

## SAFETY DATA SHEET

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

### MIXTURE solution mercury sulfate potassium dichromate

|               |                   |         |     |
|---------------|-------------------|---------|-----|
| Creation date | 24th May 2016     | Version | 3.0 |
| Revision date | 23rd October 2023 |         |     |

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

- 1.1. Product identifier**  
Substance / mixture MIXTURE solution mercury sulfate potassium dichromate  
UFI mixture WTEK-R35P-M00G-3PFF
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
**Mixture's intended use**  
Laboratory chemicals.  
**Mixture uses advised against**  
not available
- 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, 102 00  
Czech Republic  
Identification number (CRN) 02096013  
VAT Reg No CZ02096013  
Phone +420 226 060 681  
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: 112 112

#### 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.

Acute Tox. 3, H301+H331  
Acute Tox. 2, H310  
Skin Corr. 1A, H314  
Eye Dam. 1, H318  
Muta. 1B, H340  
Carc. 1B, H350  
Repr. 1B, H360FD  
STOT RE 2, H373  
Aquatic Chronic 2, H411

Full text of all classifications and hazard statements is given in the section 16.

#### Most serious adverse physico-chemical effects

Unknown.

#### Most serious adverse effects on human health and the environment

Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure. May cause genetic defects. May cause cancer. May damage fertility. May damage the unborn child. Fatal in contact with skin. Toxic if swallowed or if inhaled. Toxic to aquatic life with long lasting effects.

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#### 2.2. Label elements

##### Hazard pictogram



##### Signal word

Danger

##### Hazardous substances

sulphuric acid ... %

Inorganic compounds of mercury with the exception of mercuric sulphide

potassium dichromate

##### Hazard statements

|           |  |
|-----------|--|
| H310      | Fatal in contact with skin.  |
| H314      | Causes severe skin burns and eye damage.                           |
| H340      | May cause genetic defects.   |
| H350      | May cause cancer.  |
| H360FD    | May damage fertility. May damage the unborn child.                 |
| H373      | May cause damage to organs through prolonged or repeated exposure. |
| H411      | Toxic to aquatic life with long lasting effects.                   |
| H301+H331 | Toxic if swallowed or if inhaled.                                  |

##### Precautionary statements

|                |  |
|----------------|--|
| P260           | Do not breathe dust/fume/gas/mist/vapours/spray.   |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.   |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310           | Immediately call a doctor.   |

##### Supplemental information

|        |  |
|--------|--|
| EUH208 | Contains potassium dichromate. May produce an allergic reaction.<br>For professional users only. |
|--------|--|

#### 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.

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#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

##### Chemical characterization

Mixture of substances and additives specified below.

**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: 016-020-00-8<br>CAS: 7664-93-9<br>EC: 231-639-5 | sulphuric acid ... %   | 10-20               | Skin Corr. 1A, H314<br>Specific concentration limit:<br>Skin Corr. 1A, H314: C ≥ 15 %<br>Eye Irrit. 2, H319: 5 % ≤ C < 15 %<br>Skin Irrit. 2, H315: 5 % ≤ C < 15 %  | 2, 5       |
| Index: 080-002-00-6                                    | Inorganic compounds of mercury with the exception of mercuric sulphide | 1-10                | Acute Tox. 2, H300+H330<br>Acute Tox. 1, H310<br>STOT RE 2 (**), H373<br>Aquatic Acute 1, H400 (M=1)<br>Aquatic Chronic 1, H410 (M=1)<br>Specific concentration limit:<br>STOT RE 2, H373: C ≥ 0.1 %  | 1, 3, 8    |
| Index: 024-002-00-6<br>CAS: 7778-50-9<br>EC: 231-906-6 | potassium dichromate   | 0,1-5               | 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<br>Aquatic Chronic 1, H410<br>Specific concentration limit:<br>STOT SE 3, H335: C ≥ 5 % | 4, 6, 7, 8 |

#### Notes

\*\* another exposure route cannot be ruled out

- Note A: Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.
- Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
- Note 1: The concentration stated or, in the absence of such concentrations, the generic concentrations set out in this Regulation are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.
- 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.
- A substance for which exposure limits are set.

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- 6 Substance of very high concern - SVHC.
  - 7 The substance is included in Annex XIV of the REACH Regulation
  - 8 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

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

Protect the person against growing cold. Depending on the situation, call the medical rescue service and always ensure medical treatment.

##### If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Depending on the situation, call the medical rescue service and always ensure medical treatment.

