

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

Printing date: 15.12.2022

Version number 9 (replaces version 8)

Revision: 15.12.2022

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

· **1.1 Product identifier**

· **Trade name:** **Brightener VG 100 G**
Glanzzusatz VG 100 G

· **Article number:** 86938140

· **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**

Electroplating auxiliary

· **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:**

*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*

IRELAND

*+353 1 809 2166 (7 Days 8 am -10 pm)
Healthcare Professionals: +353 1 809 2566*

ITALY:

*Istituto Superiore di Sanità (ISS) +3906499906140
Centro Antiveleni*

Bergamo: +39 800 883300

Firenze +39 055 794 7819

Milano: +39 055 794 7819

Roma +39 06 68593726

Roma +39 06 49978000

Roma +39 06 3954343

KROATIA - REPUBLIKA HRVATSKA:

(+385) 01 2348 342

ESTLAND - ESTONIA:

Tervisemeti Mürgistusteabekeskuse

National (24/7): 16662

(+372) 7943 794

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LETTLAND - LATVIA:

Valsts Toksikoloģijas centrs, Saindēšanās un zāļu informācijas centrs,
(24h) 112

(24h) +371 67042473

LITAUEN - LIETUVOS RESPUBLIKA:

Poison Information Bureau (24/7), Tel.: +8 5 236 20 52

Apsinuodijimų informacijos biuras

SECTION 2: Hazards identification

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



health hazard

Carc. 1A H350i May cause cancer by inhalation.

Repr. 1B H360D May damage the unborn child.

STOT RE 2 H373 May cause damage to the respiratory system through prolonged or repeated exposure.



corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Sens. 1 H317 May cause an allergic skin reaction.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
- The product is classified and labelled according to the GB CLP regulation.

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

1-hydroxyethane-1,1-diylbis(phosphonic acid)
nickel dichloride

· **Hazard statements**

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H350i May cause cancer by inhalation.
H360D May damage the unborn child.
H373 May cause damage to the respiratory system through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
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).
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Restricted to professional users.

· **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.

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· Dangerous components / Information on ingredients:		
CAS: 2809-21-4 Reg.nr.: 01-2119510391-53	1-hydroxyethane-1,1-diylbis(phosphonic acid); Phosphonic acid, (1-hydroxyethylidene)bis- -----  Eye Dam. 1, H318  Aquatic Chronic 1, H410	<5%
CAS: 7718-54-9 EINECS: 231-743-0 Index number: 028-011-00-6	nickel dichloride -----  Acute Tox. 3, H301; Acute Tox. 3, H331  Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1A, H350i; Repr. 1B, H360D; STOT RE 1, H372  Aquatic Acute 1, H400; Aquatic Chronic 1, H410  Skin Irrit. 2, H315; Skin Sens. 1, H317 Specific concentration limits: STOT RE 1; H372: C ≥ 1 % STOT RE 2; H373: 0.1 % ≤ C < 1 % Skin Irrit. 2; H315: C ≥ 20 % Skin Sens. 1; H317: C ≥ 0.01 %	≥0.3–<0.5%

· **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:**

Seek immediate medical advice.

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 an accident or unwell

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

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

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

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:**

Rinse out mouth and then drink plenty of water.

Seek immediate medical advice.

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.

· 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.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· 5.2 Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Nitrogen oxides (NO_x)

Hydrogen chloride (HCl)

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- **5.3 Advice for firefighters**
- **Protective equipment:**



Wear 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

- **Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter the sewage system.

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:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

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**

Ensure that suitable extractors are available on processing machines

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

the 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 .

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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:** 6.1 D

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

CAS: 7718-54-9 nickel dichloride

WEL (Great Britain)	Long-term value: 0.1 mg/m ³ as Ni; Sk; Carc; Sen
BOELV (European Union)	Long-term value: 0.1* mg/m ³ as Ni; sens. dermal/resp. *inhalable
AGW (Germany)	Long-term value: 0.030E mg/m ³ 8(II); AGS, Sh, Y, 10, 24, 31
TRGS 910 (Germany)	Short-term value: 0.006 (A) mg/m ³ Long-term value: 0.006 (A) mg/m ³ 8, Konzentrationen beziehen sich auf Ni-Gehalt

· **Regulatory information**

WEL (Great Britain): EH40/2020

BOELV (European Union): EU 2022/431

AGW (Germany): TRGS 900

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see item 7.

