

According to directive 1907/2006/EC, 2020/878
Version 8.1 Revision date: 09-10-2024
Trade name: Copper sulphate pentahydrate ≥98%, crystalline

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

1.1 Product identification:

Product name/name:	Copper sulphate pentahydrate ≥98 %, crystalline
Registration number (REACH):	01-2119520566-40-xxxx
Cataloguing number in Annex VI to CLP:	029-023-00-4
EC no:	616-477-9
CAS no:	7758-99-8

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

Identified uses:	Laboratory chemicals. Analytical and laboratory applications.
Uses advised against:	Not to be used for private purposes (household). Food, drinks and animal feed.

1.3 Details of the supplier of the safety data sheet:

Responsible distributor :	ASSYST bvba / A.S.O.W. bvba Hellegatstraat 13a 2590 Berlaar Belgium Tel: +32 495 50 61 14 / +32 496 83 70 27 Website: www.assyst.org / www.artsuppliesonweb.com Email: ao@assyst.org / vera.opsommer@assyst.org
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1.4 Emergency phone number:

For Belgium:	Call the Poison Control Centre (070 245 245 - free) , if not available: 02 264 96 30 (normal rate) or your doctor. In life-threatening situations, always call the European emergency number 112 .
NHS 24 Direct	For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. For urgent medical help , use the NHS 111 online service, or call 111 if you are unable to get help online. For life-threatening emergencies, call 999 for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture:

Classification according to directive (EC) No 1272/2008 and its amendments.

Acute oral toxicity 4 Acute Tox. 4 H302
Serious eye damage/eye irritation 1 Eye Dam. 1 H318
Acute hazard to the aquatic environment 1 Aquatic Acute 1 H400
Chronic danger to the aquatic environment 1 Aquatic Chronic 1 H410
See SECTION 16 for full text

Main adverse physicochemical, health and environmental effects

Leaks and firewater can lead to contamination of waterways.

2.2 Labelling elements:

Labelling according to regulation (EC) No 1272/2008 [CLP/GHS]:



Hazard pictograms:

Signal word:

Danger

Hazard statements:

H302 Harmful if swallowed.

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H318 Causes serious eye damage.
H410 Very toxic to aquatic organisms with long-lasting effects.

Safety recommendations:

Precautions - prevention:

P273 Avoid discharge into the environment.
P280 Wear protective gloves/eye protection.

Precautions - reaction:

P301+P312 IF INHALED: If you feel unwell, call a POISON CENTER/doctor.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses, if possible; continue rinsing.

Labelling of packages with a total content not exceeding 125 ml



Symbol/symbols:

Signal word: Danger

H318 Causes serious eye damage.
P280 Wear protective gloves/eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses, if possible; continue rinsing.

Labelling of packages with a total content not exceeding 10 ml



Hazard pictogram(s):

Signal word: Not required

Hazard statements: Not required

Safety recommendations: Not required

2.3 Other hazards:

Results of PBT and vPvB assessment

The results of the assessment of the substance show that it is not a PBT or vPvB substance.

Endocrine-disrupting properties

Contains no endocrine disruptor (ED) at a concentration of ≥ 0.1%.

SECTION 3: Composition and information on ingredients

3.1 Substances:

Name of substance: Copper sulphate pentahydrate
Molecular formula: CuSO₄ · 5 H₂O
Molar mass: 249.7 g/mol
REACH reg. no: 01-2119520566-40-xxxx
CAS no: 7758-99-8
EC no: 616-477-9
Catalogue no.: 029-023-00-4

Substance, Specific concentration limits, M-factors, ATE			
Specific concentration limits	M-Factors	ATE	Route of exposure
-	M-factor (acute) = 10 M-factor (chronic) = 1	481 mg/kg	oral

SECTION 4: First aid measures

4.1 Description of first-aid measures:

General comments

Remove contaminated clothing immediately.

When inhaled

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Provide fresh air.