##### 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. Call medical rescue service.

##### If swallowed

FOLLOWING INGESTION OF HIGHLY TOXIC, SOME TOXIC AND OTHER SELECTED HAZARDOUS SUBSTANCES where the ingestion of less than one gram or one sip of 30 ml is life threatening, INDUCE VOMITING (especially in case of cyanides, some inorganic metal salts, paraquat, diquat, methanol, ethylene glycol, some organic solvents - benzene, tetrachloromethane, chloroform, carbon disulphide and other substances). Let the person drink about 1-2 dl of water, lukewarm at best, with a teaspoon of liquid soap and pulverized or crushed activated carbon equivalent about to 5 tablets. A larger amount of water is not suitable as if no vomiting is induced, the water would facilitate dissolution and absorption of the substance soluble in water, and in a worse case it would cause the toxic substance to move further in the gastrointestinal tract. If in doubt whether vomiting should be induced, contact the Toxicological Information Centre and give information about the substances or composition of the product as provided on the original packaging or in the safety data sheet of the product. FOLLOWING INGESTION OF TOXIC OR HIGHLY TOXIC SUBSTANCES, GIVE 10-20 CRUSHED TABLETS OF ACTIVATED CARBON, MIXED IN WATER, WITHIN NO LATER THAN 5 MINUTES - irrespective of whether vomiting could be induced. Call medical rescue service.

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

##### If inhaled

Possible irritation of airways, cough, headache.

##### If on skin

Fatal in contact with skin.

##### If in eyes

not available

##### 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.

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

Fire produces heavy, black smoke, with potential development of carbon monoxide and dioxide and other toxic gases. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

#### 5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. 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

The mixture is non-flammable. Provide sufficient ventilation. Use gloves in case of prolonged contact. Follow the instructions in the Sections 7 and 8.

#### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

#### 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. Dispose of the collected material according to the instructions in the section 13. Upon an escape of large quantities of the product, inform the Fire Department and the Environmental Department of the Municipal Authority with the extended scope of competencies. 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 flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Protect against direct sunlight. Electrostatic charge may be formed during use; use only earthed piping (tubing) when repumping. Use of antistatic clothes and footwear is recommended. Use non-sparking tools. Do not inhale gases and vapours. Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

#### 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. Do not expose to sunlight.

Storage class

8B - Non-combustible corrosive substances

#### The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

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

not available

### 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 2009/161/EU

| Substance name (component)             | Type        | Value                  |
|--|-------------|------------------------|
| Sulphuric acid (mist) (CAS: 7664-93-9) | OEL 8 hours | 0,05 mg/m <sup>3</sup> |

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#### 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. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. 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. Use barrier creams for skin protection, they should, however, not be applied once exposure has occurred. Observe other recommendations of the manufacturer. Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant to elevated temperatures. Contaminated skin should be washed thoroughly.

##### Respiratory protection

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

### 9.2. Other information

not available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The mixture is non-flammable.

### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of hazardous reactions

The product is stable under normal conditions.

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#### 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. Thereby a dangerous exothermic reaction will be prevented.

#### 10.6. Hazardous decomposition products

Not developed under normal uses.

### SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

#### Acute toxicity

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

| MIXTURE solution mercury sulfate potassium dichromate |           |             |               |         |     |                      |
|---|-----------|-------------|---------------|---------|-----|----------------------|
| Route of exposure                                     | Parameter | Value       | Exposure time | Species | Sex | Value determination  |
| Oral  | ATE       | 71.17 mg/kg |               |         |     | Calculation of value |
| Dermal  | ATE       | 71.41 mg/kg |               |         |     | Calculation of value |
| Inhalation (vapor)                                    | ATE       | >6.667 mg/l |               |         |     | Calculation of value |

| sulphuric acid ... % |                  |             |               |                         |     |                     |
|----------------------|------------------|-------------|---------------|-------------------------|-----|---------------------|
| Route of exposure    | Parameter        | Value       | Exposure time | Species                 | Sex | Value determination |
| Oral                 | LD <sub>50</sub> | 2 140 mg/kg |               | Rat (Rattus norvegicus) |     |                     |

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### Serious eye damage/irritation

Based on available data the classification criteria are not met.

#### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

May cause genetic defects.

#### Carcinogenicity

May cause cancer.

#### Reproductive toxicity

May damage fertility. May damage the unborn child.

#### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

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#### Toxicity for specific target organ - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### Aspiration hazard

Based on available data the classification criteria 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

Toxic to aquatic life with long lasting effects.

##### Acute toxicity

| sulphuric acid ... % |           |               |                                 |             |
|----------------------|-----------|---------------|---------------------------------|-------------|
| Parameter            | Value     | Exposure time | Species                         | Environment |
| IC <sub>50</sub>     | >100 mg/l | 72 hours      | Algae (Desmodesmus subspicatus) |             |
| EC <sub>50</sub>     | >100 mg/l | 48 hours      | Daphnia (Daphnia magna)         |             |
|                      | 42 mg/l   | 96 hours      | Fish (Gambusia affinis)         |             |

#### 12.2. Persistence and degradability

Data not available.

