according to Regulation (EC) No. 1907/2006 (REACH)

Wright's eosin methylene blue solution for microscopy

article number: CN05 date of compilation: 2019-10-07 Version: **2.0 en** Revision: 2021-09-15

Replaces version of: 2019-10-07

Version: (1)

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

Product identifier 1.1

Identification of the substance Wright's eosin methylene blue solution for mi-

croscopy

Article number **CN05**

Registration number (REACH) not relevant (mixture)

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

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

Uses advised against: Do not use for products which come into contact

with foodstuffs. Do not use for private purposes

(household).

1.3 Details of the supplier of the safety data sheet

> Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment

sheet:

sicherheit@carlroth.de e-mail (competent person):

1.4 **Emergency telephone number**

| Name | Street | Postal code/city | Telephone | Website |
|--|-----------|----------------------|--------------|---------|
| National Poisons Information Service City Hospital | Dudley Rd | B187QH Birmingham | 844 892 0111 | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

| Section | Hazard class | Cat- egory | Hazard class and category | Hazard statement |
|---------|---------------------------|---------------|---------------------------|---------------------|
| 2.6 | Flammable liquid | 2 | Flam. Liq. 2 | H225 |
| 3.10 | Acute toxicity (oral) | 3 | Acute Tox. 3 | H301 |
| 3.1D | D Acute toxicity (dermal) | | Acute Tox. 3 | H311 |
| 3.1I | Acute toxicity (inhal.) | 3 | Acute Tox. 3 | H331 |

United Kingdom (en) Page 1 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

| Section | Hazard class | Cat- egory | Hazard class and category | Hazard statement |
|---------|--|---------------|---------------------------|---------------------|
| 3.8 | Specific target organ toxicity - single exposure | 1 | STOT SE 1 | H370 |

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Immediate effects can be expected after short-term exposure. The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word Danger

Pictograms

GHS02, GHS06, GHS08







Hazard statements

H225 Highly flammable liquid and vapour

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled

H370 Causes damage to organs (eye)

Precautionary statements

Precautionary statements - prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking

P280 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements - response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water [or shower]

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

Precautionary statements - storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed

Hazardous ingredients for labelling: Methanol

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Symbol(s)







H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled. H370 Causes damage to organs (eye).

United Kingdom (en) Page 2 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER/doctor. P280

P301+P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. P304+P340

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

contains: Methanol

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 **Substances**

not relevant (mixture)

3.2 **Mixtures**

Description of the mixture

| Name of sub- stance | Identifier | Wt% | Classification acc. to GHS | Pictograms | Notes |
|------------------------|---|-----------|--|------------|-----------------|
| Methanol | CAS No 67-56-1 EC No 200-659-6 Index No 603-001-00-X REACH Reg. No 01-2119433307- 44-xxxx | 80 - < 85 | Flam. Liq. 2 / H225 Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 3 / H331 STOT SE 1 / H370 | | GHS-HC IOELV |
| Glycerine | CAS No 56-81-5 EC No 200-289-5 REACH Reg. No 01-2119471987- 18-xxxx | 8 - 18 | | | IOELV |

Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/

2008/EC, Annex VI)
IOELV: Substance with a community indicative occupational exposure limit value

| Name of sub- stance | Identifier | Specific Conc. Limits | M-Factors | ATE | Exposure route |
|------------------------|---|--|-----------|--|---|
| Methanol | CAS No 67-56-1 EC No 200-659-6 Index No 603-001-00-X | STOT SE 1; H370: C ≥ 10 % STOT SE 2; H371: 3 % ≤ C < 10 % | - | 100 ^{mg} /kg 300 ^{mg} /kg 3 ^{mg} / _I /4h | oral dermal inhalation: va- pour |

For full text of abbreviations: see SECTION 16

United Kingdom (en) Page 3 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off immediately all contaminated clothing. Self-protection of the first aider.

Following inhalation

Call a physician immediately. If breathing is irregular or stopped, administer artificial respiration.

