|  | SAFE <br> ccording to Regulation |  |  |
| :---: | :---: | :---: | :---: |
| Eosin solution |  |  |  |
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1. | Product identifier | Eosin solution |
| :--- | :--- | :--- |
| Substance / mixture | mixture |  |

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

Mixture's intended use
Chemical production, analytical chemistry, laboratory synthesis, industrial applications.
Mixture uses advised against
The product should not be used in ways other then those referred in Section 1.
1.3. Details of the supplier of the safety data sheet

## Supplier

Name or trade name Ing. Petr Švec - PENTA s.r.o.
Address Radiová 1122/1, Praha 10, 10200
Czech Republic
Identification number (CRN)
02096013
VAT Reg No CZ02096013
Phone +420 226060681
E-mail info@pentachemicals.eu
Web address www.pentachemicals.eu
Competent person responsible for the safety data sheet
Name Ing. Petr Švec - PENTA s.r.o.

E-mail info@pentachemicals.eu
1.4. Emergency telephone number

European emergency number: 112112

## SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is classified as dangerous.
Skin Sens. 1, H317
Muta. 1B, H340
Carc. 1B, H350
Repr. 1B, H360FD
Aquatic Chronic 3, H412
Most serious adverse effects on human health and the environment
May cause an allergic skin reaction. May cause genetic defects. May cause cancer. May damage fertility. May damage the unborn child. Harmful to aquatic life with long lasting effects.
2.2. Label elements

Hazard pictogram


Signal word
Danger
Hazardous substances
Eosin Y disodium salt
Potassium dichromate
Hazard statements
H317 May cause an allergic skin reaction.

H340
H350
H360FD
H412
Precautionary statements
P201
P261
P280
P308+P313
P333+P313
Supplemental information

May cause genetic defects.
May cause cancer.
May damage fertility. May damage the unborn child.
Harmful to aquatic life with long lasting effects.
Obtain special instructions before use.
Avoid breathing vapours.
Wear protective gloves.
IF exposed or concerned: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.

Restricted to professional users.

### 2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

| Identification numbers | Substance name | Content in \% weight | Classification according to Regulation (EC) No 1272/2008 | Note |
| :---: | :---: | :---: | :---: | :---: |
| Index: 603-002-00-5 <br> CAS: 64-17-5 <br> EC: 200-578-6 <br> Registration number: <br> 01-2119457-610-43- <br> xxxx | ethanol | 8 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2, H319: C $\geq 50$ \% |  |
| CAS: 17372-87-1 <br> EC: 241-409-6 <br> Registration number: <br> 01-2120138551-62- <br> xxxx | Eosin Y disodium salt | 1 | Skin Sens. 1, H317 <br> Eye Irrit. 2, H319 |  |
| Index: 024-002-00-6 <br> CAS: 7778-50-9 <br> EC: 231-906-6 <br> Registration number: <br> 01-2119454792-32- <br> 0007 | Potassium dichromate | 0,5 | Ox. Sol. 2, H272 <br> Acute Tox. 3, H301 <br> Acute Tox. 4, H312 <br> Skin Corr. 1B, H314 <br> Skin Sens. 1, H317 <br> Acute Tox. 2, H330 <br> Resp. Sens. 1, H334 <br> Muta. 1B, H340 <br> Carc. 1B, H350 <br> Repr. 1B, H360FD <br> STOT RE 1 (**), H372 <br> Aquatic Acute 1, H400 ( $\mathrm{M}=1$ ) <br> Aquatic Chronic 1, H410 ( $\mathrm{M}=1$ ) <br> Specific concentration limit: <br> STOT SE 3, H335: C $\geq 5 \%$ | $\begin{aligned} & 1,3, \\ & 4,5 \end{aligned}$ |
| Index: 609-009-00-X <br> CAS: 88-89-1 <br> EC: 201-865-9 | 2,4,6-trinitrophenol | 0,2 | Desen. Expl. 1, H206 Acute Tox. 4, H302 Acute Tox. 3, H311+H331 | 2 |