· **Individual protection measures, such as 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.

Store protective clothing separately.

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:**

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 to EN 14387

according to EN 143

· **Recommended filter device for short term use:** Combination filter B-P3

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- **Hand protection**
Acid resistant gloves



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 renewed use of the glove.

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.

- **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.

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/face 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**

- **Physical state**

Fluid

- **Colour:**

Light green

- **Odour:**

Odourless

- **Odour threshold:**

Not determined.

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· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	100°C (212°F)
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Decomposition temperature:	Not determined.
· pH at 20°C (68°F)	2
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20°C (68°F):	1.06 g/cm ³ (8.85 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.

· 9.2 Other information	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Evaporation rate	Not determined.

· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

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** Reacts with acids, alkalis and oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Reaktionen with metalls
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Oral	LD50	23,810 mg/kg
Inhalative	LC50/4 h	119 mg/l

CAS: 7718-54-9 nickel dichloride

Oral	LD50	100 mg/kg (ATE)
Inhalative	LC50/4 h	0.5 mg/l (ATE)

- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Carcinogenicity** May cause cancer by inhalation.
- **Reproductive toxicity** May damage the unborn child.
- **STOT-repeated exposure**
May cause damage to the respiratory system through prolonged or repeated exposure.
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

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.
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
At present there are no ecotoxicological assessments.
- Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.

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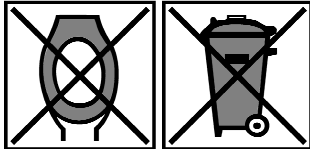
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Toxic for aquatic organisms

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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.

SECTION 14: Transport information

- 14.1 UN number or ID number

- ADR, IMDG, IATA

UN3082

- 14.2 UN proper shipping name

- ADR

UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-hydroxyethane-1,1-diylbis(phosphonic acid), nickel dichloride)

- IMDG

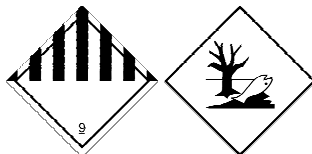
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-hydroxyethane-1,1-diylbis(phosphonic acid), nickel dichloride), MARINE POLLUTANT

- IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-hydroxyethane-1,1-diylbis(phosphonic acid), nickel dichloride)

- 14.3 Transport hazard class(es)

- ADR, IMDG, IATA



- Class

9 Miscellaneous dangerous substances and articles.

- Label

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· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Product contains environmentally hazardous substances: 1-hydroxyethane-1,1-diylbis(phosphonic acid) No Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Segregation groups · Stowage Category	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F (SGG1) Acids A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L 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
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-HYDROXYETHANE-1,1-DIYLBIS(PHOSPHONIC ACID)), NICKEL DICHLORIDE), 9, III

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

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

CAS: 7718-54-9 nickel dichloride

D(FI)

- **Directive 2012/18/EU**
 - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
 - **Seveso category E2** Hazardous to the Aquatic Environment
 - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
 - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
 - **National regulations:**
 - **Additional classification according to Decree on Hazardous Materials, Annex II:**
Carcinogenic hazardous material group III (dangerous).
 - **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
Employment restrictions concerning women of child-bearing age must be observed.
 - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| II | 0.4 |
- **Waterhazard class:** .
 - **Other regulations, limitations and prohibitive regulations -**
 - **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.

- **Reasons for revise**
If necessary, this safety data sheet can be revised according to legal guidelines.

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

- **Relevant phrases**
H301 Toxic if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341 Suspected of causing genetic defects.
H350i May cause cancer by inhalation.
H360D May damage the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

- **Department issuing SDS:**

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

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Abbreviations and acronyms:*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. 3: Acute toxicity – Category 3**Skin Corr. 1A: Skin corrosion/irritation – Category 1A**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Resp. Sens. 1: Respiratory sensitisation – Category 1**Skin Sens. 1: Skin sensitisation – Category 1**Muta. 2: Germ cell mutagenicity – Category 2**Carc. 1A: Carcinogenicity – Category 1A**Repr. 1B: Reproductive toxicity – Category 1B**STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1**STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2**** Data compared to the previous version altered.**

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