Following skin contact

After contact with skin, wash immediately with plenty of water.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation: Cough, Vertigo, Headache,

Following skin contact: Has degreasing effect on the skin,

After eye contact: Conjunctival redness of the eyes, Conjunctivitis (pink eye),

Following ingestion: Abdominal pain, Malaise, Vomiting, Poisoning effect on central nervous system can cause convulsions, laboured breathing and loss of consciousness, Loss of righting reflex, and ataxia, Serious physical decay of vision, Risk of blindness, Large doses may result in coma and death

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

United Kingdom (en) Page 4 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂), May produce toxic fumes of carbon monoxide if burning.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus. Wear full chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Danger of explosion.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Use extractor hood (laboratory). Handle and open container with care. Clear contaminated areas thoroughly.

Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

United Kingdom (en) Page 5 / 20

according to Regulation (EC) No. 1907/2006 (REACH)

ROTH

Wright's eosin methylene blue solution for microscopy

article number: CN05

Advice on general occupational hygiene

When using do not eat or drink. Thorough skin-cleansing after handling the product. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Store locked up. Ground/bond container and receiving equipment.

Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

| Cou ntr y | Name of agent | CAS No | Identi- fier | TW A [pp m] | TWA [mg/ m³] | STE [PP] | STEL [mg/ m³] | Ceil ing- [pp m] | Ceil- ing-C [mg/ m³] | Nota- tion | Source |
|-----------------|---------------|---------|-----------------|----------------------|--------------------|----------|---------------------|---------------------------|-------------------------------|---------------|----------------|
| EU | methanol | 67-56-1 | IOELV | 200 | 260 | | | | | | 2006/15/ EC |
| GB | glycerol | 56-81-5 | WEL | | 10 | | | | | mist | EH40/ 2005 |
| GB | methanol | 67-56-1 | WEL | 200 | 266 | 250 | 333 | | | | EH40/ 2005 |

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

mist As mists

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-

minute period (unless otherwise specified)

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8

hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture

| Name of sub- stance | CAS No | End- point | Threshol d level | Protection goal, route of exposure | Used in | Exposure time |
|------------------------|---------|---------------|-----------------------|--|-------------------|-------------------------------|
| Methanol | 67-56-1 | DNEL | 130 mg/m ³ | human, inhalat- ory | worker (industry) | chronic - systemic effects |
| Methanol | 67-56-1 | DNEL | 130 mg/m³ | human, inhalat- ory | worker (industry) | acute - systemic effects |

United Kingdom (en) Page 6 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

Relevant DNELs of components of the mixture

| | • | | | | | |
|------------------------|---------|---------------|-----------------------|--|-------------------|-------------------------------|
| Name of sub- stance | CAS No | End- point | Threshol d level | Protection goal, route of exposure | Used in | Exposure time |
| Methanol | 67-56-1 | DNEL | 130 mg/m ³ | human, inhalat- ory | worker (industry) | chronic - local ef- fects |
| Methanol | 67-56-1 | DNEL | 130 mg/m ³ | human, inhalat- ory | worker (industry) | acute - local ef- fects |
| Methanol | 67-56-1 | DNEL | 20 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Methanol | 67-56-1 | DNEL | 20 mg/kg bw/day | human, dermal | worker (industry) | acute - systemic effects |
| Glycerine | 56-81-5 | DNEL | 56 mg/m³ | human, inhalat- ory | worker (industry) | chronic - local ef- fects |