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## Notes

** another exposure route cannot be ruled out
1 Note 3: The concentration stated is the percentage by weight of chromate ions dissolved in water calculated with reference to the total weight of the mixture.
2 A substance for which exposure limits are set.
3 Substance of very high concern - SVHC.
4 The substance is included in Annex XIV of the REACH Regulation
5 The use of the substance is restricted by Annex XVII of REACH Regulation
Full text of all classifications and hazard statements is given in the section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

## If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

## If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

## If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes.

## If swallowed

Rinse out the mouth with clean water. Provide medical treatment. For persons with no symptoms, call the Toxicological Information Centre to decide about the need of medical treatment; provide information about the substances or composition of the product from the original packaging or the Safety Data Sheet of the product.
4.2. Most important symptoms and effects, both acute and delayed

If inhaled
Not expected.
If on skin
May cause an allergic skin reaction.
If in eyes
Not expected.

## If swallowed

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

Symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

## Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.
Unsuitable extinguishing media
Water - full jet.

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

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

## Safety data sheet

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### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures <br> Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

### 6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

### 6.4. Reference to other sections

See the Section 7, 8 and 13.

## SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Prevent contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as per Section 8 . Observe valid legal regulations on safety and health protection. Avoid release to the environment.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Recommended storage temperature $15-25^{\circ} \mathrm{C}$.
7.3. Specific end use(s)

In hematology.

## SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.
European Union
Commission Directive 91/322/EEC

| Substance name (component) | Type | Value |
| :--- | :--- | :--- |
| $2,4,6$-trinitrophenol (CAS: 88-89-1) | OEL 8 hours | $0,1 \mathrm{mg} / \mathrm{m}^{3}$ |

### 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

## Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

## Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Contaminated skin should be washed thoroughly.

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## Respiratory protection

Respirator. Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

## Thermal hazard

Not available.
Environmental exposure controls
Observe usual measures for protection of the environment, see Section 6.2.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state
Colour
Odour
Melting point/freezing point
Boiling point or initial boiling point and boiling range Flammability
Lower and upper explosion limit
Flash point
Auto-ignition temperature
Decomposition temperature
pH
Kinematic viscosity
Solubility in water
Partition coefficient $n$-octanol/water (log value)
Vapour pressure
Density and/or relative density
Relative vapour density
Particle characteristics
liquid
dark red
characteristic
data not available
data not available data not available data not available data not available data not available data not available data not available data not available data not available data not available data not available data not available data not available data not available

### 9.2. Other information

not available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

not available
10.2. Chemical stability

The product is stable under normal conditions.
10.3. Possibility of hazardous reactions

Unknown.
10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.
10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

## Safety data sheet

| $\begin{array}{l}\text { SAFETY DATA SHEET }\end{array}$ |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
|  | Eosin Solution |  |  |  |
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## SECTION 11: Toxicological information

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

## Acute toxicity

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

| 2,4,6-trinitrophenol |  | Exposure <br> time | Species | Sex <br> Route of <br> exposure Parameter | Method | Value <br> determinatio <br> $n$ | Source |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Intraperitonea <br> Ily | LD 50 |  | $56.3 \mathrm{mg} / \mathrm{kg}$ |  | Mouse |  |  | Merck |
| Skin |  |  | $461.54 \mathrm{mg} / \mathrm{kg}$ |  |  | Calculation of <br> value | Merck |  |

## Eosin Y disodium salt

| Route of <br> exposure | Parameter | Method | Value | Exposure <br> time | Species | Sex | Value <br> determinatio <br> $n$ | Source |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Oral | LD50 | OECD 423 | $>2000 \mathrm{mg} / \mathrm{kg}$ |  | Rat (Rattus <br> norvegicus) |  |  |  |
| Dermal | LD 50 | OECD 402 | $>2000 \mathrm{mg} / \mathrm{kg}$ |  | Rat (Rattus <br> norvegicus) |  |  |  |


| ethanol | Parameter | Method | Value | Exposure <br> time | Species | Sex <br> Route of <br> exposure | LD50 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Oral | $13300 \mathrm{mg} / \mathrm{kg}$ |  | Rat (Rattus <br> determinatio <br> $n$ | Source |  |  |  |  |
| norvegicus) |  |  |  |  |  |  |  |  |

