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Safety data sheet according to 1907/2006/EC

Version number 10 Revision: 05.12.2019 Printing date 05.12.2019

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

- · 1.1 Product identifier
- Trade name: Testomat 2000 Chromat Cr VI 2100 Reagenz A
- · UFI: D6NX-SEQS-6000-HD8H
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the preparation:

Reagent for analysis

EuPCS: PC-TEC-19 Reagents and laboratory chemical

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Gebrüder Heyl

Analysentechnik GmbH & Co. KG

Orleansstraße 75 b D-31135 Hildesheim

· Further information obtainable from: product safety department

· 1.4 Emergency telephone number:

Giftinformationszentrum Nord Phone +49 (0) 551 19240

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labelling:

sulphuric acid

· Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

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.

Immediately call a POISON CENTER/doctor.

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P390 Absorb spillage to prevent material damage.

- Labelling of packages where the contents do not exceed 125 ml
- · Hazard pictograms



- · Signal word Danger
- · Hazard-determining components of labelling:

sulphuric acid

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

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 POISON CENTER/doctor. P390 Absorb spillage to prevent material damage.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable. · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- Description:

Mixture of substances listed below with nonhazardous additions according to Regulation (EC) No 1272/2008.

Water CAS 7732-18-5

· Dangerous cor	nponents:
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CAS: 7664-93-9 sulphuric acid $\geq 15 - \leq 25\%$ EINECS: 231-639-5 Index number: 016-020-00-8 Reg.nr.: 01-2119458838-20 Skin Corr. 1A, H314: $C \geq 15\%$ Skin Corr. 1A; H314: $C \geq 15\%$ Skin Irrit. 2; H315: $C \leq 15\%$ Eye Irrit. 2; H319: $C \leq 15\%$

- · **SVHC** Not applicable.
- Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Personal protection for the First Aider.

Immediately remove any clothing soiled by the product.

After inhalation:

Supply fresh air.

Call a doctor immediately.

In case of unconsciousness place patient stably in side position for transportation.

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· After skin contact:

Clean with water and soap. If possible, also wash with polyethylene glycol 400.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

· After eye contact:

Protect unharmed eye.

Rinse opened eye for several minutes under running water.

Call a doctor immediately.

· After swallowing:

A person vomiting while laying on their back should be turned onto their side.

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · 5.3 Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the material collected according to regulations.

Clean the affected area carefully; suitable cleaners are:

Weak alkaline solution

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

When diluting always pour product into water and not vice versa.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- · Information about storage in one common storage facility: Store away from foodstuffs.

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· Further information about storage conditions:

Keep container tightly sealed.

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area.

- · Recommended storage temperature: 15 25 °C
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

CAS: 7664-93-9 sulphuric acid

IOELV Long-term value: 0.05 mg/m3

- · Regulatory information IOELV: (EU) 2017/164
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or sniff while working.

· Respiratory protection:

Use suitable respiratory protective device when aerosol or mist is formed. Filter: Type E / P2

Protection of hands:



Protective gloves

Wear gloves according to EN 374.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Check protective gloves prior to each use for their proper condition.

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.12 mm

Value for the permeation: Level = 6 (> 480 min)

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: \geq 0.12 mm Value for the permeation: Level = 6 (> 480 min)

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· Eye protection:



Tightly sealed goggles according to EN 166

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid
Colour: Colourless
Odour: Odourless
Odour threshold: Not determined.

pH-value: Strongly acidic

· Change in condition

Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: Undetermined.

· Flash point: Undetermined.

Flammability (solid, gas): Not applicable.
 Ignition temperature: Not determined.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

• Explosive properties: Product does not present an explosion hazard.

Not determined.

· Explosion limits:

Lower:

Upper: Not determined.

Vapour pressure: Not determined.

Density at 20 °C: 1.18 g/cm³
Relative density Not determined.

Vapour density Not determined.
Evaporation rate Not determined.

· Solubility in / Miscibility with

water: Fully miscible.

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic: Not determined. Kinematic: Not determined.

• **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

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- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions

Corrosive action on metals.

Reacts with metals forming hydrogen.

Heating occurs when water is added.

Reacts with alkaline metals.

Reacts with alkali (lyes).

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Alkaline substances.
- 10.6 Hazardous decomposition products:

Sulphuric acid

Sulphur oxides (SOx)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

CAS: 7664-93-9 sulphuric acid

Oral LD50 2,140 mg/kg (rat)

- · Primary irritant effect:
- Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes serious eve damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.

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- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

- · Uncleaned packaging:
- · Recommendation:

Packagings that may not be cleansed are to be disposed of in the same manner as the product. Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14.1 UN-Number	
ADR, IMDG, IATA	UN2796
14.2 UN proper shipping name ADR IMDG, IATA	2796 SULPHURIC ACID SULPHURIC ACID
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
Class	8 Corrosive substances.
Label	8
14.4 Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Warning: Corrosive substances.
Danger code (Kemler):	80
EMS Number:	F-A,S-B
Segregation groups	Strong acids
Stowage Category Segregation Code	B SG36 Stow "separated from" SGG18-alkalis.
Segregation Code	SG49 Stow "separated from" SGG1-cyanides
14.7 Transport in bulk according to An of Marpol and the IBC Code	nex II Not applicable.
Transport/Additional information:	Void
ADR	
Limited quantities (LQ)	1L



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Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category · Tunnel restriction code	2 E
·IMDG	
· Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2796 SULPHURIC ACID, 8, II

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · National regulations:
- · Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H314 Causes severe skin burns and eye damage.

- · Department issuing SDS: product safety department.
- Abbreviations and acronyms:

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

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative

Met. Corr.1: Corrosive to metals - Category 1

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

* Data compared to the previous version altered.