Relevant PNECs of components of the mixture

| Relevante i itzes di components di the inixtare | | | | | | | |
|---|---------|---------------|------------------------------------|----------------------------|---------------------------------|---------------------------------|--|
| Name of sub- stance | CAS No | End- point | Threshol d level | Organism | Environmental compartment | Exposure time | |
| Methanol | 67-56-1 | PNEC | 20,8 ^{mg} / _l | aquatic organ- isms | freshwater | short-term (single instance) | |
| Methanol | 67-56-1 | PNEC | 2,08 ^{mg} / _l | aquatic organ- isms | marine water | short-term (single instance) | |
| Methanol | 67-56-1 | PNEC | 100 ^{mg} / _l | aquatic organ- isms | sewage treatment plant (STP) | short-term (single instance) | |
| Methanol | 67-56-1 | PNEC | 77 ^{mg} / _{kg} | aquatic organ- isms | freshwater sedi- ment | short-term (single instance) | |
| Methanol | 67-56-1 | PNEC | 7,7 ^{mg} / _{kg} | aquatic organ- isms | marine sediment | short-term (single instance) | |
| Methanol | 67-56-1 | PNEC | 100 ^{mg} / _{kg} | terrestrial organ- isms | soil | short-term (single instance) | |
| Glycerine | 56-81-5 | PNEC | 8,85 ^{mg} / _l | aquatic organ- isms | water | intermittent re- lease | |
| Glycerine | 56-81-5 | PNEC | 0,885 ^{mg} / _l | aquatic organ- isms | freshwater | short-term (single instance) | |
| Glycerine | 56-81-5 | PNEC | 0,088 ^{mg} / _l | aquatic organ- isms | marine water | short-term (single instance) | |
| Glycerine | 56-81-5 | PNEC | 1.000 ^{mg} / _l | aquatic organ- isms | sewage treatment plant (STP) | short-term (single instance) | |
| Glycerine | 56-81-5 | PNEC | 3,3 ^{mg} / _{kg} | aquatic organ- isms | freshwater sedi- ment | short-term (single instance) | |
| Glycerine | 56-81-5 | PNEC | 0,33 ^{mg} / _{kg} | aquatic organ- isms | marine sediment | short-term (single instance) | |
| Glycerine | 56-81-5 | PNEC | 0,141 ^{mg} / kg | terrestrial organ- isms | soil | short-term (single instance) | |

United Kingdom (en) Page 7 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection





Use safety goggle with side protection.

Skin protection





hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. 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. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

type of material

Butyl caoutchouc (butyl rubber)

material thickness

0,7mm

· breakthrough times of the glove material

>480 minutes (permeation: level 6)

other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

Respiratory protection





Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.

United Kingdom (en) Page 8 / 20

according to Regulation (EC) No. 1907/2006 (REACH)

ROTH

Wright's eosin methylene blue solution for microscopy

article number: CN05

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state liquid

Colour dark blue

Odour like: - alcohol

Melting point/freezing point not determined

Boiling point or initial boiling point and boiling 65 °C at 1.013 hPa

range

range

05 Cat 1.015 liPa

Flammability flammable liquid in accordance with GHS criteria

Lower and upper explosion limit 99 g/m³ - 435 g/m³ /

2,6 vol% - 44 vol%

Flash point 9,7 °C at 1.013 hPa

Auto-ignition temperature 455 °C

Decomposition temperature not relevant pH (value) 7 (20 °C)

Kinematic viscosity not determined

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Vapour pressure 128 hPa at 20 °C

Density $0.9 \, ^{9}/_{\text{cm}^3}$ at 20 $^{\circ}\text{C}$

Relative vapour density 1,11 (air = 1)

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

Flammable liquids

Sustained combustibility yes, sustained combustion was observed

Other safety characteristics:

United Kingdom (en) Page 9 / 20

according to Regulation (EC) No. 1907/2006 (REACH)

Wright's eosin methylene blue solution for microscopy

article number: CN05

Miscibility completely miscible with water

Temperature class (EU, acc. to ATEX)

Maximum permissible surface temperature on

the equipment: 450°C

SECTION 10: Stability and reactivity

10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition. Vapours may form explosive mixtures with air.

If heated

Risk of ignition.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Danger of explosion: Oxidisers, Perchlorates, Nitrogen oxides (NOx), Chlorates, Halogenated hydrocarbons, Hydrogen peroxide, Nitric acid, Sulphuric acid,

Exothermic reaction with: Reducing agents, Acids, Chlorine, Chloroform, Acid chlorides, inorganic, **Dangerous/dangerous reactions with:** Fluorine, Alkali metals, Alkaline earth metal, strong oxidiser

10.4 Conditions to avoid

UV-radiation/sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

aluminium, iron, zinc, different plastics, Rubber articles

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled.

