

**Safety Data Sheet**

according to UK REACH Regulation

**Methylene Blue 0.03 %, aqueous**

Revision date: 02.09.2024

Product code: 18043.xxxxx

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Methylene Blue 0.03 %, aqueous

UFI: 73YK-D1GY-A00G-2VE4

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

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

**Uses advised against**

Any non-intended use.

**1.3. Details of the supplier of the safety data sheet**

|                 |                                    |                                   |
|-----------------|------------------------------------|-----------------------------------|
| Company name:   | MORPHISTO GmbH                     |                                   |
| Street:         | Schumannstr. 144                   |                                   |
| Place:          | D-63069 Offenbach                  |                                   |
| Telephone:      | +49 (0) 69 / 400 3019-60           | Telefax: +49 (0) 69 / 400 3019-64 |
| E-mail:         | info@morphisto.de                  |                                   |
| Contact person: | Morphisto GmbH                     |                                   |
| E-mail:         | gefahrstoffmanagement@morphisto.de |                                   |
| Internet:       | http://www.morphisto.de            |                                   |

**1.4. Emergency telephone number:**

Morphisto GmbH, Tel: +49(0)69 400 3019-60, Mo-Fr.: 09-16 Uhr

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

**2.2. Label elements****Additional advice on labelling**

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

**2.3. Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

aqueous solution

**Relevant ingredients**

none (according to UK REACH Regulation)

**Further Information**

This product contains no substances of very high concern (SVHC) (&gt;0,1%) which are included in the Candidate

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List according to Article 59 of REACH.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with: Water. In case of skin irritation, seek medical treatment.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

Observe risk of aspiration if vomiting occurs. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting.

**4.2. Most important symptoms and effects, both acute and delayed**

No 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**

Co-ordinate fire-fighting measures to the fire surroundings. Water spray. alcohol resistant foam. dry extinguishing powder.

**Unsuitable extinguishing media**

High power water jet.

**5.2. Special hazards arising from the substance or mixture**

Non-flammable. In case of fire may be liberated: Gas/vapours, harmful.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation.

Wear personal protection equipment. (See protective measures under section 7 and 8. )

**6.2. Environmental precautions**

Discharge into the environment must be avoided.

**6.3. Methods and material for containment and cleaning up****For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

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**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Wear suitable protective clothing. (See section 8.)

Use extractor hood (laboratory).

**Advice on protection against fire and explosion**

Usual measures for fire prevention. The product itself does not burn.

**Advice on general occupational hygiene**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

**Further information on handling**

Avoid contact with skin, eyes and clothes.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place.

**Hints on joint storage**

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances.

**Further information on storage conditions**

Protect against: UV-radiation/sunlight.

Recommended storage temperature: 15-25 °C

**7.3. Specific end use(s)**

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Additional advice on limit values**

Does not contain substances above concentration limits fixing an occupational exposure limit.

**8.2. Exposure controls****Appropriate engineering controls**

Use extractor hood (laboratory).

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear eye protection/face protection. Suitable eye protection: Tightly sealed safety glasses. EN 166

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Pull-over gloves of rubber. EN ISO 374

PVC (Polyvinyl chloride). (0,5 mm)

Butyl rubber. (0,5 mm)

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them

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before taking off and air them well.

**Skin protection**

Use of protective clothing. Lab apron.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required.

**Environmental exposure controls**

No special measures are necessary.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                                                           |                        |
|-----------------------------------------------------------|------------------------|
| Physical state:                                           | liquid                 |
| Colour:                                                   | blue                   |
| Odour:                                                    | characteristic         |
| Melting point/freezing point:                             | ~0 °C                  |
| Boiling point or initial boiling point and boiling range: | 100 °C                 |
| Flammability:                                             | not determined         |
| Lower explosion limits:                                   | not determined         |
| Upper explosion limits:                                   | not determined         |
| Flash point:                                              | >100 °C                |
| Auto-ignition temperature:                                | not determined         |
| Decomposition temperature:                                | not determined         |
| pH-Value (at 20 °C):                                      | 5-6                    |
| Viscosity / kinematic:                                    | not determined         |
| Water solubility:<br>(at 20 °C)                           | miscible.              |
| Solubility in other solvents                              | not determined         |
| Partition coefficient n-octanol/water:                    | not determined         |
| Vapour pressure:<br>(at 20 °C)                            | 23 hPa                 |
| Density (at 20 °C):                                       | 1,00 g/cm <sup>3</sup> |
| Relative vapour density:                                  | not determined         |
| Particle characteristics:                                 | not applicable         |

**9.2. Other information****Information with regard to physical hazard classes****Explosive properties**

The product is not: Explosive.

**Oxidizing properties**

The product is not: oxidising.

**Other safety characteristics**

|                   |                |
|-------------------|----------------|
| Evaporation rate: | not determined |
| Solvent content:  | not determined |
| Solid content:    | not determined |

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Stable under normal storage and handling conditions.

**10.2. Chemical stability**

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No information available.

**10.3. Possibility of hazardous reactions**

Substances that form flammable gases when in contact with water.

**10.4. Conditions to avoid**

Keep away from heat. Protect from moisture.

**10.5. Incompatible materials**

Oxidizing agents, strong. Reducing agents, strong.

**10.6. Hazardous decomposition products**

In case of fire may be liberated: Gas/vapours, harmful.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

Based on available data, the classification criteria are not met.

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**11.2. Information on other hazards****Endocrine disrupting properties**

This product does not contain any substance that has endocrine disrupting properties in humans as no ingredient meets the criteria.

**Other information**

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

**SECTION 12: Ecological information****12.1. Toxicity**

Based on available data, the classification criteria are not met.

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

No indication of bioaccumulation potential.

**12.4. Mobility in soil**

No information available.

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#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

No information available.

#### Further information

Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal.

##### List of Wastes Code - residues/unused products

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

##### List of Wastes Code - used product

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

##### List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

##### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Non-contaminated packages may be recycled.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

- 14.1. UN number or ID number:  
14.2. UN proper shipping name:  
14.3. Transport hazard class(es):  
14.4. Packing group:

No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)

- 14.1. UN number or ID number:  
14.2. UN proper shipping name:  
14.3. Transport hazard class(es):  
14.4. Packing group:

No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

- 14.1. UN number or ID number:  
14.2. UN proper shipping name:  
14.3. Transport hazard class(es):  
14.4. Packing group:

No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.

#### Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number or ID number:  
14.2. UN proper shipping name:  
14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.  
No dangerous good in sense of this transport regulation.  
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**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Refer to section 6-8

**14.7. Maritime transport in bulk according to IMO instruments**

not relevant

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 75

Information according to Directive  
2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

**Additional information**

This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [CLP].

**National regulatory information**

Water hazard class (D):

- - non-hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,9,11,12,13,14,15,16.

Rev. 2,0; 06.07.2022, Individual safety data sheet based on 13312\_collect

Rev. 2,1; 02.09.2024, general adjustment(s)

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**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations

Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect concentration

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

EC/EEC: European Community/European Economic Community

EU: European Union

M-factor: Multiplying factor

IATA: International Air Transport Association

DGR: Dangerous Goods Regulations

ICAO: International Civil Aviation Organization

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TI: Technical Instructions

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*