If in doubt or if symptoms persist, consult a doctor.

In case of skin contact

Rinse/shower skin with water.

If in doubt or if symptoms persist, consult a doctor.

On eye contact

In case of contact with eyes, rinse immediately with opened eyelids for 10 to 15 minutes with running water and consult an ophthalmologist.

If swallowed

Rinse mouth with water (only if the person is conscious).

Consult a doctor.

4.2 Main acute and delayed symptoms and effects

Vomiting, Danger of blindness, Danger of serious eye damage.

4.3 Indication of any immediate medical care and special treatment needed

None.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing agents

Match fire-fighting measures to the environment!

Water, foam, alcohol-resistant foam, dry extinguishing powder, ABC powder.

Unsuitable extinguishing agents

Full water jet.

5.2 Special hazards arising from the substance or mixture

Non-flammable.

Hazardous combustion products:

In case of fire, it can produce: Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂).

5.3 Advice for firefighters

In case of fire and/or explosion, avoid breathing fumes.

With normal precautions, extinguish from a reasonable distance.

Wear self-contained breathing apparatus.

SECTION 6: Measures in case of accidental release of the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

For persons other than emergency services

Use the necessary personal protective equipment.

Avoid contact with skin, eyes and clothing.

Do not inhale dust.

6.2 Environmental precautions

Avoid getting the product into drains, surface water or groundwater.

Retain and remove contaminated wash water.

Alert the responsible authority if the substance got into the water or sewage system.

6.3 Containment and cleaning methods and materials

Advice on how to contain the spill

Covering drains.

Mechanical recording.

Advice on how to clean up the spill

Mechanical recording.

Combating dust formation.

Other information relating to the discharge or release

Put into suitable retainers for disposal.

6.4 Reference to other sections

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Hazardous combustion products: see section 5.
Personal protective equipment: see section 8.
Incompatible materials: see section 10.
Instructions for disposal: see section 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling of the substance or mixture:

Avoid dust generation.

Measures to protect the environment

Avoid discharge into the environment.

Advice on general occupational hygiene

Wash hands before work breaks and end of work.

Keep away from food, drink and animal feed.

7.2 Conditions for safe storage, including incompatibilities

Store in a dry place.

Incompatible substances or mixtures

Note advice for chemical storage.

Incompatible materials: see section 10.

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25°C.

7.3 Specific end use

No information is available.

SECTION 8: Exposure controls/personal protection measures

8.1 Control parameters:

National limits

Occupational exposure limits (occupational exposure limits)

This information is not available.

Human health values

Relevant DNEL and other thresholds

End point	Threshold	Protection objective, route of exposure	Used in	Exposure time
DNEL	1 mg/m ³	human, via inhalation	(industrial) employees	chronic - systemic effects
DNEL	1 mg/m ³	human, via inhalation	(industrial) employees	chronic - local effects
DNEL	137 mg/kg bw/day	human, through the skin	(industrial) employees	chronic - systemic effects

Environmental values

Relevant PNEC and other thresholds

End point	Threshold	Organism	Environmental compartments	Exposure time
PNEC	7.8 µg/l	Aquatic organisms	Freshwater	short-term (one-off)
PNEC	5.2 µg/l	aquatic organisms	Seawater	short-term (one-off)
PNEC	230 µg/l	aquatic organisms	sewage treatment plants (STP)	short-term (one-off)
PNEC	87 mg/kg	aquatic organisms	Freshwater sediment	short-term (one-off)
PNEC	676 mg/kg	Aquatic organisms	Sea water sediment	short-term (one-off)
PNEC	65 mg/kg	terrestrial organisms	Bottom	short-term (one-off)

8.2 Exposure control measures

Individual protection measures (personal protective equipment)

Eye/face protection

Wear safety goggles with side protection.

Skin protection

Hand protection

Wear suitable gloves.

Suitable are EN 374-tested gloves against chemicals.

