

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 01/01/2021 Revision date: 16/01/2023 Supersedes version of: 10/05/2021 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Substance name Product code

: Substance : ATTO 540Q biotin : AD 5400-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Fluorescent label, labeling of bio-molecules

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

ATTO-TEC GmbH Martinshardt 7 57074 Siegen T +49-271-23853-0 - F +49-271-23853-11 info@atto-tec.com www.atto-tec.com

1.4. Emergency telephone number

Emergency number

: +49-271-23853-0 (8:30 - 16:30)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements	
Labelling according to Regulation (EC) No. 1	272/2008 [CLP]
Precautionary statements (CLP)	: P102 - Keep out of reach of children. P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
EUH-statements	: EUH210 - Safety data sheet available on request.
2.3. Other hazards	

No additional information available

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients 3.1. Substances			
Name	Product identifier	%	
ATTO 540Q biotin	AD 540Q-7	100	
3.2. Mixtures			

Not applicable

SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures after inhalation First-aid measures after skin contact	 Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. 			
First-aid measures after eye contact	: Rinse eyes with water as a precaution.			
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. 4.2. Most important symptoms and effects, both acute and delayed				
No additional information available				
4.3. Indication of any immediate medical attention and special treatment needed				
Treat symptomatically.				

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Water spray. Dry powder. Foam.		
5.2. Special hazards arising from the substance or mixture			
Hazardous decomposition products in case of fire	: Toxic fumes may be released.		
5.3. Advice for firefighters			
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	ipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containme	nt and cleaning up
Methods for cleaning up Other information	Mechanically recover the product.Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, include	ing any incompatibilities
Storage conditions 7.3. Specific end use(s)	: Store at -20°C
No additional information available	

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:	
Protective goggles (EN 166)	

8.2.2.2. Skin protection

Skin and body protection:	
Wear suitable protective clothing	

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Hand protection:					
Protective gloves	Protective gloves				
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,2	1 (< 4.0)	EN 374-3, EN 374-2

8.2.2.3. Respiratory protection

Respiratory protection:	
No respiratory protection needed under normal use conditions	

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties				
9.1. Information on basic physical and chemical properties				
Physical state	: Solid			
Colour	: Various colours.			
Odour	: odourless.			
Odour threshold	: Not available			
Melting point	: Not available			
Freezing point	: Not available			
Boiling point	: Not available			
Flammability	: Not available			
Explosive limits	: Not applicable			
Lower explosion limit	: Not applicable			
Upper explosion limit	: Not applicable			
Flash point	: Not applicable			
Auto-ignition temperature	: Not applicable			
Decomposition temperature	: Not available			
рН	: Not available			
pH solution	: Not available			
Viscosity, kinematic	: Not applicable			
Solubility	: In water: low	Soluble in: dimethyl sulfoxide, dimethylformamide, acetonitrile		
Partition coefficient n-octanol/water (Log Kow)	: Not available			
Vapour pressure	: Not available			
Vapour pressure at 50 °C	: Not available			
Density	: Not available			
Relative density	: Not available			
Relative vapour density at 20 °C	: Not applicable			
Particle size	: Not available			
Particle size distribution	: Not available			
Particle shape	: Not available			
Particle aspect ratio	: Not available			
Particle aggregation state	: Not available			
Particle agglomeration state	: Not available			
Particle specific surface area	: Not available			
Particle dustiness	: Not available			

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

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 hazard classes as defined in Regulation (EC) No 1272/2008

	3 (
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
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
11.2. Information on other hazards	

No additional information available

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.	
Hazardous to the aquatic environment, short-term (acute)	: Not classified	
Hazardous to the aquatic environment, long-term (chronic)	: Not classified	

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

2.2. Persistence and degradability
o additional information available
2.3. Bioaccumulative potential
o additional information available
2.4. Mobility in soil
o additional information available
2.5. Results of PBT and vPvB assessment
o additional information available
2.6. Endocrine disrupting properties
o additional information available
2.7. Other adverse effects
o additional information available

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.	

accordance with ADR / IMD	G / IATA / ADN / RID			
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID nu	mber			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping	name			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard cla	ass(es)			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental haza	rds			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

14.6. Special precautions for user

Overland transport Not regulated Transport by sea Not regulated Air transport Not regulated Inland waterway transport

Not regulated Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

SDB Fluoreszenzmarker is not on the REACH Candidate List

SDB Fluoreszenzmarker is not on the REACH Annex XIV List

SDB Fluoreszenzmarker is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

SDB Fluoreszenzmarker is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other	information	
Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
EUH210	Safety data sheet available on request.

The classification complies with : ATP 12

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.