

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: 11/05/2021 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 MB2 azide : AD MB2-10

#### 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<br>Medical Toxicology Unit, Guy's & St<br>Thomas' Hospital Trust | Avonley Road<br>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. | 1272/2008 [CLP]                                                                                                         |
| Precautionary statements (CLP)             | : P102 - Keep out of reach of children.<br>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<br>3.1. Substances |                    |     |  |
|----------------------------------------------------------------------|--------------------|-----|--|
| Name                                                                 | Product identifier | %   |  |
| ATTO MB2 azide                                                       | AD MB2-10          | 100 |  |
| 3.2. Mixtures                                                        |                    |     |  |

Not applicable

| SECTION 4: First aid measures                                    |                                                                  |  |  |
|------------------------------------------------------------------|------------------------------------------------------------------|--|--|
| 4.1. Description of first aid measures                           |                                                                  |  |  |
| First-aid measures after inhalation                              | : Remove person to fresh air and keep comfortable for breathing. |  |  |
| First-aid measures after skin contact                            | : 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 medica                          | I 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<br>Other information | <ul><li>Mechanically recover the product.</li><li>Dispose of materials or solid residues at an authorized site.</li></ul>                                   |
| 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, inclu     | ding 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 |                      |                   |                |             |                    |
| 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 prope          | erties               |                                                                 |
|-------------------------------------------------|----------------------|-----------------------------------------------------------------|
| 9.1. Information on basic physical and chemic   | cal 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: moderate | 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

| Acute toxicity (oral)<br>Acute toxicity (dermal)<br>Acute toxicity (inhalation)                                                              | <ul><li>Not classified</li><li>Not classified</li><li>Not classified</li></ul>                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Skin corrosion/irritation<br>Serious eye damage/irritation<br>Respiratory or skin sensitisation<br>Germ cell mutagenicity<br>Carcinogenicity | <ul> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul> |
| 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

| 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. Results of PBT and vPvB assessment |
| No additional information available      |
| 12.6. Endocrine disrupting properties    |
| No additional information available      |
| 12.7. Other adverse effects              |
| No 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. |  |

| n accordance with ADR / IMD | OG / 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 cl   | 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    | irds                  | -             |               | •             |
| 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 in        | formation                                                                                       |  |
|-----------------------------|-------------------------------------------------------------------------------------------------|--|
| 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                                                                     |  |
| РВТ                         | 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.