Determine leak tightness/impermeability before use.

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It is recommended that in case of special applications, the chemical resistance of the safety gloves mentioned above be checked with the supplier of the gloves.

Times are estimated values from measurements at 22°C and permanent contact.

Increased temperatures due to heated fabrics, body heat, etc.

And a reduction in effective layer thickness due to stretching can lead to a significant reduction in breakthrough time.

If in doubt, contact the manufacturer.

For a layer thickness approximately 1.5 times larger / smaller, the respective breakthrough time is doubled / halved.

The data applies only to the pure substance.

When transferred to mixtures of substances, they should only be considered as guidelines.

Type of material

NBR (nitrile rubber)

Material thickness

>0.11 mm

Breakthrough time of glove material

>480 minutes (permeation level: 6)

Other protective equipment

Insert rest periods for skin regeneration.

Preventive skin protection (skin-protective creams) is recommended.

Protection of respiratory organs

Respiratory protection is necessary in case of: Dust generation.

Particle filter (EN 143).

P2 (filters at least 94% of air particles, colour code: white).

Managing environmental exposure

Avoid getting the product into drains, surface water or groundwater.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	solid
Colour:	blue
Odour:	odourless
Melting/freezing point:	30 - 110 °C (Issue of crystalline water)
Boiling point or initial boiling point and boiling range:	undetermined
Flammability:	non-flammable
Lower and upper explosion limit:	irrelevant (solid)
Flash point:	not applicable
Self-ignition temperature:	undetermined
Decomposition temperature:	>30 °C (Release of crystalline water)
pH value:	3.5 - 4.5 (in aqueous solution: 50 g/l, 20 °C)
Kinematic viscosity:	irrelevant

Solubility

Solubility in water: 317 g/l at 20 °C

Partition coefficient

Partition coefficient n-octanol/water (log value): not relevant (inorganic)

Vapour pressure: not determined

Density and/or relative density

Density: 2.286 g/cm³ (ECHA)

Relative vapour density: irrelevant (solid)

Particle characteristics: No data available.

Other safety parameters

Oxidising properties: None

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9.2 Other information

Information on physical hazard classes: hazard classes in accordance with GHS
(physical hazards): not relevant.
Other safety features: There is no further information.

SECTION 10: Stability and reactivity

10.1 Reactivity:

This substance is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal atmospheric conditions and expected temperature and pressure during storage and handling.

10.3 Possible hazardous reactions

Violent reaction with: Acetylene, Magnesium, Strong lye.

10.4 Conditions to avoid

Keep away from heat.

Decomposition occurs from temperatures of: >30 °C.

10.5 Incompatible materials

There is no further information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

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

Acute toxicity

Harmful if swallowed.

Route of exposure	End point	Value	Species	Method	Source
Oral	LD50	482 mg/kg	Rat		ECHA
Dermal	LD50	>2,000 mg/kg	Rat		ECHA

Skin corrosion/irritation

Is not classifiable as corrosive/irritating to the skin.

Serious eye damage/eye irritation

Causes severe eye irritation.

Respiratory or skin sensitisation

Is not classifiable as inhalant or skin allergenic.

Mutagenicity in gametes

Is not classifiable as mutagenic in germ cells (mutagenic).

Carcinogenicity

Is not classifiable as carcinogenic.

Reproductive toxicity

Is not classifiable as a reproductive toxicant.

Specific target organ toxicity at single exposure

Cannot be classified as toxic to specific target organs (single exposure).

Specific target organ toxicity on repeated exposure

Cannot be classified as toxic to specific target organs (repeated exposure).

Inhalation hazard

Is not classifiable as dangerous in aspiration.

Symptoms related to physical, chemical and toxicological properties

- After swallowing

Diarrhoea, vomiting, nausea, gastrointestinal distress.

- In case of contact with eyes

Causes serious eye damage, danger of blindness.

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- After inhalation

No data are available.