Acute toxicity estimate (ATE) of components of the mixture

| Name of substance | CAS No | Exposure route | ATE |
|-------------------|---------|--------------------|------------------------------------|
| Methanol | 67-56-1 | oral | 100 ^{mg} / _{kg} |
| Methanol | 67-56-1 | dermal | 300 ^{mg} / _{kg} |
| Methanol | 67-56-1 | inhalation: vapour | 3 ^{mg} / _l /4h |

United Kingdom (en) Page 10 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

| Acute toxicity of componer | Acute toxicity of components of the mixture | | | | | | | | | |
|----------------------------|---|-------------------------|----------|---------------------------------------|---------|--|--|--|--|--|
| Name of substance | CAS No | Exposure route | Endpoint | Value | Species | | | | | |
| Methanol | 67-56-1 | inhalation: va- pour | LC50 | 131 ^{mg} / _l /4h | rat | | | | | |
| Methanol | 67-56-1 | oral | LD50 | 5.628 ^{mg} / _{kg} | rat | | | | | |
| Methanol | 67-56-1 | oral | LDLo | 143 ^{mg} / _{kg} | human | | | | | |
| Methanol | 67-56-1 | dermal | LD50 | 15.800 ^{mg} / _{kg} | rabbit | | | | | |
| Glycerine | 56-81-5 | dermal | LD50 | >10.000 ^{mg} / _{kg} | rabbit | | | | | |
| Glycerine | 56-81-5 | oral | LD50 | 12.600 ^{mg} / _{kg} | rat | | | | | |

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Causes damage to organs (eye).

| Hazard category | Target organ | Exposure route |
|-----------------|--------------|----------------|
| 1 | eye | if exposed |

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

abdominal pain, vomiting, loss of righting reflex, and ataxia, poisoning effect on central nervous system can cause convulsions, laboured breathing and loss of consciousness, risk of blindness, large doses may result in coma and death

• If in eyes

conjunctivitis (pink eye)

United Kingdom (en) Page 11 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

If inhaled

vertigo, cough, headache

• If on skin

has degreasing effect on the skin

• Other information

none

11.2 Endocrine disrupting properties

None of the ingredients are listed.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

| Aquatic toxicity (acute) of components of the mixture | | | | | |
|---|---------|----------|-------------------------------------|--|------------------|
| Name of sub- stance | CAS No | Endpoint | Value | Species | Exposure time |
| Methanol | 67-56-1 | LC50 | 15.400 ^{mg} / _l | fish | 96 h |
| Methanol | 67-56-1 | ErC50 | 22.000 ^{mg} / _l | algae | 96 h |
| Glycerine | 56-81-5 | LC50 | 54.000 ^{mg} / _l | rainbow trout (Onco- rhynchus mykiss) | 96 h |

Biodegradation

Data are not available.

12.2 Process of degradability

| Degradabilit | Degradability of components of the mixture | | | | | |
|-------------------|--|-----------------------|-----------------------|------|--------|--------|
| Name of substance | CAS No | Process | Degrada- tion rate | Time | Method | Source |
| Methanol | 67-56-1 | biotic/abiotic | 99 % | 30 d | | |
| Methanol | 67-56-1 | oxygen deple- tion | 69 % | 5 d | | ECHA |
| Glycerine | 56-81-5 | biotic/abiotic | 63 % | 14 d | | |

12.3 Bioaccumulative potential

Data are not available.

| Bioaccumulative potential of components of the mixture | | | | |
|--|---------|-----|------------------------------|----------|
| Name of substance | CAS No | BCF | Log KOW | BOD5/COD |
| Methanol | 67-56-1 | | -0,77 | |
| Glycerine | 56-81-5 | | -1,75 (pH value: 7,4, 25 °C) | |

United Kingdom (en) Page 12 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number or ID number

| ADR/RID/ADN | UN 1230 |
|-------------|---------|
| IMDG-Code | UN 1230 |
| ICAO-TI | UN 1230 |

14.2 UN proper shipping name

| ADR/RID/ADN | METHANOL |
|-------------|----------|
| IMDG-Code | METHANOL |
| ICAO-TI | Methanol |

