

Safety Data Sheet

according to UK REACH Regulation

MAY GRÜNWARD Eosin-Methylen Blue (CI-No. 52015 & 45380)

Revision date: 05.09.2022

Product code: 17627.xxxxx

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

1.1. Product identifier

MAY GRÜNWARD Eosin-Methylen Blue (CI-No. 52015 & 45380)

UFI: MKRH-G1Q5-W00K-6FDN

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

none

1.3. Details of the supplier of the safety data sheet

Company name: MORPHISTO GmbH
Street: Schumannstr. 142/144
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: info@morphisto.de
Internet: http://www.morphisto.de

1.4. Emergency telephone number:

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Signal word: Warning

Pictograms:



Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

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3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
17372-87-1	Eosin Y (disodium 2-(2,4,5,7-tetrabromo-6-oxido-3-oxoxanthen-9-yl)benzoate)			50 - < 55 %
	241-409-6			
	Eye Irrit. 2; H319			
122965-43-9	Methylene Blue Hydrate			50 - < 55 %
	200-515-2			
	Repr. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 1, STOT RE 1, Aquatic Chronic 3; H361fd H302 H315 H319 H370 H372 H412			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
17372-87-1	241-409-6	Eosin Y (disodium 2-(2,4,5,7-tetrabromo-6-oxido-3-oxoxanthen-9-yl)benzoate)	50 - < 55 %
	oral: LD50 = 2344 mg/kg		
122965-43-9	200-515-2	Methylene Blue Hydrate	50 - < 55 %
	dermal: LD50 = 1250 mg/kg; oral: LD50 = 1180 mg/kg		

Further Information

Full text of R- and H-phrases: see section 16.

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. No special measures are necessary. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Take off contaminated clothing and wash it before reuse. Wash with plenty of water. In case of skin irritation, seek medical treatment.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink 1 glass of water. Rinse mouth thoroughly with water. Let water be drunk in little sips (dilution effect). In all cases of doubt, or when symptoms persist, seek medical advice.

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

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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Treat symptomatically.

SECTION 5: Firefighting measures

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5.1. Extinguishing media**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

none

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). Bromine hydrogen (HBr).

5.3. Advice for firefighters

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

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. 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. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Wear personal protection equipment. (See section 8.)

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided.

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

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

Other information

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. Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Clear contaminated areas thoroughly. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13 See protective measures under point 7 and 8.

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

Wear suitable protective clothing. (See section 8.) Do not breathe dust.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary.

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When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

Further information on handling

Conditions to avoid: Generation/formation of dust

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Recommended storage temperature: 20°C

Hints on joint storage

Do not store together with: Oxidizing substances.

Further information on storage conditions

Keep/Store only in original container. Protect against: frost. heat. Cold. Humidity

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

refer to chapter 7. No further action is necessary.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. 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. In case of prolonged or frequently repeated skin contact:

Pull-over gloves of rubber. EN ISO 374

Suitable material:

Butyl rubber.

FKM (fluororubber).

CR (polychloroprenes, Chloroprene rubber).

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Use of protective clothing. Suitable 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

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

Physical state:	solid
Colour:	light brown
Odour:	odourless
Melting point/freezing point:	139-141 °C
Boiling point or initial boiling point and boiling range:	N/A
Flammability	
Solid/liquid:	not determined
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	N/A
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	N/A
Viscosity / kinematic:	not determined
Water solubility:	partially soluble
Solubility in other solvents	
none	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	not determined
Bulk density (at 20 °C):	500 kg/m ³
Relative vapour density:	not determined

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

Explosive properties

The product is not: Explosive.

Oxidizing properties

none

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Viscosity / dynamic:

not determined

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

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10.2. Chemical stability

Stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions

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10.4. Conditions to avoid

Keep away from heat. Protect against: frost.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong.

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10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). Bromine hydrogen (HBr).

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.

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
17372-87-1	Eosin Y (disodium 2-(2,4,5,7-tetrabromo-6-oxido-3-oxoxanthen-9-yl)benzoate)				
	oral	LD50 mg/kg	2344	Mouse.	
122965-43-9	Methylene Blue Hydrate				
	oral	LD50 mg/kg	1180	Rat	External SDS
	dermal	LD50 mg/kg	1250	Rat	External SDS

Irritation and corrosivity

Causes serious eye irritation.

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

There are no data available on the preparation/mixture itself.

Sensitising effects

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

There are no data available on the preparation/mixture itself.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Ames test negative.

ZEIGER,E, ANDERSON,B, HAWORTH,S, LAWLOR,T AND MORTELMANS,K; SALMONELLA MUTAGENICITY TESTS. V. RESULTS FROM THE TESTING OF 311 CHEMICALS; ENVIRON. MOL. MUTAGEN. 19(SUPPL.21):2-141, 1992

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.

There are no data available on the preparation/mixture itself.

Aspiration hazard

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

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
122965-43-9	Methylene Blue Hydrate					
	Acute fish toxicity	LC50	15 mg/l	96 h	Pimephales promelas	External SDS
	Acute crustacea toxicity	EC50	2260 mg/l	48 h	Daphnia magna	External SDS

12.2. Persistence and degradability

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12.3. Bioaccumulative potential

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12.4. Mobility in soil

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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.

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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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

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14.1. UN number or ID number: Not restricted**14.2. UN proper shipping name:** Not restricted**Inland waterways transport (ADN)****14.1. UN number or ID number:** Not restricted**14.2. UN proper shipping name:** Not restricted**Marine transport (IMDG)****14.1. UN number or ID number:** Not restricted**14.2. UN proper shipping name:** Not restricted**Other applicable information (marine transport)**

Not restricted

Air transport (ICAO-TI/IATA-DGR)**Other applicable information (air transport)**

Not restricted

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 3 - highly 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**

18.06.2012 Rev.1.0 Initial release

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)

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LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
SVHC: substances of very high concern
PBT: Substances which are persistent, bioaccumulative and toxic
vPvB: very persistent and very bioaccumulative
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
MFAAG: Medical First Aid Guide
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
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).

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

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 hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)