- On contact with skin

Frequent and prolonged skin contact can lead to skin irritation.

- Other information

Other adverse effects: Liver and kidney damage, Circulatory disturbance.

11.2 Additional information

Contains no endocrine disruptor (ED) at a concentration of ≥ 0.1%.

11.3 Information on other hazards

There is no further information.

SECTION 12: Ecological information

12.1 Toxicity:

Highly toxic to aquatic organisms, with long-term effects.

Aquatic toxicity (acute)				
End point	Value	Species	Source	Exposure time
LC50	38.4 µg/l	Fish	ECHA	96 h

12.2 Persistence and Degradability:

No data are available.

12.3 Bioaccumulation:

No data are available.

12.4 Mobility in soil:

No data are available.

12.5 Results of PBT and vPvB assessment

No data are available.

12.6 Endocrine disrupting properties

Contains no endocrine disruptor (ED) at a concentration of ≥ 0.1%.

12.7 Other adverse effects

No data are available.

SECTION 13: Disposal instructions

13.1 Waste treatment methods:

Dispose of this substance and its packaging as hazardous waste.

Dispose of contents/packaging in accordance with local/regional/national/international regulations.

Information regarding wastewater discharge

Do not throw waste in the sink.

Avoid discharge into the environment.

Ask for special instructions/safety card.

Waste treatment of containers/packaging

It is hazardous waste; only approved packaging (e.g. in accordance with ADR) may be used.

Contaminated packaging can be treated like the substance itself. Fully emptied packaging can be recycled.

Relevant provisions on waste prevention

The allocation of waste key numbers/waste markings should be industry- and process-specific in accordance with AVV.

Hazardous properties of waste

HP 4 irritant - skin irritation and eye damage

HP 6 acute toxicity

HP 14 ecotoxic

Comments

Waste is separated into the categories that can be treated separately by local or national waste management services.

Please note the relevant national or regional provisions.

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Uncontaminated and completely empty containers can be used again.

SECTION 14: Information relating to transport

14.1 UN number or ID number

ADR/RID/ADN: UN 3077
IMDG Code: VN 3077
ICAO-TI: UN 3077

14.2 Proper cargo name according to UN model regulations

ADR/RID/ADN: ENVIRONMENTALLY HAZARDOUS SOLID, N.O.S.
IMDG Code: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S.
ICAO-TI: Environmentally hazardous substance, solid, n.o.s.
Technical name: Copper sulphate pentahydrate

14.3 Transport hazard class(es)

ADR/RID/ADN: 9
IMDG Code: 9
ICAO-TI: 9

14.4 Packing group

ADR/RID/ADN: III
IMDG Code: III
ICAO-TI: III

14.5 Environmental hazards

danger to the aquatic environment.

14.6 Special precautions for the user

The provisions for dangerous goods (ADR) must also be complied with in the company.

14.7 Sea transport in bulk in accordance with IMO instruments

The cargo is not meant to be transported in bulk.

14.8 Information for each of the UN regulations

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

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SOLID, N.O.S.
Details on transport document: UN3077, ENVIRONMENTALLY DANGEROUS SOLID,
N.O.S., (Copper sulphate pentahydrate), 9, III, (-)
Classification code: M7
Danger labels: 9, "Fish and tree"
Environmental hazards: yes (aquatic hazard)
Special provisions: 274, 335, 375, 601
Exempt quantities (EQ): E1
Limited quantities (LQ): 5 kg
Transport category: 3
Tunnel restriction code: -
Hazard Identification Number (GEVI): 90

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
Data on the transport document (shipper's
declaration): UN3077, ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S., (Copper(II) sulphate
pentahydrate), 9, III
Marine Pollutant (Marine Pollutant): Yes (hazard to the aquatic environment), (Copper(II)
sulphate pentahydrate)
Danger labels: 9, "Fish and tree"
Special provisions: 274, 335, 966, 967, 969