#### 12.3. Bioaccumulative potential

Data not available.

#### 12.4. Mobility in soil

Data not available.

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

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.

#### 12.6. Endocrine disrupting properties

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

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.



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#### SECTION 14: Transport information

##### 14.1. UN number or ID number

UN 2922

##### 14.2. UN proper shipping name

CORROSIVE LIQUID, TOXIC, N.O.S. (MIXTURE solution ( contains SULFURIC ACID, MERCURY SULFATE, POTASSIUM DICHROMATE ))

##### 14.3. Transport hazard class(es)

8 Corrosive substances

##### 14.4. Packing group

II - substances presenting medium danger

##### 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

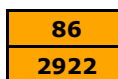
##### Additional information

Hazard identification No.

UN number

Classification code

Safety signs



CT1

8+6.1+hazardous for the environment



##### Air transport - ICAO/IATA

Packaging instructions passenger

851

Cargo packaging instructions

855

##### Marine transport - IMDG

EmS (emergency plan)

F-A, S-B

MFAG

760

#### 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. Product contains restricted explosives precursors: Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 5. 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

Inorganic compounds of mercury with the exception of mercuric sulphide

| Restriction | Conditions of restriction   |
|-------------|---|
| 18          | <p>Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use:</p> <ul style="list-style-type: none"> <li>(a) to prevent the fouling by micro-organisms, plants or animals of: <ul style="list-style-type: none"> <li>— the hulls of boats,</li> <li>— cages, floats, nets and any other appliances or equipment used for fish or shellfish farming,</li> <li>— any totally or partly submerged appliances or equipment;</li> </ul> </li> <li>(b) in the preservation of wood;</li> <li>(c) in the impregnation of heavy-duty industrial textiles and yarn intended for their manufacture;</li> <li>(d) in the treatment of industrial waters, irrespective of their use.</li> </ul> |

potassium dichromate

| Restriction | Conditions of restriction   |
|-------------|---|
| 28          | <p>Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:</p> <ul style="list-style-type: none"> <li>1. Shall not be placed on the market, or used, <ul style="list-style-type: none"> <li>— as substances,</li> <li>— as constituents of other substances, or,</li> <li>— in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: <ul style="list-style-type: none"> <li>— either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,</li> <li>— the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.</li> </ul> </li> </ul> </li> </ul> <p>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:</p> <p>"Restricted to professional users".</p> <ul style="list-style-type: none"> <li>2. By way of derogation, paragraph 1 shall not apply to: <ul style="list-style-type: none"> <li>(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;</li> <li>(b) cosmetic products as defined by Directive 76/768/EEC;</li> <li>(c) the following fuels and oil products: <ul style="list-style-type: none"> <li>— motor fuels which are covered by Directive 98/70/EC,</li> <li>— mineral oil products intended for use as fuel in mobile or fixed combustion plants,</li> <li>— fuels sold in closed systems (e.g. liquid gas bottles);</li> </ul> </li> <li>(d) artists' paints covered by Regulation (EC) No 1272/2008;</li> <li>(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.</li> <li>(f) devices covered by Regulation (EU) 2017/745.</li> </ul> </li> </ul> |

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| Restriction | Conditions of restriction   |
|-------------|---|
| 29          | <p>Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:</p> <p>1. Shall not be placed on the market, or used,</p> <ul style="list-style-type: none"> <li>— as substances,</li> <li>— as constituents of other substances, or,</li> <li>— in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: <ul style="list-style-type: none"> <li>— either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,</li> <li>— the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.</li> </ul> </li> </ul> <p>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:</p> <p>"Restricted to professional users".</p> <p>2. By way of derogation, paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> <li>(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;</li> <li>(b) cosmetic products as defined by Directive 76/768/EEC;</li> <li>(c) the following fuels and oil products: <ul style="list-style-type: none"> <li>— motor fuels which are covered by Directive 98/70/EC,</li> <li>— mineral oil products intended for use as fuel in mobile or fixed combustion plants,</li> <li>— fuels sold in closed systems (e.g. liquid gas bottles);</li> </ul> </li> <li>(d) artists' paints covered by Regulation (EC) No 1272/2008;</li> <li>(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.</li> <li>(f) devices covered by Regulation (EU) 2017/745.</li> </ul> |

