

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 12/15/2021 Version: 1.0

## **SECTION 1: Identification**

1.1.	Identification		
Produc	t form	:	Mixture
Produc	t name	:	BHQ-1 Succinimidyl Ester
Produc	t code	:	BHQ-1000S

## 1.2. Recommended use and restrictions on use

No additional information available

## 1.3. Supplier

Biosearch Technologies, Inc 2199 South McDowell Boulevard Petaluma, CA 94954-6904 USA

## 1.4. Emergency telephone number

Emergency number

: 1-888-575-9695 (Monday-Friday, 8:00AM-5:00PM)

#### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Acute Tox. 4 (Oral)	H302
Acute Tox. 4 (Dermal)	H312
Acute Tox. 4 (Inhalation)	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Carc. 1B	H350
STOT RE 2	H373

## 2.2. GHS Label elements, including precautionary statements

## GHS US labelling

Hazard pictograms (GHS US)

Signal word (GHS US)	: Danger
Hazard statements (GHS US)	<ul> <li>H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled H315 - Causes skin irritation.</li> <li>H319 - Causes serious eye irritation.</li> <li>H350 - May cause cancer.</li> <li>H373 - May cause damage to organs through prolonged or repeated exposure.</li> </ul>
Precautionary statements (GHS US)	<ul> <li>P201 - Obtain special instructions before use.</li> <li>P202 - Do not handle until all safety precautions have been read and understood.</li> <li>P261 - Avoid breathing dust</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P271 - Use only outdoors or in a well-ventilated area.</li> <li>P280 - Wear eye protection, protective gloves, protective clothing.</li> <li>P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.</li> <li>P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</li> <li>P308+P313 - If exposed or concerned: Get medical advice/attention.</li> <li>P314 - Get medical advice/attention if you feel unwell.</li> <li>P330 - Rinse mouth.</li> <li>P332+P313 - If skin irritation occurs: Get medical advice/attention.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse.</li> <li>P405 - Store locked up.</li> </ul>

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P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards which do not result in classification

#### No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%
Benzenediazonium, 2-methoxy-5-methyl-4-[(4-methyl-2-nitrophenyl)azo]-, (T-4)- tetrachlorozincate(2-) (2:1)	(CAS-No.) 61966-14-1	30 - 60
Ethyl 4-bromobutyrate	(CAS-No.) 2969-81-5	10 – 30
N-methylaniline	(CAS-No.) 100-61-8	10 – 30
N-hydroxysuccinimide	(CAS-No.) 6066-82-6	10 – 30

## SECTION 4: First-aid measures

4.1.	Description of first aid measures
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First-aid measures general	If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
First-aid measures after skin contact	: IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
First-aid measures after eye contact	IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing if pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
First-aid measures after ingestion	: IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if you feel unwell.
4.2. Most important symptoms and	effects (acute and delayed)
Symptoms/effects	: Causes skin irritation. Causes serious eye irritation. May cause cancer. May cause damage to organs through prolonged or repeated exposure
Symptoms/effects after inhalation	: May be harmful if inhaled.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

## No additional information available

## SECTION 5: Fire-fighting measures

5.1.	5.1. Suitable (and unsuitable) extinguishing media			
Suitable extinguishing media : Foam. Carbon dioxide. Dry powder. Water spray.				
5.2.	5.2. Specific hazards arising from the chemical			
Fire ha	azard	: Not flammable.		
Explos	sion hazard	: Product is not explosive.		
React	vity	: Air and moisture sensitive.		
5.3.	Special protective equipment and	ecautions for fire-fighters		
Preca	utionary measures fire	: Eliminate all ignition sources if safe to do so.		
Firefig	hting instructions	: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling expose containers. Do not dispose of fire-fighting water in the environment.	d	
Protec	tion during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.		

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SECTION 6: Accidental release measures         6.1. Personal precautions, protective equipment and emergency procedures         General measures       : Evacuate area. Ventilate area. Keep upwind. Spill should be handled b personnel properly equipped with respiratory and eye protection.         6.1.1. For non-emergency personnel       : Wear Protective equipment as described in Section 8.         Protective equipment       : Wear Protective equipment as described in Section 8.         Emergency procedures       : Evacuate unnecessary personnel.         6.1.2. For emergency responders       : Wear suitable protective clothing, gloves and eye or face protection. All respirator, in case of emergency.         6.2. Environmental precautions         Avoid release to the environment. Prevent entry to sewers and public waters.         6.3. Methods and material for containment and cleaning up		
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6.3. Methods and material for containment and cleaning up		
	Methods and material for containment and cleaning up	
For containment : Contain and collect as any solid. Sweep or shovel spills into appropriat	e container for disposal.	
Methods for cleaning up       : Wear suitable protective clothing. Take up mechanically (sweeping, sh suitable container for disposal. Avoid dust formation. This material and disposed of in a safe way, and as per local legislation.		
6.4. Reference to other sections		
See Sections 8 and 13.		
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling : Do not handle until all safety precautions have been read and understo closed when not in use. Avoid contact with skin and eyes. Do not eat, o using this product. Wash hands and other exposed areas with mild soa eating, drinking or smoking and when leaving work.	drink or smoke when	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions : Store in original container. Keep container closed when not in use. Sto ventilated place.	re in a dry, cool and well-	