Potassium dichromate

| Route of <br> exposure | Parameter | Method | Value | Exposure <br> time | Species | Sex | Value <br> determinatio <br> $n$ | Source |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Dermal | LD 50 |  | $1860 \mathrm{mg} / \mathrm{kg}$ |  | Rat (Rattus <br> norvegicus) |  |  |  |
| Oral | LD 50 | OECD 401 | $90.5 \mathrm{mg} / \mathrm{kg}$ |  | Rat |  |  |  |

## Skin corrosion/irritation

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

## Safety data sheet

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| :---: | :---: | :---: | :---: |
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| Corrosivity |  |  |  |
| ethanol |  |  |  |
| Route of exposure | Result | Exposure time | Species |
|  | No effect |  | Rabbit |

## Serious eye damage/irritation

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

| ethanol |  |  |  |
| :--- | :--- | :--- | :--- |
| Route of exposure | Result | Exposure time | Species |
|  | Irritating |  | Rabbit |

## Respiratory or skin sensitisation

May cause an allergic skin reaction.

| ethanol |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Route of exposure | Result | Exposure time | Species | Sex |
|  | Indeterminate |  | Human |  |

## Germ cell mutagenicity

May cause genetic defects.

| ethanol | Exposure time | Specific target organ | Species | Sex |
| :--- | :--- | :--- | :--- | :--- |
| Result |  |  |  |  |
| Indeterminate |  |  |  |  |

## Carcinogenicity

May cause cancer.

| ethanol |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Route of exposure | Parameter | Value | Result | Species | Sex |
| Oral |  |  | Indeterminate | Rat (Rattus <br> norvegicus) |  |

## Reproductive toxicity

May damage fertility. May damage the unborn child.

| ethanol | Parameter | Value | Exposure time | Result | Species | Sex |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Effect <br> Developmental <br> toxicity | NOAEL | $38 \mathrm{mg} / \mathrm{l}$ |  | Negative | Rat (Rattus <br> norvegicus) |  |
|  | NOAEL | $5200 \mathrm{mg} / \mathrm{kg}$ | 24 hours | Indeterminate | Rat (Rattus <br> norvegicus) |  |


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## Toxicity for specific target organ - single exposure

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

| ethanol |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Route of <br> exposure | Parameter | Value | Exposure time | Specific <br> target organ | Result | Species | Sex |
| Inhalation | LOAEL | $2.6 \mathrm{mg} / \mathrm{I}$ | 30 minutes | Nervous <br> system | Drowsiness, <br> Dizziness | Human |  |
| Inhalation | LOAEL | $9.4 \mathrm{mg} / \mathrm{I}$ |  | Lungs | Indeterminate | Human |  |

## Toxicity for specific target organ - repeated exposure

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

## Aspiration hazard

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

### 11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 12: Ecological information

### 12.1. Toxicity

Harmful to aquatic life with long lasting effects.
Acute toxicity
Eosin Y disodium salt

| Parameter | Value | Exposure time | Species | Environment | Value <br> determination |
| :--- | :--- | :--- | :--- | :--- | :--- |
| LC 50 | $1200 \mathrm{mg} / \mathrm{I}$ | 48 hours | Fish (Oryzias latipes) |  |  |
| EC50 | $>100 \mathrm{mg} / \mathrm{I}$ | 48 hours | Daphnia (Daphnia <br> magna) |  |  |

ethanol

| Parameter | Value | Exposure time | Species | Environment | Value <br> determination |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EC 50 | $42 \mathrm{mg} / \mathrm{I}$ | 96 hours | Fish | Experimentally |  |
| EC 50 | $5012 \mathrm{mg} / \mathrm{I}$ | 48 hours | Daphnia | Algae |  |
| NOEC | $<500 \mathrm{mg} / \mathrm{l}$ | 96 hours | Experimentally |  |  |

