Safety data sheet
according to 1907/2006/EC, Article 31

Heimerle + Meule
Heimerle + Meule Group

Printing date: 27.07.2022 *Version number 7* *Revision: 27.07.2022*

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

· **1.1 Product identifier**

· **Trade name: Titanium colouring solution W**
Titanfärbelösung W

· **Article number:** 81010671

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Not approved for private consumers.

· **Application of the substance / the mixture** Galvanic bath

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

Heimerle + Meule GmbH
Dennigstrasse 16
D-75179 Pforzheim

Telefon +49 (0) 7231 940-0
Telefax +49 (0) 7231 940-2199
www.heimerle-meule.com

· **Further information obtainable from:**
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Abteilung BASU - Bau/Arbeitssicherheit/Umwelt
Department BASU - Construction / Occupational Safety / Environment
sds@heimerle-meule.com

IATA - 24h Emergency Contact - IATA - 24h Emergency Contact -
(Dangerous goods emergency number)
+49 172 739 6970

· **1.4 Emergency telephone number:**

DEUTSCHLAND - GERMANY:
Vergiftungs-Informations-Zentrale Freiburg, ++49 761 19240 (24 h)
(Poisoning Information Center)
GREAT BRITAIN:
National Poisons Information Service +44 121 507 4123
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111 - In Scotland: NHS 24 - dial 111
ITALY:
Istituto Superiore di Sanità +3906499906140
KROATIA - REPUBLIKA HRVATSKA:
(+385) 01 2348 342
ESTLAND - ESTONIA:
Tervisemeti Mürgistusteabekeskuse 16662, (+342) 7914 794
LETTLAND - LATVIA:
Latvijas Vides, ģeoloģijas un meteoroloģijas centrs (+371) 670 32600
LITAUEN - LIETUVOS RESPUBLIKA:
Apsinuodijimų informacijos biuras +370 (85) 2362052
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SECTION 2: Hazards identification

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

corrosion

Skin Corr. 1B 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 GB CLP regulation.
· **Hazard pictograms**

GHS05

· **Signal word** Danger

· **Hazard-determining components of labelling:**
phosphoric acid 85%
· **Hazard statements**
H314 Causes severe skin burns and eye damage.
· **Precautionary statements**
P260 Do not breathe dusts or mists.
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.
P321 Specific treatment (see on this label).
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

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· ***Dangerous components / Information on ingredients:***

CAS: 7664-38-2 *EINECS: 231-633-2* *Index number: 015-011-00-6* *RTECS: TB 6300000* *Reg.nr.: 01-2119485924-24*	*phosphoric acid 85%; orthophosphoric acid 85%; phosphoric acid ... %, orthophosphoric acid ...%* *Skin Corr. 1B, H314* *Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 %* *Skin Irrit. 2; H315: 10 % ≤ C < 25 %* *Eye Irrit. 2; H319: 10 % ≤ C < 25 %*	*25-50%*
CAS: 144-62-7 *EINECS: 205-634-3* *Index number: 607-006-00-8* *RTECS: RO 2450000*	*oxalic acid* *Acute Tox. 4, H302; Acute Tox. 4, H312*	*<5%*

· ***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:***
Immediately remove any clothing soiled by the product.
Personal protection for the First Aider.
Take affected persons out of danger area and lay down.
Involve doctor immediately after a accident or unwell
· ***After inhalation:*** *In case of unconsciousness place patient stably in side position for transportation.*
· ***After skin contact:***
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
If skin irritation continues, consult a doctor.
· ***After eye contact:*** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
· ***After swallowing:***
Drink plenty of water and provide fresh air. Call for a doctor immediately.
A person vomiting while laying on their back should be turned onto their side.
Rinse out mouth and then drink plenty of water.
· ***4.2 Most important symptoms and effects, both acute and delayed*** *No further relevant information available.*
· ***Hazards*** *Danger of gastric perforation.*
· ***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:***
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· ***For safety reasons unsuitable extinguishing agents:*** *Water with full jet*
· ***5.2 Special hazards arising from the substance or mixture*** *No further relevant information available.*
· ***5.3 Advice for firefighters***
· ***Protective equipment:***

Wear self-contained respiratory protective device.

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· ***Additional information***
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures***
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Only handle and refill product in closed systems.
· ***6.2 Environmental precautions:***
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· ***6.3 Methods and material for containment and cleaning up:***
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· ***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***
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
he usual precautionary measures are to be adhered to when handling chemicals.
Prevent formation of aerosols.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
· ***Information about fire - and explosion protection:*** *Keep respiratory protective device available.*

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:***
Observe official regulations on storing packagings .
Observe official regulations on storing packagings .
Prevent any seepage into the ground.
· ***Information about storage in one common storage facility:***

Store away from foodstuffs.
· ***Further information about storage conditions:***
Keep container tightly sealed.
Store under lock and key and out of the reach of children.
· ***Storage class:*** *8 B*
· ***7.3 Specific end use(s)*** *No further relevant information available.*

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SECTION 8: Exposure controls/personal protection

· ***8.1 Control parameters***
· ***Additional information about design of technical facilities:*** *No further data; see item 7.*