SAFETY DATA SHEET

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Exempt quantities (EQ): E1
Limited quantities (LQ): 5 kg
EmS: F-A, S-F
Stowage category: A
International Civil Aviation Organisation (ICAO-IATA/DGR) - Additional information
Proper shipping name: Environmentally hazardous substance, solid, n.o.s.
Data on the transport document (shipper's declaration): UN3077, Environmentally hazardous substance, solid, n.o.s., (Copper(II) sulphate pentahydrate), 9, III
Environmental hazards: yes (aquatic hazard)
Danger labels: 9, "Fish and tree"
Special provisions: A97, A158, A179, A197, A215
Exempt quantities (EQ): E1
Limited quantities (LQ): 30 kg

SECTION 15: Statutory information

15.1 Safety, health and environmental regulations and legislation specific to the substance or mixture:

Relevant European Union (EU) provisions

Restrictions in accordance with REACH, Annex XVII

Restricted hazardous substances (REACH, Annex XVII)

Name of substance	Name according to inventory	CAS No.	Restriction	No.
Copper sulphate pentahydrate	substances in ink for tattoo or permanent make-up		R75	75

Legend

R75

- Shall not be placed on the market in mixtures for tattooing purposes, and mixtures containing such substances shall not be used for tattooing purposes after 4 January 2022 if the substance(s) in question is/are present or if the following circumstances occur:
 - in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogenic category 1A, 1B or 2, or as germ cell mutagenic category 1A, 1B or 2, the concentration of that substance in the mixture is equal to or greater than 0.00005 % by weight;
 - in the case of a substance classified as toxic to reproduction category 1A, 1B or 2 in Part 3 of Annex VI to Regulation (EC) No 1272/2008, the concentration of that substance in the mixture is equal to or greater than 0.001 % by weight;
 - in the case of a substance classified as a category 1, 1A or 1B skin allergen in Part 3 of Annex VI to Regulation (EC) No 1272/2008, the concentration of that substance in the mixture is equal to or greater than 0.001 % by weight;
 - in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as corrosive to the skin, category 1, 1A, 1B or 1C, or irritant to the skin, category 2, or for serious eye damage, category 1 or irritant to the eyes, category 2, the concentration of that substance in the mixture is equal to or greater than:
 - 0.1 % by weight, if the substance is used solely as a pH regulator;
 - 0.01% by weight, in all other cases;
 - in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), a concentration in the mixture equal to or greater than 0,00005 % by weight; in the case of a substance for which column g (Product type, body parts) of the table in Annex IV to Regulation (EC) No 1223/2009 indicates one or more of the following types of conditions, the concentration of the substance in the mixture equal to or greater than 0,00005 % by weight:
 - "Products washed off, out or away";
 - "Do not use in products applied to mucous membranes";
 - "Do not use in eye products";
 - in the case of a substance for which a condition is specified in column h (Maximum concentration in the product ready for use) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the concentration of the substance in the mixture does not meet the condition specified in that column, or the substance otherwise fails to meet it;
 - in the case of a substance listed in Appendix 13 to this Annex, the concentration of the substance in the mixture is equal to or greater than the concentration limit specified for that substance in that Appendix.
- For the purposes of this entry, the use of a mixture "for tattooing purposes" means the injection or insertion of the mixture into the skin, mucous membranes or eyeball of a person by means of a process or procedure (including procedures commonly referred to as "permanent make-up", cosmetic tattooing, "microblading" and "micropigmentation"), for the purpose of leaving a permanent mark(s) or drawing on that person's body.
- Where a substance not listed in Appendix 13 falls under more than one of items (a) to (g) of paragraph 1, the most stringent of the concentration limits set out in those items shall apply to that substance. Where a substance listed in Appendix 13 also falls under one or more of items (a) to (g) of paragraph 1, the concentration limit set out in paragraph 1(h) shall apply to that substance.
- By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
 - Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
 - Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).

