vapor density	5.41
Density	Not determined or not available.
Relative density	1.49 g/cm3
Solubilities	Insoluble
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	566°C
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

Molecular Weight

157.01

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Ignition sources, excess heat, confined spaces.

Incompatible materials:

Strong oxidizing agents.

Hazardous decomposition products:

Oxides of carbon and hydrogen bromide.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Bromobenzene	inhalation	LD50 - Rat - 2380 mg/kg

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data: No data available.

Substance data:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

Page 6 of 9

Name	Result
Bromobenzene	Causes skin irritation.
Serious eye damage/irrita	tion
Assessment: Based on a	available data, the classification criteria are not met.
Product data: No data a	vailable.
Substance data: No dat	a available.
Respiratory or skin sensit	ization
Assessment: Based on a	available data, the classification criteria are not met.
Product data: No data a	vailable.
Substance data: No dat	a available.
Carcinogenicity	
Assessment: Based on a	available data, the classification criteria are not met.
Product data: No data a	vailable.
Substance data: No dat	a available.
International Agency for	or Research on Cancer (IARC): None of the ingredients are listed.
National Toxicology Pr	ogram (NTP): None of the ingredients are listed.
Germ cell mutagenicity	
Assessment: Based on a	available data, the classification criteria are not met.
Product data: No data a	vailable.
Substance data: No dat	a available.
Reproductive toxicity	
Assessment: Based on a	available data, the classification criteria are not met.
Product data: No data a	vailable.
Substance data: No dat	a available.
Specific target organ toxi	city (single exposure)
Assessment: Based on a	available data, the classification criteria are not met.
Product data: No data a	vailable.
Substance data: No dat	a available.
Specific target organ toxi	city (repeated exposure)
Assessment: Based on a	available data, the classification criteria are not met.
Product data: No data a	vailable.
Substance data: No dat	a available.
Aspiration toxicity	
Assessment: Based on a	available data, the classification criteria are not met.
Product data: No data a	vailable.
Substance data: No dat	a available.
-	es of exposure: No data available.
	physical, chemical and toxicological characteristics: No data available.
Other information: No data	a available.
CTION 12: Ecological infor	mation

Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

Name	Result
Bromobenzene	LC50 - Fish - 96 H - Minimun: 5.6 mg/l , Median: 5.6 mg/l Maximum: 5.6 mg/l

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available. **Substance data:** No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available. Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN 2514	
UN proper shipping name	BROMOBENZENE	
UN transport hazard class(es)	3	Constant and
Packing group		
Environmental hazards	None	
Special precautions for user	None	

International Maritime Dangerous Goods (IMDG)

UN number	UN 2514	
UN proper shipping name	BROMOBENZENE	
UN transport hazard class(es)	3	
Packing group		
Environmental hazards	None	
Special precautions for user	None	

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 2514
UN proper shipping name	BROMOBENZENE

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

UN transport hazard class(es)	3
Packing group	III
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing	(TSCA):			I
108-86-1	Bromobenzen	Bromobenzene		
Significant New	Use Rule (TSCA Se	ction 5): Not deter	mined.	·
Export notification	on under TSCA Sec	ction 12(b): Not de	termined.	
SARA Section 31	1/312 hazards:			
Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No
SARA Section 30	2 extremely hazar	dous substances:	Not determined.	·
SARA Section 31	3 toxic chemicals:			
108-86-1	Bromobenzen	Bromobenzene		
CERCLA: Not dete	rmined.			
RCRA: Not determ	ined.			
Section 112(r) of	^t the Clean Air Act	(CAA): Not determ	ined.	
Massachusetts R	ight to Know:			
108-86-1	Bromobenzen	Bromobenzene		
New Jersey Right	to Know:			
108-86-1	Bromobenzen	Bromobenzene		
New York Right t	o Know:			
108-86-1	Bromobenzen	Bromobenzene		
Pennsylvania Rig	ht to Know:			
108-86-1	Bromobenzen	Bromobenzene		

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-2-0

HMIS: 2-2-0

Initial preparation date: 11.15.2017

Page 8 of 9

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 11.15.2017

Bromobenzene

End of Safety Data Sheet

Page 9 of 9