

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 01/27/2022 Version: 1.0

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture

Product name : BHQ-2 dT linker Amidite

Product code : BNS-5052T

#### 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

Skin Corr. 1B H314 Eye Dam. 1 H318 Skin Sens. 1 H317

#### 2.2. GHS Label elements, including precautionary statements

### **GHS US labelling**

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

Precautionary statements (GHS US) : P260 - Do not breathe dust.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear eye protection, protective gloves, protective clothing. P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.

P302+P352 - If on skin: Wash with plenty of soap and water.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call poison center/doctor/...

 ${\sf P333+P313-If\ skin\ irritation\ or\ rash\ occurs:\ Get\ medical\ advice/attention.}$ 

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

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

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

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	<b>%</b> *
Benzenediazonium, 2,5-dimethoxy-4-[(4-nitrophenyl)azo]-, (T-4)-tetrachlorozincate(2-) (2:1)	(CAS-No.) 64071-86-9	15 – 40
Phosphorodiamidous acid, tetrakis(1-methylethyl)-,2-cyanoethyl ester	(CAS-No.) 102691-36-1	10 – 30
Ethanol, 2-(ethylphenylamino)-	(CAS-No.) 92-50-2	7 – 13
Bis(p-nitrophenyl) carbonate	(CAS-No.) 5070-13-3	1 – 5

<sup>\*</sup> In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret

#### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

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 difficult, supply oxygen. If breathing has stopped, give artificial

respiration.

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 immediately.

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. Get medical attention immediately. Continue rinsing.

First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison

control center or medical professional. Get medical attention immediately.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes severe skin burns and eye damage. May cause an allergic skin reaction.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : May cause an allergic skin reaction. Causes severe skin burns.

Symptoms/effects after eye contact : Causes serious eye damage.

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. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder.

Unsuitable extinguishing media : Carbon dioxide (CO2). Water.

## 5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

Explosion hazard : Product is not explosive.

Reactivity : No dangerous reactions known under normal conditions of use.

## 5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so.

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed

containers. Do not dispose of fire-fighting water in the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Self-contained breathing apparatus.

## **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 by trained cleaning

personnel properly equipped with respiratory and eye protection.

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#### 6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air

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

For containment : Contain and collect as any solid. Sweep or shovel spills into appropriate container for disposal.

Methods for cleaning up : Wear suitable protective clothing. Take up mechanically (sweeping, shovelling) and collect in

suitable container for disposal. This material and its container must be 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 understood. Keep container

closed when not in use. Avoid contact with skin and eyes. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap

and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container closed when not in use. Store in a dry, cool and well-

ventilated place.

Incompatible materials : Air. Moisture.

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

Phosphorodiamidous acid, tetrakis(1-methylethyl)-,2-cyanoethyl ester (102691-36-1)			
ACGIH	Remark (ACGIH)	OELs not established	
OSHA	Remark (OSHA)	OELs not established	
Benzenediazonium, 2,5-dimethoxy-4-[(4-nitrophenyl)azo]-, (T-4)-tetrachlorozincate(2-) (2:1) (64071-86-9)			
ACGIH	Remark (ACGIH)	OELs not established	
OSHA	Remark (OSHA)	OELs not established	
Ethanol, 2-(ethylphenylamino)- (92-50-2)			
ACGIH	Remark (ACGIH)	OELs not established	
OSHA	Remark (OSHA)	OELs not established	
Bis(p-nitrophenyl) carbonate (5070-13-3)			
ACGIH	Remark (ACGIH)	OELs not established	
OSHA	Remark (OSHA)	OELs not established	

## 8.2. Appropriate engineering controls

Appropriate engineering controls

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<sup>:</sup> 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. Protective clothing. [In case of inadequate ventilation] wear respiratory protection.

#### 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 vapor, mist, or dust exceed 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 : Dark purple
Odor : Odorless

Odor Odor threshold : No data available No data available pН : No data available Melting point No data available Freezing point : No data available Boiling point 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 : No data available Decomposition temperature Viscosity, kinematic : Not applicable Viscosity, dynamic : No data available : No data available Explosive limits : No data available Explosive properties

#### 9.2. Other information

Oxidising properties

No additional information available

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: No data available

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#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 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

Air contact. Moisture.

### 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) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Ethanol. 2-(ethylphenylamino)- (92-50	0-21	
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LD50 oral rat	1640 ma/ka

Skin corrosion/irritation: Causes severe skin burns.Serious eye damage/irritation: Causes serious eye damage.Respiratory or skin sensitisation: May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : Not applicable

Symptoms/effects : Causes severe skin burns and eye damage. May cause an allergic skin reaction.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : May cause an allergic skin reaction. Causes severe skin burns.

Symptoms/effects after eye contact : Causes serious eye damage.
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 additional information available

#### 12.3. Bioaccumulative potential

No additional information available

## 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

Waste 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.

Product/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

Transport document description (DOT) : UN3263 Corrosive solid, basic, organic, n.o.s. (contains: Ethanol, 2-(ethylphenylamino)-), 8, II

UN-No.(DOT) : UN3263

Proper Shipping Name (DOT) : Corrosive solid, basic, organic, n.o.s.

contains: Ethanol, 2-(ethylphenylamino)-

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : II - Medium Danger Hazard labels (DOT) : 8 - Corrosive



DOT Quantity Limitations Passenger aircraft/rail : 15 kg

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 50 kg

CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

DOT Vessel Stowage Other : 52 - Stow "separated from" acids

Emergency Response Guide (ERG) Number : 154

Other information : No supplementary information available.

Transport by sea (IMDG)

Transport document description (IMDG) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. (contains: Ethanol, 2-

(ethylphenylamino)-), 8, II

UN-No. (IMDG) : 3263

Proper Shipping Name (IMDG) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.

Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : II - substances presenting medium danger

Limited quantities (IMDG) : 1 kg

Air transport (IATA)

Transport document description (IATA) : UN 3263 Corrosive solid, basic, organic, n.o.s. (contains: Ethanol, 2-(ethylphenylamino)-), 8, II

UN-No. (IATA) : 326

Proper Shipping Name (IATA) : Corrosive solid, basic, organic, n.o.s.

Class (IATA) : 8 - Corrosives
Packing group (IATA) : II - Medium Danger

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#### **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

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All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb. 2019, as amended Feb. 2021, or are otherwise exempt or regulated by other agencies such as FDA or FIFRA, except CAS# 102691-36-1 and 5070-13-3.		
SARA Section 311/312 Hazard Classes	Health hazard - Respiratory or skin sensitization Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation	

#### 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
Ethanol, 2-(ethylphenylamino)- (92-50-2)	U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List

#### **SECTION 16: Other information**

Other information : Author: EMA.

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions,

including intrinsically noncombustible materials such as

concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.

**HMIS Hazard Rating** 

Health : 2\*

\* - Chronic (long-term) health effects may result from repeated overexposure

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.

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