Incompatible materials

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OEIs not established
Ethyl 4-bromol	outyrate (2969-81-5)	
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OEIs not established
N-methylanilin	e (100-61-8)	
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OEIs not established
N-hydroxysuco	cinimide (6066-82-6)	
ACGIH	Remark (ACGIH)	OELs not established
OSHA	Remark (OSHA)	OEls not established

: No data available.

## 8.2. Appropriate engineering controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

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## 8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment symbol(s):



#### Personal protective equipment:

Gloves. Protective goggles. Wear chemically impervious apron over labcoat and full coverage clothing.

#### Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

#### Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

#### Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

#### **Respiratory protection:**

Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. Where dust exceeds PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

### **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties		
Physical state	: Solid	
Appearance	: Powder.	
Color	: Red	
Odor	: No data available	
Odor threshold	: No data available	
pH	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Flammability (solid, gas)	: No data available	
Vapor pressure	: No data available	
Relative vapor density at 20 °C	: No data available	
Relative density	: No data available	
Solubility	: No data available	
Partition coefficient n-octanol/water (Log Pow)	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Viscosity, kinematic	: Not applicable	
Viscosity, dynamic	: No data available	
Explosive limits	: No data available	
Explosive properties	: No data available	
Oxidising properties	: No data available	

#### 9.2. Other information

No additional information available

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#### SECTION 10: Stability and reactivity

### 10.1. Reactivity

Air and moisture sensitive.

## 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

#### 10.3. Possibility of hazardous reactions

None under normal use.

## 10.4. Conditions to avoid

None under normal use.

#### 10.5. Incompatible materials

None known.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information		
11.1. Information on toxicological effects		
Acute toxicity (oral)	: Harmful if swallowed.	
Acute toxicity (dermal)	: Harmful in contact with skin.	
Acute toxicity (inhalation)	: Harmful if inhaled.	
N-methylaniline (100-61-8)		
LD50 oral rat	716 – 782 mg/kg	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: May cause cancer.	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: Not applicable	
Symptoms/effects	: Causes skin irritation. Causes serious eye irritation. May cause cancer. May be harmful if swallowed or if inhaled.	
Symptoms/effects after inhalation	: May be harmful if inhaled.	
Symptoms/effects after skin contact	: Causes skin irritation.	
Symptoms/effects after eye contact	: Causes serious eye irritation.	
Symptoms/effects after ingestion	: May cause gastrointestinal irritation.	

## **SECTION 12: Ecological information**

12.1.	Toxicity	
Ecology - general		: No data available.
12.2.	Persistence and degradability	
No addi		
12.3.	Bioaccumulative potential	
No addi		
12.4.	Mobility in soil	
No additional information available		
12.5.	Other adverse effects	
Other	adverse effects	: No data available.

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# SECTION 13: Disposal considerations

13.1	Disposal methods		
Wa	ste treatment methods	: Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.	
Pro	duct/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.	

## SECTION 14: Transport information

## Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

## Transport by sea (IMDG)

Not regulated for transport

## Air transport (IATA)

Not regulated for transport

## **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

BHQ-1 Succinimidyl Ester				
Inactive) Requirements Rule" ("the Fi	nal Rule") of Feb 2019, as	e EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active amended Feb 2021 or are otherwise exempt, or regulated by other agencies in the "TSCA Inventory Notification (Active-Inactive) list.		
Ethyl 4-bromobutyrate	(CAS-No.) 2969-81-5			
SARA Section 311/312 Hazard Classes		Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation Health hazard – Carcinogenicity Health hazard - Acute toxicity (any route of exposure)		

#### 15.2. International regulations

No additional information available

### 15.3. US State regulations

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Component	State or local regulations
N-methylaniline(100-61-8)	U.S Pennsylvania - RTK (Right to Know) List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Massachusetts - Right To Know List

## **SECTION 16: Other information**

NFPA health hazard	: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
NFPA fire hazard	<ul> <li>Constraints that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.</li> </ul>
NFPA reactivity	<ul> <li>O - Material that in themselves are normally stable, even under fire conditions.</li> </ul>

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HMIS Hazard Rating			
Health	:	3	
Flammability	:	0	
Physical	:	0	

Indication of changes: Revision 1.0: New SDS Created.

This information is disclosed to the best of LGC's knowledge. This document does not constitute a contractual relationship with product end users or handlers with respect to the possible presence of hazards in this item. Disposal should be in accordance with applicable regional, national and local laws and regulations.