SAFETY DATA SHEET

CHEMSERVICE

1. Identification

Product identifier	1-(2-Bromoethyl)naphthale	ene	
Other means of identification			
Item	N-10008		
CAS number	13686-49-2		
Recommended use	For Laboratory Use Only		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/	Distributor information		
Manufacturer			
Company name	Chem Service, Inc.		
Address	660 Tower Lane		
	West Chester, PA 19380 United States		
Telephone	Toll Free	800-452-9994	
relephone	Direct	610-692-3026	
Website	www.chemservice.com		
E-mail	info@chemservice.com		
Emergency phone number	Chemtrec US	800-424-9300	
	Chemtrec outside US	+1 703-527-3887	7
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Skin corrosion/irritation		Category 2
	Serious eye damage/eye irri	itation	Category 2
	Specific target organ toxicity	, single exposure	Category 3 respiratory tract irritation
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
	$\mathbf{\wedge}$		
Signal word	Warning		
Hazard statement	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.		
Precautionary statement			
Prevention	Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves.		
Response	If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.		
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.		
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.		
Hazard(s) not otherwise	None known.		

Hazard(s) not otherwise classified (HNOC)

100% of the mixture consists of component(s) of unknown acute oral toxicity. 100% of the mixture consists of component(s) of unknown acute dermal toxicity. 100% of the mixture consists of component(s) of unknown acute inhalation toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Substances

Substances			
Chemical name	Common name and synonyms	CAS number	%
1-(2-Bromoethyl)naphthalene		13686-49-2	100
4. First-aid measures			
Inhalation	Remove victim to fresh air and keep at rest in CENTER or doctor/physician if you feel unwel		hing. Call a POISON
Skin contact	Remove contaminated clothing. Wash with ple medical advice/attention. Wash contaminated		itation occurs: Get
Eye contact	Immediately flush eyes with plenty of water for present and easy to do. Continue rinsing. Get		
Ingestion	Rinse mouth. Get medical attention if symptor	ns occur.	
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include s vision. May cause respiratory irritation. Skin irr		
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and trea Symptoms may be delayed.	at symptomatically. Keep victim	under observation.
General information	If you feel unwell, seek medical advice (show personnel are aware of the material(s) involve		
5. Fire-fighting measures			
Suitable extinguishing media	Water fog. Dry chemical powder. Carbon diox	ide (CO2). Alcohol resistant foa	n.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as thi	s will spread the fire.	
Specific hazards arising from the chemical	During fire, gases hazardous to health may be	e formed.	
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full pr	otective clothing must be worn i	n case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do s apparatus for fire fighting if necessary.	o without risk.Wear self contain	ed breathing
Specific methods	Use standard firefighting procedures and cons	sider the hazards of other involv	ed materials.
General fire hazards	No unusual fire or explosion hazards noted.		
6. Accidental release measures			
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep peo appropriate protective equipment and clothing not touch damaged containers or spilled mate Ensure adequate ventilation. Local authorities contained. For personal protection, see sectio	during clean-up. Avoid breathir rial unless wearing appropriate should be advised if significant	ig mist or vapor. Do protective clothing.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is possible. Absorb in vermiculite, dry sand or earecovery, flush area with water.		
	Small Spills: Wipe up with absorbent material remove residual contamination.	(e.g. cloth, fleece). Clean surfac	e thoroughly to
	Never return spills to original containers for re-	-use. For waste disposal, see se	ection 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or	onto the ground.	
7. Handling and storage			
Precautions for safe handling	Avoid breathing mist or vapor. Avoid contact w ventilation. Wear appropriate personal protect practices.		

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Occupational exposure limits	This substance has no PEL, TLV, or other recommended exposure limit.	
Biological limit values	No biological exposure limits noted for the ingredient(s).	
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.	
Individual protection measures	, such as personal protective equipment	
Eye/face protection	Chemical respirator with organic vapor cartridge and full facepiece.	
Skin protection		
Hand protection	Wear appropriate chemical resistant gloves.	
Other	Wear appropriate chemical resistant clothing.	
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.	
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.	
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.	

9. Physical and chemical properties

Appearance		
Physical state	Liquid.	
Form	Liquid.	
Color	Colorless to Yellowish	
Odor	Not available.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	Not available.	
Flash point	Not available.	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or explosive limits		
Flammability limit - lower (%)	Not available.	
Flammability limit - upper (%)	Not available.	
Explosive limit - lower (%)	Not available.	
Explosive limit - upper (%)	Not available.	
Vapor pressure	Not available.	
Vapor density	Not available.	
Relative density	Not available.	
Solubility(ies)		
Solubility (water)	Not available.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity	Not available.	

Other information	
Explosive properties	Not explosive.
Molecular formula	C12H11Br
Molecular weight	235.12 g/mol
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Oxidizing agents. Bases.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of	exposure
Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	Not known.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.
IARC Monographs. Overall	Evaluation of Carcinogenicity

Not listed.

Not regulated.

Not listed. This product is not expected to cause reproductive or developmental effects. **Reproductive toxicity** Specific target organ toxicity -May cause respiratory irritation. single exposure

US. National Toxicology Program (NTP) Report on Carcinogens

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Specific target organ toxicity -Not classified. repeated exposure

Not an aspiration hazard. Aspiration hazard

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	
Bioaccumulative potential	No data available.
Mobility in soil	No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	11-28-2017
Version #	01
NFPA ratings	Health: 2 Flammability: 0 Instability: 0
Disclaimer	The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.
	Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.
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