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· **Ingredients with limit values that require monitoring at the workplace:**	
CAS: 7664-38-2 phosphoric acid 85%	
WEL (Great Britain)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³
IOELV (European Union)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³
AGW (Germany)	Long-term value: 2 E mg/m³ 2(I);DFG, EU, AGS, Y
CAS: 144-62-7 oxalic acid	
WEL (Great Britain)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³
IOELV (European Union)	Long-term value: 1 mg/m³
AGW (Germany)	Long-term value: 1 E mg/m³ 1(I);H, EU, 13

· **Regulatory information**
WEL (Great Britain): EH40/2020
IOELV (European Union): (EU) 2019/1831
AGW (Germany): TRGS 900
· **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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
According to EC Directive 89/686/EEC
· **Respiratory protection:**
Use suitable respiratory protective device only when aerosol or mist is formed.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Beware: Filter masks provide protection for a short period of time only. They should only be used in exceptional cases, that is if a small amount of the substance has spilled out or in order to fight spillages and fire.
according EN 14387
according to EN 143
· **Recommended filter device for short term use:** Combination filter B-P2
· **Protection of hands:**

Protective gloves

according to EN 374
To avoid skin problems reduce the wearing of gloves to the required minimum.
Only use chemical-protective gloves with CE-labelling of category III.
Sensibilisation by the components in the glove materials is possible.
Check the permeability prior to each anewed use of the glove.

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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
Prior to working with gloves the rubbing in with tanniferous skin-protecting agents for the avoidance of skin softening due to perspiration is recommended.

· ***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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Chloroprene rubber, CR
Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR

· ***Penetration time of glove material***
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 3).
Value for the permeation: Level ≤ 3

· ***Not suitable are gloves made of the following materials:***
Leather gloves
Strong material gloves

· ***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:***	*Product specific*
· ***Odour threshold:***	*Not determined.*
· ***pH-value at 20°C (68°F):***	*1*
· ***Change in condition***	
Melting point/freezing point:	*Undetermined.*
Initial boiling point and boiling range:	*Undetermined.*
· ***Flash point:***	*Not applicable.*
· ***Flammability (solid, gas):***	*Not applicable.*

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· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density at 20°C (68°F):**	1.2 g/cm³ (10.01 lbs/gal)
· **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.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** Reacts with acids, alkalis and oxidising agents.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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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:**		
ATE (Acute Toxicity Estimates)		
Oral	LD50	12,500–37,500 mg/kg (rat)
Dermal	LD50	36,667–110,000 mg/kg

CAS: 144-62-7 oxalic acid		
Oral	LD50	375 mg/kg (rat)
Dermal	LD50	1,100 mg/kg (ATE)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
· **Serious eye damage/irritation**
Causes serious eye damage.

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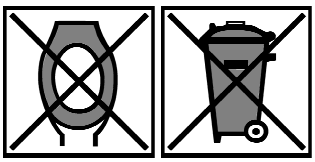
· ***Respiratory or skin sensitisation*** *Based on available data, the classification criteria are not met.*
· ***Additional toxicological information:***
· ***CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)***
· ***Germ cell mutagenicity*** *Based on available data, the classification 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:***
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
· ***12.5 Results of PBT and vPvB assessment*** *Not applicable.*
· ***PBT:*** *Not applicable.*
· ***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.

Contact manufacturer for recycling information.
· ***Waste disposal key:***
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

· ***Uncleaned packaging:***
· ***Recommendation:***
Disposal must be made according to official regulations.
Packaging which is uncleaned or soiled with product remains is to be treated like the product itself
Packaging free of product remains is to be supplied refuse for recycling. Only if no adequate collecting system is available, they may be disposed of through the domestic rubbish
· ***Recommended cleansing agents:*** *Water, if necessary together with cleansing agents.*

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SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN1805
· **14.2 UN proper shipping name**	
· **ADR**	UN1805 PHOSPHORIC ACID, SOLUTION
· **IMDG, IATA**	PHOSPHORIC ACID, SOLUTION
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG, IATA**	

· **Class**	8 Corrosive substances.
· **Label**	8
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	III
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Corrosive substances.
· **Hazard identification number (Kemler code):**	80
· **EMS Number:**	F-A,S-B
· **Segregation groups**	Acids
· **Stowage Category**	A
· **Segregation Code**	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **Transport category**	3
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **IATA**	
· **Remarks:**	24h emergency contact - (Dangerous goods emergency number) +49 172 739 6970

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· **UN "Model Regulation":** UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

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SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

COUNCIL DIRECTIVE 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)

DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

· **GADSL - Global Automotive Declarable Substance List**

None of the ingredients is listed.

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations:**

· **Waterhazard class:** .

· **Other regulations, limitations and prohibitive regulations** -
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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.

· **Reasons for revise**
If necessary, this saftey data sheet can revised according to legal guidelines.

Our current version for your reference is available on our website
www.heimerle-meule.com

· **Relevant phrases**
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.

· **Department issuing SDS:**

Abteilung BASU - Bau/Arbeitssicherheit/Umwelt
Department BASU - Construction / Occupational Safety / Environment

sds@heimerle-meule.com
.

· **Contact:**
Herr Thomas Knuth
thomas.knuth@heimerle-meule.com
sds@heimerle-meule.com

· **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)

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IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
AwSV: Ordinance on facilities for handling water-polluting substances (German regulation).
TRGS: Technical rules for hazardous substances (German regulation)
ADR: Accord relatif au transport international 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
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

· **** Data compared to the previous version altered.***