

According to the UN GHS revision 8

Version: 1.0 Creation Date: July 15, 2019 Revision Date: July 15, 2019

1.	Identification			
1.1	GHS Product identifier			
	Product name	Bis-Biotin-PEG23		
1.2	Other means of identification			
	Product number Other names	-		
1.3	Recommended use of the chemical and restrictions on use			
	Identified uses Uses advised against	Industrial and scientific research uses. no data available		
1.4	Supplier's details			
	Company Address Telephone Fax	Target molecule Corp. 36 Washington Street, Wellesley Hills, MA 02481 USA (781) 999-4286 (781)-999-5354		
1.5	Emergency phone number			
	Emergency phone number Service hours	(781)-999-5354 Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).		
2.	Hazard identification			
2.1	Classification of the substance or mixture			
	no data available			
2.2	GHS label elements, including precautionary statements			
	Pictogram(s) Signal word Hazard statement(s) Precautionary statement(s) Prevention Response Storage	no data available no data available no data available no data available no data available no data available		
• •	Disposal	no data available		
2.3	Other hazards which do not result in classification			

no data available

# 3. Composition/information on ingredients

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Bis-Biotin-PEG23	Bis-Biotin-PEG23	293298-36-9	no data available	100%

# 4. First-aid measures

#### 4.1 Description of necessary first-aid measures

#### General advice

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

# Following eye contact

Rinse with water. Consult a doctor immediately.

### **Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison

Control Center immediately

# 4.2 Most important symptoms/effects, acute and delayed

no data available

# 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Wear personal protective equipment.

# 5. Fire-fighting measures

# 5.1 Extinguishing media

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

# 5.2 Specific hazards arising from the chemical

no data available

# 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary

# 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use sparkproof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# 7. Handling and storage

# 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

# 7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

# 8. Exposure controls/personal protection

#### 8.1 Control parameters

#### **Occupational Exposure limit values**

no data available

# 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the riskelimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection. Wear tightly fitting safety goggles with side-shields conforming to EN 2229(EU) or NIOSH (US). Skin protection. Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. Respiratory protection. If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator. Thermal hazards. no data available

# 9. Physical and chemical properties

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Physical state	solid
Odour	no data available
Melting point/ freezing point	no data available
Boiling point or initial boiling point and boiling range	no data available
Flammability	no data available
Lower and upper explosion limit /	no data available
flammability limit	
Flash point	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	no data available
Partition coefficient n-octanol/water	no data available
Vapour pressure	no data available
Density and/or relative density	no data available

	Relative vapour density Particle characteristics	no data available no data available			
10.	Stability and reactivity				
10.1	Reactivity				
	no data available				
10.2	Chemical stability				
	Stable under proper conditions				
10.3					
	no data available				
10.4	Conditions to avoid				
	no data available				
10.5	Incompatible materials				
	no data available				
10.6	Hazardous decompositio	n products			
	no data available				
11.	Toxicological informati	on			
	Acute toxicity				
	no data available				
	Skin corrosion/irritation				
	no data available				
	Serious eye damage/irritation				
	no data available				
	Respiratory or skin sensitizatio	n			
	no data available				
	Germ cell mutagenicity				
	no data available				
	Carcinogenicity no data available				
	Reproductive toxicity				
	no data available				
	STOT-single exposure				
	no data available				
	STOT-repeated exposure				
	no data available				
	Aspiration hazard				
	no data available				
12.	<b>Ecological information</b>				
12.1	Toxicity				
	no data available				
12.2	Persistence and degradab	oility			
	no data available				
12.3	Bioaccumulative potentia	al			
	no data available				

- 12.4 Mobility in soil no data available
- 12.5 Other adverse effects

no data available

#### Disposal considerations 13.

#### 13.1 **Disposal methods**

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14.	Transport information				
14.1	UN Number				
	no data available				
14.2	UN Proper Shipping Name				
	no data available				
14.3	Transport hazard class(es	)			
	no data available				
14.4	Packing group, if applicable				
	no data available				
14.5	Environmental hazards				
	ADR/RID: No	IMDG: No	IATA: No		
14.6	Special precautions for us	ser			
	no data available				
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code				
	no data available				
15.	Regulatory information				
15.1	Safety, health and environmental regulations specific for the product in question				
	Not Listed.				
16.	Other information				
	Information on revision				
	Creation Date Revision Date	July 15, 2019 July 15, 2019			
	Abbreviations and acronyms				
	<ul> <li>CAS: Chemical Abstracts Service</li> <li>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road</li> <li>RID: Regulation concerning the International Carriage of Dangerous Goods by Rail</li> <li>IMDG: International Maritime Dangerous Goods</li> <li>IATA: International Air Transportation Association</li> <li>TWA: Time Weighted Average</li> <li>STEL: Short term exposure limit</li> <li>LC50: Lethal Concentration 50%</li> <li>EC50: Effective Concentration 50%</li> </ul>				
	References				
	IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm IARC - International Agency for				

Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/ eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/smple ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp ERG -Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2320.jsp ECHA - European Chemicals Agency, website: https://echa.europa.eu/

#### For Research Use Only

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.