14.3 Transport hazard class(es)

| ADR/RID/ADN | 3 (6.1) |
|-------------|---------|
| IMDG-Code | 3 (6.1) |
| ICAO-TI | 3 (6.1) |

United Kingdom (en) Page 13 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

14.4 Packing group

ADR/RID/ADN II IMDG-Code II

ICAO-TI II

14.5 Environmental hazards non-environmentally hazardous acc. to the dan-

gerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Proper shipping name METHANOL

Particulars in the transport document UN1230, METHANOL, 3 (6.1), II, (D/E)

Classification code FT1

Danger label(s) 3+6.1



Special provisions (SP) 279, 802(ADN)

Excepted quantities (EQ) E2
Limited quantities (LQ) 1 L
Transport category (TC) 2
Tunnel restriction code (TRC) D/E
Hazard identification No 336

Emergency Action Code 2WE

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name METHANOL

Particulars in the shipper's declaration UN1230, METHANOL, 3 (6.1), II, 9,7°C c.c.

Marine pollutant -

Danger label(s) 3+6.1



Special provisions (SP) 279

Excepted quantities (EQ) E2

Limited quantities (LQ) 1 L

EmS F-E, S-D

United Kingdom (en) Page 14 / 20

according to Regulation (EC) No. 1907/2006 (REACH)

Wright's eosin methylene blue solution for microscopy

article number: CN05

Stowage category

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

В

Proper shipping name Methanol

Particulars in the shipper's declaration UN1230, Methanol, 3 (6.1), II

Danger label(s) 3+6.1





Special provisions (SP) A113 Excepted quantities (EQ) E2 Limited quantities (LQ) 1 L

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions (REACH, Annex XVII)

| Name of substance | Name acc. to inventory | CAS No | Restriction | No |
|---|--|---------|-------------|----|
| Wright's eosin methylene blue solu- tion | this product meets the criteria for classification in accordance with Reg- ulation No 1272/2008/EC | | R3 | 3 |
| Methanol | methanol | 67-56-1 | R69 | 69 |
| Methanol | flammable / pyrophoric | | R40 | 40 |

Legend

1. Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- tricks and jokes,

games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

 Articles not complying with paragraph 1 shall not be placed on the market.
 Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they

can be used as fuel in decorative oil lamps for supply to the general public, and

present an aspiration hazard and are labelled with H304

- 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
 5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and pack-
- aging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following require-

(a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil

or even sucking the wick of lamps – may lead to life-threatening lung damage";

(b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage';

(c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black

opaque containers not exceeding 1 litre by 1 December 2010.';

United Kingdom (en) Page 15 / 20

according to Regulation (EC) No. 1907/2006 (REACH)

Wright's eosin methylene blue solution for microscopy

article number: CN05

Legend

R40 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,

- artificial snow and frost,
- 'whoopee' cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
 decorative flakes and foams,
- artificial cobwebs,
- stink bombs.
- 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: 'For professional users only'.
- 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).
- 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.
- Shall not be placed on the market to the general public after 9 May 2019 in windscreen washing or defrosting fluids, in a concentration equal to or greater than 0,6 % by weight. R69

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

None of the ingredients are listed. (Or Concentration of the substance in a mixture: <0.1 % Mass concentration)

Seveso Directive

| 2012/ | 2012/18/EU (Seveso III) | | | | |
|-------|---------------------------------------|---|-------|--|--|
| No | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the application of lower and upper-tier requirements | Notes | | |
| 22 | methanol | 500 5.000 | | | |

Deco-Paint Directive

| VOC content | 83,5 % , 767 ^g / _I |
|-------------|---|
|-------------|---|

Industrial Emissions Directive (IED)

| VOC content | 83,5 % |
|---|-----------------------------------|
| VOC content | 771,7 ⁹ / _l |
| VOC content Water content was discounted | 767 ^g / _l |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Page 16 / 20 United Kingdom (en)

