

Printing date: 21.12.2022

Version number 7 (replaces version 6)

Revision: 21.12.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking · 1.1 Product identifier · Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l · Article number: 81012255 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: 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 LETTLAND - LATVIA: Valsts Toksikoloģijas centrs, Saindēšanās un zāļu informācijas centrs,



Revision: 21.12.2022

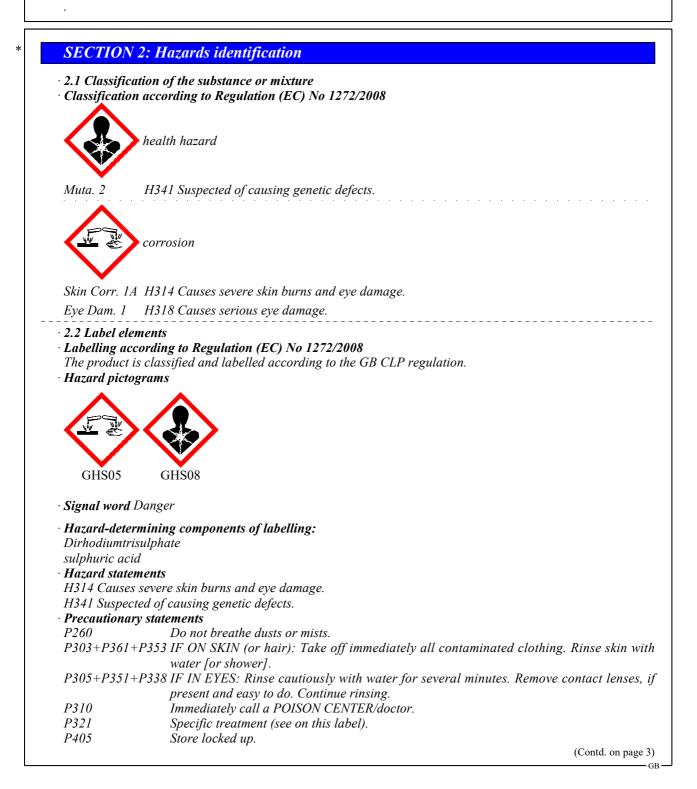
Printing date: 21.12.2022

Version number 7 (replaces version 6)

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

(Contd. of page 1)

(24h) 112 (24h) +371 67042473 <u>LITAUEN - LIETUVOS RESPUBLIKA:</u> Poison Information Bureau (24/7), Tel.: +8 5 236 20 52 Apsinuodijimų informacijos biuras





Printing date: 21.12.2022

Version number 7 (replaces version 6)

Revision: 21.12.2022

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

P501

(Contd. of page 2) 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.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components / Infe	ormation on ingredients:	
CAS: 7664-93-9	sulphuric acid; sulfuric acid	≥5-<7%
EINECS: 231-639-5	Met. Corr.1, H290; Skin Corr. 1A, H314	
Index number: 016-020-00-8	Specific concentration limits: Skin Corr. 1A; H314: $C \ge 15$ %	
Reg.nr.: 01-2119453338-20	<i>Skin Irrit. 2; H315: 5 % ≤ C < 15 %</i>	
_	<i>Eye Irrit. 2; H319: 5 % ≤ C < 15 %</i>	
CAS: 10489-46-0	Dirhodiumtrisulphate	≥3-<5%
EINECS: 234-014-5	🕭 Muta. 2, H341	
	Net. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	
CAS: 5329-14-6	sulphamic acid; sulphamidic acid; sulfamic acid	2.5%
EINECS: 226-218-8	🚯 Skin Irrit. 2, H315; Eye Irrit. 2, H319	
Index number: 016-026-00-0	Aquatic Chronic 3, H412	
RTECS: WO 5950000		

• 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.

(Contd. on page 4)

GB



Revision: 21.12.2022

Printing date: 21.12.2022

Version number 7 (replaces version 6)

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

(Contd. of page 3)

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
- In case of fire, the following can be released:
- Sulphur dioxide (SO2)

Sulphuric acid aerosol - sulfur oxides

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

• 5.3 Advice for firefighters

· Protective equipment:

Mount respiratory protective device.



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: 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.

Open and handle receptacle with care.

he usual precautionary measures are to be adhered to when handling chemicals. Prevent formation of aerosols.