Potassium dichromate

| Parameter | Value | Exposure time | Species | Environment | Value <br> determination |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EC50 | $0.035 \mathrm{mg} / \mathrm{I}$ | 48 hours | Daphnia (Daphnia <br> magna) |  |  |
| LC 50 | $58.5 \mathrm{mg} / \mathrm{I}$ | 96 hours | Fish (Lepomis <br> macrochirus) |  |  |

### 12.2. Persistence and degradability

No data are available for either the mixture or the components.
12.3. Bioaccumulative potential

|  | SAFE <br> ccording to Regulation | A SH <br> 7/2006 |  |
| :---: | :---: | :---: | :---: |
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No data are available for either the mixture or the components.
12.4. Mobility in soil

No data are available for either the mixture or the components.

### 12.5. Results of PBT and vPvB assessment <br> Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended. <br> 12.6. Endocrine disrupting properties <br> The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### 12.7. Other adverse effects <br> Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

## Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

## SECTION 14: Transport information

### 14.1. UN number or ID number not subject to transport regulations

### 14.2. UN proper shipping name

 not relevant```
14.3. Transport hazard class(es)
    not relevant
```


### 14.4. Packing group

not relevant

### 14.5. Environmental hazards not relevant

14.6. Special precautions for user not available
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 Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH),

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Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended
Potassium dichromate

| Restriction | Conditions of restriction |
| :---: | :---: |
| 28 | Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30: <br> 1. Shall not be placed on the market, or used, <br> - as substances, <br> - as constituents of other substances, or, <br> - in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: <br> - either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, <br> - the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. <br> Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows: <br> "Restricted to professional users". <br> 2. By way of derogation, paragraph 1 shall not apply to: <br> (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; <br> (b) cosmetic products as defined by Directive 76/768/EEC; <br> (c) the following fuels and oil products: <br> - motor fuels which are covered by Directive 98/70/EC, <br> - mineral oil products intended for use as fuel in mobile or fixed combustion plants, <br> - fuels sold in closed systems (e.g. liquid gas bottles); <br> (d) artists' paints covered by Regulation (EC) No 1272/2008; <br> (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. <br> (f) devices covered by Regulation (EU) 2017/745. |

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| Restriction | Conditions of restriction |
| :--- | :--- |
| 29 | Without prejudice to the other parts of this Annex the following shall apply to entries 28 to $30:$ <br> 1. Shall not be placed on the market, or used, <br> - as substances, <br> - as constituents of other substances, or, <br> - in mixtures, for supply to the general public when the individual concentration in the substance or <br> mixture is equal to or greater than: <br> - either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No <br> $1272 / 2008$, or, <br> - the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No <br> $1272 / 2008$. <br> Without prejudice to the implementation of other Community provisions relating to the classification, <br> packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the <br> market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as <br> follows: <br> "Restricted to professional users". <br> 2. By way of derogation, paragraph 1 shall not apply to: <br> (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; <br> (b) cosmetic products as defined by Directive 76/768/EEC; <br> (c) the following fuels and oil products: <br> - motor fuels which are covered by Directive 98/70/EC, <br> - mineral oil products intended for use as fuel in mobile or fixed combustion plants, <br> - fuels sold in closed systems (e.g. liquid gas bottles); <br> (d) artists' paints covered by Regulation (EC) No 1272/2008; <br> (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, <br> column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the <br> said date. <br> (f) devices covered by Regulation (EU) 2017/745. |

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| Restriction | Conditions of restriction |
| :--- | :--- |
