

Printing date: 20.12.2022

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Version number 11 (replaces version 10)

Revision: 20.12.2022

1.1 Product identifier	
Trade name: <u>Black pen rhodium bath DK-S, 20 g Rh/l</u> Stiftschwarzrhodiumbad DK-S, 20 g Rh/l	
Article number:	
86914950	
81010230	
81010392	
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	
<i>Telefax</i> +49 (0) 7231 940-2199 www.heimerle-meule.com	
Further information obtainable from:	
sds@heimerle-meule.com IATA - 24h Emergency Contact - IATA - 24h Emergency Contact - (Dangerous goods emergency number)	
+49 172 739 6970 1 4 Emergence telephone number	
1.4 Emergency lelednone number:	
1.4 Emergency telephone number:	
DEUTSCHLAND - GERMANY:	
DEUTSCHLAND - GERMANY: Vergiftungs-Informations-Zentrale Freiburg, ++49 761 19240 (24 h)	
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(+372) 7943 794 <u>LETTLAND - LATVIA:</u> Valsts Toksikoloģijas centrs, Saindēšanās un zāļu informācijas centrs, (24h) 112 (24h) +371 67042473 <u>LITAUEN - LIETUVOS RESPUBLIKA:</u> Poison Information Bureau (24/7), Tel.: +8 5 236 20 52 Apsinuodijimų informacijos biuras



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

health hazard

Muta. 2

C 🛃 corrosion

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 GB CLP regulation. • *Hazard pictograms*

H341 Suspected of causing genetic defects.



· Signal word Danger

Hazard-determining components of labelling: sulphuric acid Dirhodiumtrisulphate
Hazard statements H314 Causes severe skin burns and eye damage. H341 Suspected of causing genetic defects.
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.

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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.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

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

• Dangerous components / Inf	formation on ingredients:	
CAS: 7664-93-9	sulphuric acid; sulfuric acid	≥15–≤25%
EINECS: 231-639-5	<i>Met. Corr.1, H290; Skin Corr. 1A, H314</i>	
Index number: 016-020-00-8	Specific concentration limits: Skin Corr. 1A; H314: $C \ge 15$ %	
Reg.nr.: 01-2119453338-20	Skin Irrit. 2; H315: 5 % $\leq C < 15$	
	%	
	<i>Eye Irrit.</i> 2; <i>H</i> 319: 5 % ≤ <i>C</i> < 15 %	
CAS: 10489-46-0	Dirhodiumtrisulphate	7–10%
EINECS: 234-014-5	& Muta. 2, H341	
	i Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	
• 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: Use fire extinguishing methods suitable to surrounding conditions.

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- · 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.: Sulphur dioxide (SO2)

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 Store in cool, dry place in tightly closed receptacles. Ensure that suitable extractors are available on processing machines When diluting always pour product into water and not vice versa. 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. 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.

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(Contd. of page 4) • Information about fire - and explosion protection: Keep respiratory protective device available.

- \cdot 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

 8.1 Control parameters 		
· Ingredients with limit valu	es that require monitoring at the workplace:	
CAS: 7664-93-9 sulphuric	e acid	
WEL (Great Britain)	Long-term value: 0.05* mg/m ³ *mist: defined as thoracic fraction	
IOELV (European Union)	Long-term value: 0.05 mg/m ³	
AGW (Germany)	Long-term value: 0.1 E mg/m³ 1(1);DFG, EU, Y	
8.2 Exposure controls Appropriate engineering c	(EU) 2019/1831 00 The lists valid during the making were used as basis. Controls No further data; see item 7.	
General protective and hy Vacuum clean contaminate Do not eat, drink, smoke of The usual precautionary m Keep away from foodstuffs	ed clothing. Do not blow or brush off contamination. r sniff while working. neasures are to be adhered to when handling chemicals. , beverages and feed. iled and contaminated clothing and at the end of work.	
Avoid contact with the eyes Avoid contact with the eyes According to EC Directive Respiratory protection: Not necessary if room is we	s. s and skin. 89/686/EEC	(Contd. on page 6)