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5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 and thereby classifies or reclassifies a substance in such a way that it falls under (a), (b), (c) or (d) of paragraph 1 of this entry, or falls under a different entry than before, and if the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall be treated, for the purposes of applying this entry to that substance, as applying on the date of application of that new or revised classification.

6. Where the entry of a substance in Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 such that the substance falls under (e), (f) or (g) of point 1 of this entry, or under a different point than before, and if the amendment takes effect after the date referred to in point 1 or, as the case may be, point 4 of this entry, that amendment shall be treated, for the purposes of applying this entry to that substance, as taking effect from the date falling 18 months after the entry into force of the act which adopted that amendment.

7. Suppliers placing a mixture on the market for tattooing purposes after 4 January 2022 shall ensure that the following information is indicated on the mixture:

- a) the text "Mixture for use in tattoos or permanent make-up";
- b) a unique batch identification reference number;
- c) the list of ingredients according to the nomenclature defined in the glossary of common ingredient names in accordance with Article 33 of Regulation (EC) No 1223/2009, or, in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC designation, the CAS and EC number. Ingredients shall be listed in descending order of weight or volume of ingredients at the time of formulation. Ingredient means any substance added during the formulation of the mixture for tattooing purposes and present therein. Impurities are not considered ingredients. Where the name of a substance used as an ingredient within the meaning of this entry must already be indicated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient need not be indicated in accordance with this Regulation;
- d) the additional entry "pH regulator" for substances covered by paragraph 1(d)(ii);
- e) the statement "Contains nickel. May cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;
- f) the statement "Contains hexavalent chromium (VI). May cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;
- g) safety precautions for use, if not already required to be indicated on the label in accordance with Regulation (EC) No 1272/2008. The information shall be clearly visible, easily legible and indelible. The information shall appear in the official language(s) of the Member State(s) where the mixture is marketed, unless otherwise specified by the Member State(s) concerned. If there is not enough space on the packaging for the information referred to in the first subparagraph, that information shall, except as regards point (a), be included in the instructions for use. The person administering the mixture shall provide the information specified on the packaging or in the instructions for use in accordance with this point to the person undergoing the procedure before the mixture is used for tattooing purposes.

8. Mixtures without the text "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.

9. This entry does not apply to substances which are gases at a temperature of 20 °C and pressure of 101.3 kPa, or which generate a vapour pressure greater than 300 kPa at a temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market or use of mixtures for tattooing purposes that are placed on the market or used exclusively as medical devices or accessories to a medical device within the meaning of Regulation (EU) 2017/745. Where a mixture has not been placed on the market or cannot be used exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and the requirements of this Regulation apply cumulatively.

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

not listed

Seveso Directive

2012/18/EU (Seveso III)

No.	Hazardous substance/hazard categories	Thresholds (tonnes) for application of requirements for lower and upper-tier establishments	Nuts
E1	environmental hazards (danger to the aquatic environment, cat.1)	100 - 200	56)

Notation

56) Hazardous to the aquatic environment in category Acute 1 or Chronic 1

Decopaint Directive

VOC content: 0 %

Directive on industrial emissions (IE Directive)

VOC content: 0 %

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

Not stated.

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

Not stated.

Water framework directive (WFD)

List of pollutants (WFD)

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Name of substance	Name according to inventory	CAS No.	Included in	Comments
Copper sulphate pentahydrate	Substances and preparations, or their degradation products, which have been shown to possess carcinogenic or mutagenic properties or properties which may cause effects in or via the aquatic environment on steroidogenic functions, thyroid functions, reproduction or other hormonal functions		a)	
Copper sulphate pentahydrate	Metals and metal compounds		a)	

Legend

(a) Indicative list of the main pollutants

Regulation on marketing and use of explosives precursors

Not stated.

Regulation on drug precursors

Not stated.

Regulation on ozone-depleting substances

Not stated.

Regulation on export and import of dangerous chemicals (PIC)

Not stated.

Regulation on persistent organic pollutants (POPs)

Not stated.