(Contd. on page 5)

⁻ G



Revision: 21.12.2022

Printing date: 21.12.2022

Version number 7 (replaces version 6)

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

(Contd. of page 4) 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. **SECTION 8: Exposure controls/personal protection** · 8.1 Control parameters · Ingredients with limit values that require monitoring at the workplace: CAS: 7664-93-9 sulphuric acid WEL (Great Britain) Long-term value: 0.05* mg/m³ *mist: defined as thoracic fraction IOELV (European Union) Long-term value: 0.05 mg/m³ AGW (Germany) Long-term value: 0.1 E mg/m³ 1(I); DFG, EU, Y· 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 · 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. 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 EN 14387 according to EN 143 • **Recommended filter device for short term use:** Combination filter B-P2 (Contd. on page 6) GB



Revision: 21.12.2022

Printing date: 21.12.2022

Version number 7 (replaces version 6)

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l



Printing date: 21.12.2022

Version number 7 (replaces version 6)



Revision: 21.12.2022

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

	(Contd. of page
Odour:	Odourless
Odour threshold:	Not determined.
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)	1
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:	Not determined.
Relative density	Not determined.
Vapour density	Not determined.
Form: Important information on protection of health an 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 classe	S
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
corrosite to metals	

(Contd. on page 8)



Revision: 21.12.2022

Printing date: 21.12.2022

Version number 7 (replaces version 6)

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

(Contd. of page 7)

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.

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:

CAS: 5329-14-6 sulphamic acid

Oral LD50 3,160 mg/kg (rat)

- · Skin corrosion/irritation Causes severe skin burns and eye damage.
- Serious eye damage/irritation Causes serious eye damage.
- · Germ cell mutagenicity Suspected of causing genetic defects.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

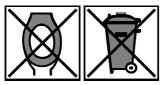
SECTION 12: Ecological information

· 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
- Additional ecological information:
- · General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

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.

(Contd. on page 9)



Revision: 21.12.2022

Printing date: 21.12.2022

Version number 7 (replaces version 6)

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

(Contd. of page 8)

• *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.

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN3264
· 14.2 UN proper shipping name	
ADR	UN3264 CORROSIVE LIQUID, ACIDIC, INORGAN
	N.O.S. (SULPHURIC ACID, Dirhodiumtrisulphate)
· IMDG, IATA	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.
	(SULPHURIC ACID, Dirhodiumtrisulphate)
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
PS	
· 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.
• Hazard identification number (Kemler code):	80
• EMS Number:	F-A,S-B
· Segregation groups	(SGG1) Acids
· Stowage Category	B
· Stowage Code	SW2 Clear of living quarters.
· 14.7 Maritime transport in bulk according to IM	10
instruments	Not applicable.
· Transport/Additional information:	
·ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2
Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per inner packaging: 50 ml Maximum net quantity per outer packaging: 500 ml



Revision: 21.12.2022

Printing date: 21.12.2022

Version number 7 (replaces version 6)

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

	(Contd. of page
Transport category	2
- IMDG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
IATA Remarks:	
	24h emergency contact -
	(Dangerous goods emergency number)
	+49 172 739 6970
UN "Model Regulation":	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANI N . O . S . (S U L P H U R I C A C I D DIRHODIUMTRISULPHATE), 8, II

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.

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

H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.

(Contd. on page 11)

GB

Version number 7 (replaces version 6)



Revision: 21.12.2022

Printing date: 21.12.2022

Trade name: Rhodium conc. WhiteStar® DIP-C, 10g Rh/l Rhodiumkonz. WhiteStar® DIP-C, 10 g Rh/l

	(Contd. of page 10)
H315 Causes skin irritation.	
H318 Causes serious eye damage.	
H319 Causes serious eye irritation.	
H341 Suspected of causing genetic defects.	
H412 Harmful to aquatic life with long lasting effects.	
• Department issuing SDS:	
Abteilung BASU - Bau/Arbeitssicherheit/Umwelt	
Department BASU - Construction / Occupational Safety / Environment	
Department DASO - Construction / Occupational Sufery / 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 (Re	gulations Concerning the
International Transport of Dangerous Goods by Rail)	8
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 Ag	reement Concerning the
International Carriage of Dangerous Goods by Road)	reement Concerning the
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	
<i>Met. Corr.1: Corrosive to metals – Category 1</i>	
Skin Corr. 1A: Skin corrosion/irritation – Category 1A	
Skin Irrit. 2: Skin corrosion/irritation – Category 2 Fast Dame I. Statistication and the institution of Category 1	
Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2	
<i>Lye Irru. 2. Serious eye damage/eye irrudion – Category 2</i> Muta. 2: Germ cell mutagenicity – Category 2	
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3	
• * Data compared to the previous version altered.	
	GB