## SAFETY DATA SHEET

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

### MIXTURE solution mercury sulfate potassium dichromate

|               |                   |         |     |
|---------------|-------------------|---------|-----|
| Creation date | 24th May 2016     | Version | 3.0 |
| Revision date | 23rd October 2023 |         |     |

potassium dichromate

| Restriction | Conditions of restriction   |
|-------------|---|
| 30          | <p>Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:</p> <p>1. Shall not be placed on the market, or used,</p> <ul style="list-style-type: none"> <li>— as substances,</li> <li>— as constituents of other substances, or,</li> <li>— in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: <ul style="list-style-type: none"> <li>— either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,</li> <li>— the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.</li> </ul> </li> </ul> <p>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:</p> <p>"Restricted to professional users".</p> <p>2. By way of derogation, paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> <li>(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;</li> <li>(b) cosmetic products as defined by Directive 76/768/EEC;</li> <li>(c) the following fuels and oil products: <ul style="list-style-type: none"> <li>— motor fuels which are covered by Directive 98/70/EC,</li> <li>— mineral oil products intended for use as fuel in mobile or fixed combustion plants,</li> <li>— fuels sold in closed systems (e.g. liquid gas bottles);</li> </ul> </li> <li>(d) artists' paints covered by Regulation (EC) No 1272/2008;</li> <li>(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.</li> <li>(f) devices covered by Regulation (EU) 2017/745.</li> </ul> |

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

### MIXTURE solution mercury sulfate potassium dichromate

|               |                   |         |     |
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| Creation date | 24th May 2016     | Version | 3.0 |
| Revision date | 23rd October 2023 |         |     |

potassium dichromate

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

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### MIXTURE solution mercury sulfate potassium dichromate

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potassium dichromate

| Restriction | Conditions of restriction   |
|-------------|---|
| 72          | <p>1. Shall not be placed on the market after 1 November 2020 in any of the following:</p> <ul style="list-style-type: none"> <li>(a) clothing or related accessories;</li> <li>(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;</li> <li>(c) footwear;</li> </ul> <p>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.</p> <p>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 mg/kg during the period between 1 November 2020 and 1 November 2023. The concentration specified in Appendix 12 shall apply thereafter.</p> <p>3. Paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> <li>(a) clothing, related accessories or footwear, or parts of clothing, related accessories or footwear, made exclusively of natural leather, fur or hide;</li> <li>(b) non-textile fasteners and non-textile decorative attachments;</li> <li>(c) second-hand clothing, related accessories, textiles other than clothing or footwear</li> <li>(d) wall-to-wall carpets and textile floor coverings for indoor use, rugs and runners.</li> </ul> <p>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 (**).</p> <p>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.</p> <p>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.</p> <p>7. The Commission shall review the exemption in paragraph 3(d) and, if appropriate, modify that point accordingly.</p> <p>(*) Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC (OJ L 81, 31.3.2016, p. 51).</p> <p>(**) 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).</p> |

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out (mixture).

#### SECTION 16: Other information

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

|      |  |
|------|--|
| H272 | May intensify fire; oxidiser.            |
| H301 | Toxic if swallowed.                      |
| H310 | Fatal in contact with skin.              |
| H312 | Harmful in contact with skin.            |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation.                  |
| H317 | May cause an allergic skin reaction.     |
| H318 | Causes serious eye damage.               |

## SAFETY DATA SHEET

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

### MIXTURE solution mercury sulfate potassium dichromate

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|           |  |
|-----------|--|
| 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.            |
| H373      | May cause damage to organs through prolonged or repeated exposure.         |
| H400      | Very toxic to aquatic life.  |
| H410      | Very toxic to aquatic life with long lasting effects.                      |
| H411      | Toxic to aquatic life with long lasting effects.                           |
| H300+H330 | Fatal if swallowed or if inhaled.  |
| H301+H331 | Toxic if swallowed or if inhaled.  |

#### Guidelines for safe handling used in the safety data sheet

|                |  |
|----------------|--|
| P260           | Do not breathe dust/fume/gas/mist/vapours/spray.   |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.   |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310           | Immediately call a doctor.   |

#### A list of additional standard phrases used in the safety data sheet

|        |  |
|--------|--|
| EUH208 | Contains potassium dichromate. May produce an allergic reaction. |
|--------|--|

#### 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 |
| EC               | Identification code for each substance listed in EINECS   |
| EC <sub>50</sub> | 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       |
| IC <sub>50</sub> | Concentration causing 50% blockade  |
| 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   |
| LD <sub>50</sub> | Lethal dose of a substance in which it can be expected death of 50% of the population             |

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

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|                 |   |
|-----------------|---|
| log Kow         | Octanol-water partition coefficient   |
| 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   |
| Eye Dam.        | Serious eye damage  |
| 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.

#### 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 3.0 replaces the SDS version from 11 May 2020. Changes were made in sections 1, 2, 11, 12, 13, 15 and 16.

#### 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.