

## Safety Data Sheet

according to UK REACH Regulation

### Heyn

Revision date: 28.03.2022

Product code:

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

### 1.1. Product identifier

Heyn

UFI: YF18-2ACT-JY6M-XQS0

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

#### Use of the substance/mixture

Laboratory chemical

#### Uses advised against

Any non-intended use.

### 1.3. Details of the supplier of the safety data sheet

Company name: Schmitz-Metallographie GmbH  
Street: Kaiserstraße 100  
Place: D-52134 Herzogenrath  
Telephone: 02407 / 568296-0      Telefax: 02407 / 568296-9  
e-mail: info@schmitz-metallographie.de  
Contact person: Herr Füllmann  
e-mail: info@schmitz-metallographie.de  
Internet: www.schmitz-metallographie.de  
Responsible Department: Dr. Gans-Eichler      e-mail: info@tge-consult.de  
Chemieberatung GmbH      Tel.: +49(0)2534 6441185  
Otto-Hahn-Str. 36      www.tge-consult.de  
D-48161 Münster

### 1.4. Emergency telephone

#### number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

### 2.2. Label elements

#### GB CLP Regulation

#### Special labelling of certain mixtures

EUH210      Safety data sheet available on request.

#### Additional advice on labelling

Labelling according to GHS (UK CLP) regulation.: none

### 2.3. Other hazards

For information or further instructions, see also section 11 or 12.

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

in aqueous solution

#### Hazardous components

CAS No	Chemical name	Quantity
	EC No      Index No      REACH No	

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	Classification (GB CLP Regulation)	
10060-13-6	Ammonium tetrachlorocuprate(II) dihydrate	7 - < 10 %
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335	

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

**Further Information**

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After inhalation**

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

**After contact with skin**

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

**After contact with eyes**

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

**After ingestion**

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>). Dry extinguishing powder. alcohol resistant foam. Atomized water.

**Unsuitable extinguishing media**

High power water jet.

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

Can be released in case of fire: Chlorine (Cl<sub>2</sub>). Hydrogen chloride (HCl).

**5.3. Advice for firefighters**

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

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

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### General advice

- Provide adequate ventilation.
- Avoid contact with skin, eyes and clothes.
- Wear personal protection equipment. (See section 8.)

### For non-emergency personnel

- Wear personal protection equipment (refer to section 8).

### For emergency responders

- No special measures are necessary.

### 6.2. Environmental precautions

- Discharge into the environment must be avoided.

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

#### For containment

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Treat the recovered material as prescribed in the section on waste disposal.

#### For cleaning up

- Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

- Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

- Provide adequate ventilation.
- Avoid contact with skin, eyes and clothes.
- Wear personal protection equipment. (See section 8.)

#### Advice on protection against fire and explosion

- Usual measures for fire prevention.

#### Advice on general occupational hygiene

- Always close containers tightly after the removal of product. Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and after work.

#### Further information on handling

- General protection and hygiene measures: See section 8.

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

#### Requirements for storage rooms and vessels

- Keep locked up. Keep container tightly closed and in a well-ventilated place. Store in a cool dry place.
- Unsuitable materials for Container: metals. alloys.

#### Hints on joint storage

- Do not store together with: Explosives. Radioactive substances. Infectious substances.

#### Further information on storage conditions

- Keep the packing dry and well sealed to prevent contamination and absorption of humidity.
- Recommended storage temperature: 20°C
- Protect against: frost. UV-radiation/sunlight. heat. Humidity

### 7.3. Specific end use(s)

- See section 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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**Additional advice on limit values**

Does not contain substances above concentration limits fixing an occupational exposure limit.

**8.2. Exposure controls**

**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear safety glasses; chemical goggles (if splashing is possible). BS/EN 166

**Hand protection**

In case of prolonged or frequently repeated skin contact:

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time  $\geq$  8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time  $\geq$  8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time  $\geq$  8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time  $\geq$  8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time  $\geq$  8 h

The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN ISO 374 derived from it.

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

**Skin protection**

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

**Respiratory protection**

With correct and proper use, and under normal conditions, breathing protection is not required.

**Thermal hazards**

No special precautionary measures are necessary.

**Environmental exposure controls**

No special precautionary measures are necessary.

**SECTION 9: Physical and chemical properties**

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

Physical state:	liquid
Colour:	not determined
Odour:	characteristic

**Changes in the physical state**

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	~100 °C
Sublimation point:	not determined
Softening point:	not determined

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Pour point: not determined

Flash point: not determined

**Explosive properties**

none

Lower explosion limits: not determined

Upper explosion limits: not determined

Auto-ignition temperature: not determined

**Self-ignition temperature**

Gas: not determined

Decomposition temperature: not determined

pH-Value: 2,8

Viscosity / dynamic: not determined

Viscosity / kinematic: not determined

Flow time: not determined

Water solubility: miscible.