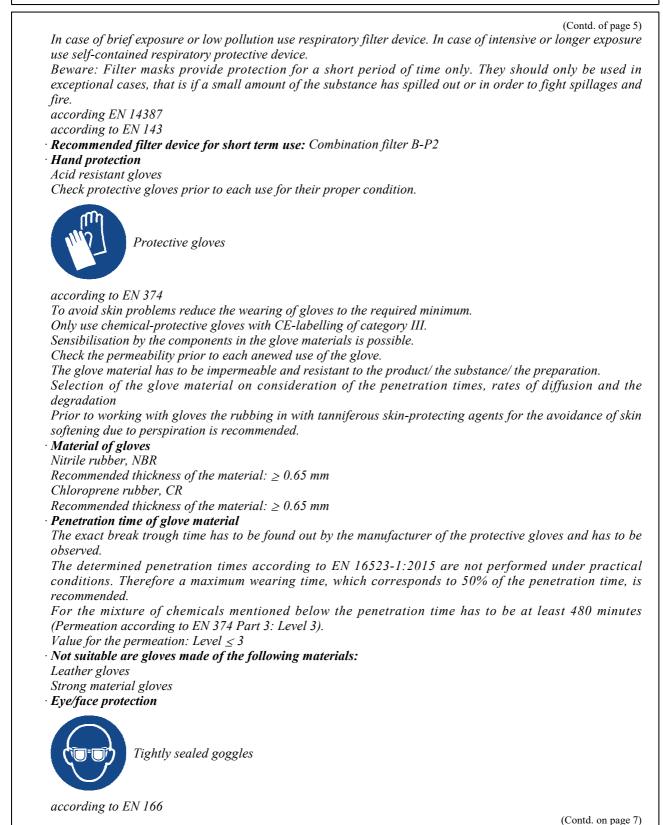


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· Body protection: Protective work clothing

SECTION 9: Physical and chemical prop	
9.1 Information on basic physical and chemical p	roperties
General Information	
Physical state	Fluid
Colour:	Black
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	
<i>Density at 20°C (68°F):</i>	1.17 g/cm ³ (9.76 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Fluid
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	round abes not present an expression nazara.
Evaporation rate	Not determined.
•	
Information with regard to physical hazard classe	
Explosives	Void Void
Flammable gases	
Aerosols	Void 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
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 • 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.

- 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 light alloys to form hydrogen.
- \cdot 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Reaktions 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
- · 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

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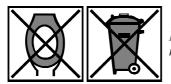
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SECTION 13: Disposal considerations

- · 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.

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN3264
· 14.2 UN proper shipping name	
· ADR	UN3264 CORROSIVE LIQUID, ACIDIC, INORGAN
· IMDG, IATA	N.O.S. (SULPHURIC ACID, Dirhodiumtrisulphate) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.C
	(SULPHURIC ACID, Dirhodiumtrisulphate)
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
• Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· ADR, IMDĞ, 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	



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Stowage Code	SW2 Clear of living quarters.
14.7 Maritime transport in bulk accordin instruments	g to IMO Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	1L
Excepted quantities (\widetilde{EQ})	Code: E2
······································	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
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, INORGANIC 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.

(Contd. on page 11)

Version number 11 (replaces version 10)



Revision: 20.12.2022

Trade name: Black pen rhodium bath DK-S, 20 g Rh/l Stiftschwarzrhodiumbad DK-S, 20 g Rh/l

Printing date: 20.12.2022

(Contd. of page 10)

This information is based on our present knowledge. However, this shall not constitute a guarantee j 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. H318 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H341 Suspected of causing genetic defects. 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 Concer International Transport of Dangerous Goods by Rail) IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO-TI: Technical Instructions by the "International Air Transport Association" (IATA) ICAO-TI: Technical Instructions by the "International Air Transport (ICAO)	'or an
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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 Concer-	ning th
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)	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
Met. Corr.1: Corrosive to metals – Category 1 Skin Corr. 14: Skin corrosion/irritation – Category 14	
Skin Corr. 1A: Skin corrosion/irritation – Category 1A Eye Dam. 1: Serious eye damage/eye irritation – Category 1	
Muta. 2: Germ cell mutagenicity – Category 2	
* Data compared to the previous version altered.	