Other information

Directive 94/33/EC on the protection of young people at work. Observe work restrictions in accordance with the Pregnancy Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	List	Status
AU	AIIC	substance is mentioned
CN	IECSC	substance is mentioned
EU	ECSI	substance is mentioned
JP	CSCL-ENCS	substance is mentioned
KR	KECI	substance is mentioned
NZ	NZIoC	substance is mentioned
PH	PICCS	substance is mentioned
TW	TCSI	substance is mentioned
UN	NCI	substance is mentioned

Legend

AIIC: Australian Inventory of Industrial Chemicals
CICR: Chemical Inventory and Control Regulation
CSCL-ENCS: List of Existing and New Chemical Substances (CSCL-ENCS)
ECSI: EC inventory (EINECS, ELINCS, NLP)
IECSC: Inventory of Existing Chemical Substances Produced or Imported in China
KECI: Korea Existing Chemicals Inventory
NCI: National Chemical Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances (PICCS)
TCSI: Taiwan Chemical Substance Inventory

15.2 Chemical safety assessment:

According to REACH, Article 14(1), a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.

SECTION 16: Other information**Indication of changes (revised safety data sheet)**

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

Section 2.2:

Labelling of packages with a total content not exceeding 125 ml: change in the list (table)

Section 2.2:

According to directive 1907/2006/EC, 2020/878
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Labelling of packets with a total content not exceeding 10 ml.

List of relevant sentences (code and full text as mentioned in sections 2 and 3)

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H400 Very toxic to aquatic organisms.
H410 Very toxic to aquatic organisms with long-lasting effects.

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road (ADR Agreement); AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Association for the Testing of Materials; bw - Body Weight; CLP - Regulation on Classification, Labelling and Packaging; Regulation (EC) No 1272/2008; CMR - Carcinogenic, mutagenic or toxic to reproduction; DIN - Standard of the German Institute for Standardisation; DSL - List of substances used indoors (Canada); ECHA - European Chemicals Agency; EC-Number - EINECS number; ECx - Concentration associated with x% response; ELx - Charge capacity associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemicals (Japan); ErCx - Concentration associated with x% growth response; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - IMO International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk; IC50 - Half-Maximum Inhibitory Concentration; ICAO - International Civil Aviation Organisation; IECSC - Inventory List of Existing Chemicals in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korean Inventory of Existing Chemicals; LC50 - Lethal concentration for 50% of a test population; LD50 - Lethal dose for 50% of a test population (lethal dose median); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not otherwise specified; NO(A)EC - No discernible (negative) effect on concentration; NO(A)EL - No discernible (negative) effect on Level; NOELR - No discernible effect on cargo capacity; NZIoC - New Zealand inventory of chemicals; OECD - Organisation for Economic Co-operation and Development OECD; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, bioaccumulative and toxic substance; PICCS - Philippine inventory of chemicals and chemical substances; (Q)SAR - (Quantitative) structure-activity relationships; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH); RID - Regulations concerning the International Carriage of Dangerous Goods by Rail (RID); SADT - Self-accelerating decomposition temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwanese Inventory of Chemical Substances; TECL - Inventory of Chemical Substances Existing in Thailand; TRGS - Technical Regulation on Hazardous Substances; TSCA - Toxic Substances Control Act (USA); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Training advice:
Provide proper information, instruction and training for users.

Reference documents:

Regulation (EC) No 1272/2008 on classification, labelling and packaging (CLP) of substances and mixtures.
Regulation (EC) No 1907/2006 (REACH), as amended by 2020/878/EU.
Transport of dangerous goods by road, rail or inland waterways (ADR/RID/ADN).
International Maritime Dangerous Goods Code (IMDG).
Dangerous Goods Regulations (DGR) for aviation (IATA).

Rejection of liability

This information is based on the current state of our knowledge. This safety data sheet has been compiled and is exclusively intended for this product.

SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878

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