**Solubility in other solvents**

not determined

Partition coefficient n-octanol/water: SECTION 12: Ecological information

Vapour pressure: not determined

Density: ~1 g/cm<sup>3</sup>

Relative vapour density: not determined

**9.2. Other information**

**Information with regard to physical hazard classes**

Sustaining combustion: Not sustaining combustion

Oxidizing properties  
none

**Other safety characteristics**

Solvent separation test: not determined

Solvent content: not determined

Solid content: not determined

Evaporation rate: not determined

**Further Information**

No information available.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No information available.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

Protect against: UV-radiation/sunlight. heat.

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#### **10.5. Incompatible materials**

Materials to avoid: Reducing agent. Oxidizing agents. Substances and mixtures which, in contact with water, emit flammable gases

#### **10.6. Hazardous decomposition products**

Can be released in case of fire: Chlorine (Cl<sub>2</sub>). Hydrogen chloride (HCl).

### **SECTION 11: Toxicological information**

#### **11.1. Information on hazard classes as defined in GB CLP Regulation**

##### **Toxicokinetics, metabolism and distribution**

No data available.

##### **Acute toxicity**

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

##### **Irritation and corrosivity**

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

##### **Sensitising effects**

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

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

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

##### **STOT-single exposure**

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

##### **STOT-repeated exposure**

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

##### **Aspiration hazard**

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

##### **Specific effects in experiment on an animal**

No data available.

#### **11.2. Information on other hazards**

##### **Endocrine disrupting properties**

No data available.

### **SECTION 12: Ecological information**

#### **12.1. Toxicity**

The product has not been tested.

#### **12.2. Persistence and degradability**

The product has not been tested.

#### **12.3. Bioaccumulative potential**

No indication of bioaccumulation potential.

#### **12.4. Mobility in soil**

No data available.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1 %.

#### **12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1 %.

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**12.7. Other adverse effects**

No data available.

**Further information**

Do not allow to enter into surface water or drains.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations**

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

**List of Wastes Code - residues/unused products**

120199 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; wastes not otherwise specified

**List of Wastes Code - used product**

120199 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; wastes not otherwise specified

**List of Wastes Code - contaminated packaging**

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number or ID number:** No dangerous good in sense of these transport regulations.  
**14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.  
**14.3. Transport hazard class(es):** No dangerous good in sense of these transport regulations.  
**14.4. Packing group:** No dangerous good in sense of these transport regulations.

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** No dangerous good in sense of these transport regulations.  
**14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.  
**14.3. Transport hazard class(es):** No dangerous good in sense of these transport regulations.  
**14.4. Packing group:** No dangerous good in sense of these transport regulations.

**Marine transport (IMDG)**

**14.1. UN number or ID number:** No dangerous good in sense of these transport regulations.  
**14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.  
**14.3. Transport hazard class(es):** No dangerous good in sense of these transport regulations.

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** No dangerous good in sense of these transport regulations.  
**14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.  
**14.3. Transport hazard class(es):** No dangerous good in sense of these transport regulations.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

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**14.6. Special precautions for user**

Refer to section 6-8

**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**

**EU regulatory information**

2010/75/EU (VOC):	No information available.
2004/42/EC (VOC):	No information available.
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

**Additional information**

Safety Data Sheet according to UK-REACH Regulation  
The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].  
UK REACH Appendix XVII, No (mixture): not relevant

**National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**

**Changes**

Rev. 1,00; Initial release 28.03.2022

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
AGW: Arbeitsplatzgrenzwert  
CAS: Chemical Abstracts Service  
CLP: Classification, Labelling and Packaging of substances and mixtures  
DNEL: Derived No Effect Level  
d: day(s)  
EINECS: European INventory of Existing Commercial chemical Substances  
ELINCS: European List of Notified Chemical Substances  
ECHA: European Chemicals Agency  
EWC: European Waste Catalogue  
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)  
h: hour  
LOAEL: Lowest observed adverse effect level  
LOAEC: Lowest observed adverse effect concentration  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
NOAEL: No observed adverse effect level



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NOAEC: No observed adverse effect concentration

NLP: No-Longer Polymers

N/A: not applicable

OECD: Organisation for Economic Co-operation and Development

PNEC: predicted no effect concentration

PBT: Persistent bioaccumulative toxic

RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail )

REACH: Registration, Evaluation, Authorisation of Chemicals

SVHC: substance of very high concern

TRGS: Technische Regeln für Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

**Relevant H and EUH statements (number and full text)**

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
EUH210	Safety data sheet available on request.

**Further Information**

Classification according to GHS [UK CLP] - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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