| 30 | Without prejudice to the other parts of this Annex the following shall apply to entries 28 to $30:$ <br> 1. Shall not be placed on the market, or used, <br> - as substances, <br> - as constituents of other substances, or, <br> - in mixtures, for supply to the general public when the individual concentration in the substance or <br> mixture is equal to or greater than: <br> - either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No <br> $1272 / 2008$, or, <br> - the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No <br> $1272 / 2008$. <br> Without prejudice to the implementation of other Community provisions relating to the classification, <br> packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the <br> market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as <br> follows: <br> "Restricted to professional users". <br> 2. By way of derogation, paragraph 1 shall not apply to: <br> (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; <br> (b) cosmetic products as defined by Directive 76/768/EEC; <br> (c) the following fuels and oil products: <br> - motor fuels which are covered by Directive 98/70/EC, <br> - mineral oil products intended for use as fuel in mobile or fixed combustion plants, <br> - fuels sold in closed systems (e.g. liquid gas bottles); <br> (d) artists' paints covered by Regulation (EC) No 1272/2008; <br> (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, <br> column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the <br> said date. <br> (f) devices covered by Regulation (EU) 2017/745. |

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according to Regulation (EC) No 1907/2006 (REACH) as amended

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Potassium dichromate

| Restriction | Conditions of restriction |
| :--- | :--- |
| 47 | 1. Cement and cement-containing mixtures shall not be placed on the market, or used, if they <br> contain, when hydrated, more than $2 \mathrm{mg} / \mathrm{kg}(0,0002 \%)$ soluble chromium VI of the total dry weight <br> of the cement. <br> 2. If reducing agents are used, then without prejudice to the application of other Community <br> provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall <br> ensure before the placing on the market that the packaging of cement or cement-containing mixtures <br> is visibly, legibly and indelibly marked with information on the packing date, as well as on the storage <br> conditions and the storage period appropriate to maintaining the activity of the reducing agent and to <br> keeping the content of soluble chromium VI below the limit indicated in paragraph 1. |
| 3. By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use <br> in, controlled closed and totally automated processes in which cement and cement-containing <br> mixtures are handled solely by machines and in which there is no possibility of contact with the skin. |  |
| 4. The standard adopted by the European Committee for Standardization (CEN) for testing the water- <br> soluble chromium (VI) content of cement and cement-containing mixtures shall be used as the test <br> method for demonstrating conformity with paragraph 1. |  |
| 5. Leather articles coming into contact with the skin shall not be placed on the market where they <br> contain chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 \% by weight) of the <br> total dry weight of the leather. |  |
| 6. Articles containing leather parts coming into contact with the skin shall not be placed on the <br> market where any of those leather parts contains chromium VI in concentrations equal to or greater <br> than 3 mg/kg ( 0,0003 \% by weight) of the total dry weight of that leather part. |  |
| 7. Paragraphs 5 and 6 shall not apply to the placing on the market of second-hand articles which <br> were in end-use in the Union before 1 May 2015. |  |

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Potassium dichromate

| Restriction | Conditions of restriction |
| :---: | :---: |
| 72 | 1. Shall not be placed on the market after 1 November 2020 in any of the following: <br> (a) clothing or related accessories; <br> (b) textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing; <br> (c) footwear; <br> if the clothing, related accessory, textile other than clothing or footwear is for use by consumers and the substance is present in a concentration, measured in homogeneous material, equal to or greater than that specified for that substance in Appendix 12. <br> 2. By way of derogation, in relation to the placing on the market of formaldehyde [CAS No 50-00-0] in jackets, coats or upholstery, the relevant concentration for the purposes of paragraph 1 shall be $300 \mathrm{mg} / \mathrm{kg}$ during the period between 1 November 2020 and 1 November 2023. The concentration specified in Appendix 12 shall apply thereafter. <br> 3. Paragraph 1 shall not apply to: <br> (a) clothing, related accessories or footwear, or parts of clothing, related accessories or footwear, made exclusively of natural leather, fur or hide; <br> (b) non-textile fasteners and non-textile decorative attachments; <br> (c) second-hand clothing, related accessories, textiles other than clothing or footwear <br> (d) wall-to-wall carpets and textile floor coverings for indoor use, rugs and runners. <br> 4. Paragraph 1 shall not apply to clothing, related accessories, textiles other than clothing, or footwear within the scope of Regulation (EU) 2016/425 of the European Parliament and of the Council (*) or Regulation (EU) 2017/745 of the European Parliament and of the Council (**). <br> 5. Paragraph 1(b) shall not apply to disposable textiles. 