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

Water Framework Directive (WFD)

List of pollutants (WFD)

| Name of substance | Name acc. to inventory | CAS No | Listed in | Remarks |
|-------------------|--|--------|-----------|---------|
| Methanol | Substances and preparations, or the breakdown products of such, which have been proved to pos- sess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine- related functions in or via the aquatic environment | | A) | |

Legend

A) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

Regulation on drug precursors

none of the ingredients are listed

Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

Regulation concerning the export and import of hazardous chemicals (PIC)

none of the ingredients are listed

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

| Country | Inventory | Status |
|---------|------------|--------------------------------|
| AU | AICS | not all ingredients are listed |
| CA | DSL | not all ingredients are listed |
| CN | IECSC | not all ingredients are listed |
| EU | ECSI | all ingredients are listed |
| EU | REACH Reg. | not all ingredients are listed |
| JP | CSCL-ENCS | not all ingredients are listed |
| KR | KECI | not all ingredients are listed |
| MX | INSQ | not all ingredients are listed |
| NZ | NZIoC | all ingredients are listed |
| PH | PICCS | not all ingredients are listed |
| TR | CICR | not all ingredients are listed |
| TW | TCSI | not all ingredients are listed |
| | | |

United Kingdom (en) Page 17 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

| Country | Inventory | Status |
|---------|-----------|--------------------------------|
| US | TSCA | not all ingredients are listed |

Legend

Australian Inventory of Chemical Substances Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) AICS CICR CSCL-ENCS

DSL ECSI Domestic Substances List (DSL)

DSL Domestic Substances List (DSL)
ECSI EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC Inventory of Existing Chemical Substances Produced or Imported in China
INSQ National Inventory of Chemical Substances
KECI Korea Existing Chemicals Inventory
NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances
TCSI Taiwan Chemical Substance Inventory

Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation: Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Restructuring: section 9, section 14

| Section | Former entry (text/value) | Actual entry (text/value) | Safety- relev- ant |
|---------|---|---|--------------------------|
| 2.1 | | Classification according to Regulation (EC) No 1272/2008 (CLP): change in the listing (table) | yes |
| 2.1 | | The most important adverse physicochemical, human health and environmental effects: Immediate effects can be expected after short-term exposure. The product is combustible and can be ignited by potential ignition sources. | yes |
| 2.3 | Other hazards: There is no additional information. | Other hazards | yes |
| 2.3 | | Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB. | yes |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-------------|---|
| 2006/15/EC | Commission Directive establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC |
| Acute Tox. | Acute toxicity |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de naviga- tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In- land Waterways) |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |
| ADR/RID/ADN | Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN) |

United Kingdom (en) Page 18 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

| Abbr. | Descriptions of used abbreviations |
|------------|--|
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BOD | Biochemical Oxygen Demand |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances |
| Ceiling-C | Ceiling value |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| COD | Chemical oxygen demand |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| EC No | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an iden fier of substances commercially available within the EU (European Union) |
| EH40/2005 | EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/) |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in eithe growth (EbC50) or growth rate (ErC50) relative to the control |
| Flam. Liq. | Flammable liquid |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |
| index No | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 |
| IOELV | Indicative occupational exposure limit value |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 lethality during a specified time interval |
| LD50 | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality durin specified time interval |
| log KOW | n-Octanol/water |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| ppm | Parts per million |

United Kingdom (en) Page 19 / 20

according to Regulation (EC) No. 1907/2006 (REACH)



Wright's eosin methylene blue solution for microscopy

article number: CN05

| Abbr. | Descriptions of used abbreviations |
|---------|--|
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail) |
| STEL | Short-term exposure limit |
| STOT SE | Specific target organ toxicity - single exposure |
| SVHC | Substance of Very High Concern |
| TWA | Time-weighted average |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and very Bioaccumulative |
| WEL | Workplace exposure limit |

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

| Code | Text |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H331 | Toxic if inhaled. |
| H370 | Causes damage to organs (eye). |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

United Kingdom (en) Page 20 / 20