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SECTION 1: Identification of the substance/mixture and of the company/undertaking · 1.1 Product identifier · Trade name: Electrode Cleaner Elektrodenreiniger · Article number: 77953459 · UFI: Q1J8-M0J2-500J-U46Y · 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, (Contd. on page 2)



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(24h) 112 (24h) +371 67042473 <u>LITAUEN - LIETUVOS RESPUBLIKA:</u> 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



STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

· 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



· Signal word Danger

· Hazard-determining components of labelling:

potassium iodide

- · Hazard statements
- H372 Causes damage to organs through prolonged or repeated exposure.
- · Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P314 Get medical advice/attention if you feel unwell.

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 / Information on ingredients:

_ L	8 1	,	5	
	CAS: 7681-11-0		potassium iodide	50-100%
	EINECS: 231-659-4		🚸 STOT RE 1, H372	
	RTECS: TT 2970000			
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 CAS: 7553-56-2
 iodine
 ≥1-<2.5%</td>

 EINECS: 231-442-4
 Aquatic Acute 1, H400
 ≥1-<2.5%</td>

 Index number: 053-001-00-3
 Acute Tox. 4, H312; Acute Tox. 4, H332
 ≥1-<2.5%</td>

• 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. Take affected persons out of danger area and lay down. Involve doctor immediately after a accident or unwell

- Immediately remove any clothing soiled by the product. • After inhalation: Supply fresh air; consult doctor in case of complaints.
- 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:

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.
- 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
- Formation of toxic gases is possible in case of fire.
- 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.

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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: None.

• 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: 7681-11-0 potassium iodide					
MAK (Germany)	vgl. Abschn. IIb				
CAS: 7553-56-2 iodine					
WEL (Great Britain)	Short-term value: 1.1 mg/m ³ , 0.1 ppm				
AGW (Germany)	Long-term value: 1.1 mg/m ³ , 0.1 ppm 1(I);DFG, H				
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· Regulatory information MAK (Germany): MAK- und BAT-Liste WEL (Great Britain): EH40/2020 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. Wash hands before breaks and at the end of work. Store protective clothing separately. Do not inhale gases / fumes / aerosols. 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 · Hand protection 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.

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.

Natural rubber, NR

Recommended thickness of the material: ≥ 0.6 mm

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

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- \cdot 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

9.1 Information on basic physical and chemical p	ronerties
General Information	roperues
Physical state	Fluid
Colour:	Dark brown
Odour:	Odourless
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling	
range	Undetermined.
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)	7
Viscosity:	,
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	Not determined.
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	Not acter minea.
Density and/or relative density Density at 20°C (68°F):	1.82 g/cm ³ (15.19 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
• •	
9.2 Other information	0.00 %
Appearance:	
Form:	Fluid
Important information on protection of health and	d
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

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· 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 flamm	able	
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 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:** Iodine compounds Hydrogen iodide (HI)

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)DermalLD5050,000 mg/kgInhalativeLC50/4 h68.2 mg/l

CAS: 7553-56-2 iodine

 Dermal
 LD50
 1,100 mg/kg (ATE)

 Inhalative
 LC50/4 h
 1.5 mg/l (ATE)

· STOT-repeated exposure Causes damage to organs through prolonged or repeated exposure.

• 11.2 Information on other hazards

• Endocrine disrupting properties

None of the ingredients is listed.

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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

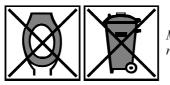
The product does not contain substances with endocrine disrupting properties.

- 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

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	tion	
· 14.1 UN number or ID number · ADR, IMDG, IATA	Void	
· 14.2 UN proper shipping name · ADR, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
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· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according instruments	to IMO Not applicable.
· Transport/Additional information:	
· IATA · Remarks:	
	24h emergency contact - (Dangerous goods emergency number)
	+49 172 739 6970
· UN "Model Regulation":	Void

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

CAS: 7553-56-2 iodine

D/P(LR)

· 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

H312 Harmful in contact with skin.

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⁻ GB -



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H332 Harmful if inhaled.	ntd. of page 9)
H372 Causes damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life.	
· 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:	
AwSV: Ordinance on facilities for handling water-polluting substances (German regulation).	
TRGS: Technical rules for hazardous substances (German regulation)	• 1
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Co International Carriage of Dangerous Goods by Road)	ncerning 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	
Acute Tox. 4: Acute toxicity – Category 4	
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1	
• * Data compared to the previous version altered.	
Duiu computeu to the previous version unereu.	GB-
	UB-