'Disposable textiles' means textiles that are designed to be used only once or for a limited time and are not intended for subsequent use for the same or a similar purpose. <br> 6. Paragraphs 1 and 2 shall apply without prejudice to the application of any stricter restrictions set out in this Annex or in other applicable Union legislation. <br> 7. The Commission shall review the exemption in paragraph 3(d) and, if appropriate, modify that point accordingly. <br> (*) Regulation (EU) 2016/425 of the European Parliament and of the Council of of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC (OJ L 81, 31.3.2016, p. 51). <br> (**) Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC (OJ L 117, 5.5.2017, p. 1). |

### 15.2. Chemical safety assessment

No chemical safety assessment has been performed for this substance.

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## Eosin solution

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No chemical safety assessment has been performed for this substance.

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| according to Regulation (EC) No 1907/2006 (REACH) as amended |

No chemical safety assessment has been performed for this substance.

## SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

| H206 | Fire, blast or projection hazard; increased risk of explosion if desensitising agent is <br> reduced. |
| :--- | :--- |
| H225 | Highly flammable liquid and vapour. |
| H272 | May intensify fire; oxidiser. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H340 | May cause genetic defects. |
| H350 | May cause cancer. |
| H360FD | May damage fertility. May damage the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H311+H331 | Toxic in contact with skin or if inhaled. |
| Guidelines for safe handling used in the safety data sheet |  |
| P201 | Obtain special instructions before use. |
| P261 | Avoid breathing vapours. |
| P280 | Wear protective gloves. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |

## Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

## Key to abbreviations and acronyms used in the safety data sheet

ADR
European agreement concerning the international carriage of dangerous goods by road
BCF
Bioconcentration Factor
CAS
Chemical Abstracts Service
CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures

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| EC | Identification code for each substance listed in EINECS |
| EC50 | Concentration of a substance when it is affected $50 \%$ of the population |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| EmS | Emergency plan |
| EU | European Union |
| EuPCS | European Product Categorisation System |
| IATA | International Air Transport Association |
| IBC | International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| INCI | International Nomenclature of Cosmetic Ingredients |
| ISO | International Organization for Standardization |
| IUPAC | International Union of Pure and Applied Chemistry |
| LC50 | Lethal concentration of a substance in which it can be expected death of $50 \%$ of the population |
| LD50 | Lethal dose of a substance in which it can be expected death of $50 \%$ of the population |
| LOAEL | Lowest observed adverse effect level |
| log Kow | Octanol-water partition coefficient |
| NOAEL | No observed adverse effect level |
| NOEC | No observed effect concentration |
| OEL | Occupational Exposure Limits |
| PBT | Persistent, Bioaccumulative and Toxic |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Agreement on the transport of dangerous goods by rail |
| UN | Four-figure identification number of the substance or article taken from the UN Model Regulations |
| UVCB | Substances of unknown or variable composition, complex reaction products or biological materials |
| voc | Volatile organic compounds |
| vPvB | Very Persistent and very Bioaccumulative |
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Hazardous to the aquatic environment |
| Aquatic Chronic | Hazardous to the aquatic environment (chronic) |
| Carc. | Carcinogenicity |
| Desen. Expl. | Desensitised explosives |
| Flam. Liq. | Flammable liquid |
| Muta. | Germ cell mutagenicity |
| Ox. Sol. | Oxidising solid |
| Repr. | Reproductive toxicity |
| Resp. Sens. | Respiratory sensitization |
| Skin Corr. | Skin corrosion |
| Skin Sens. | Skin sensitization |
| STOT RE | Specific target organ toxicity - repeated exposure |
| STOT SE | Specific target organ toxicity - single exposure |

## Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

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## Recommended restrictions of use

not available
Information about data sources used to compile the Safety Data Sheet
REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.
The changes (which information has been added, deleted or modified)
The version 4.0 replaces the SDS version from 31 May 2023. Changes were made in sections 2 and 16.

## More information

Classification procedure - calculation method.

## Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.

