

Printing date: 21.12.2022

Version number 2 (replaces version 1)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking · 1.1 Product identifier • Trade name: S-Act - Plating Activator Solution S-Act - Vergoldungsaktivierung · Article number: 77953449 · UFI: AMM8-T07Y-C00D-PCPW · 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 Corrosive cleaner • 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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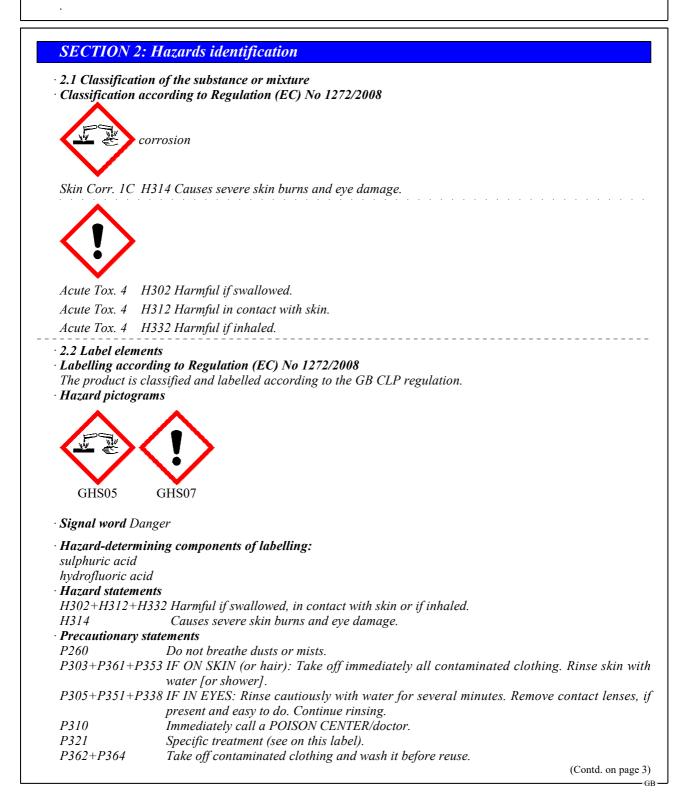
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(24h) 112 (24h) +371 67042473 <u>LITAUEN - LIETUVOS RESPUBLIKA:</u> Poison Information Bureau (24/7), Tel.: +8 5 236 20 52 Apsinuodijimų informacijos biuras



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regulations.

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P405 P501 Store locked up. Dispose of contents/container in accordance with local/regional/national/international

· 2.3 Other hazards

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· 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%
EINECS: 231-639-5	Amet. 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: 7664-39-3	hydrofluoric acid	<0.5%
EINECS: 231-634-8 Index number: 009-003-00-1	Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330 Skin Corr. 1A, H314	-
	Specific concentration limits: Skin Corr. 1A; H314: $C \ge 7$ %	
	<i>Skin Corr. 1B; H314: 1 % ≤ C < 7 %</i>	
	<i>Eye Irrit. 2; H319: 0.1 % ≤ C < 1 %</i>	
· 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:

Call a doctor immediately.

Supply fresh air or oxygen; call for 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:
- *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.

Call a doctor immediately.

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.

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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)
- Hydrogen fluoride (HF) • 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.
- **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.

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- 7.2 Conditions for safe storage, including any incompatibilities
 Storage:
 Requirements to be met by storerooms and receptacles: Provide acid-resistant floor.
 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 metals. 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 val	ues that require monitoring at the workplace:
CAS: 7664-93-9 sulphuri	
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/m ³ 1(I);DFG, EU, Y
CAS: 7664-39-3 hydroflu	oric acid
WEL (Great Britain)	Short-term value: 2.5 mg/m ³ , 3 ppm Long-term value: 1.5 mg/m ³ , 1.8 ppm
IOELV (European Union)) Short-term value: 2.5 mg/m³, 3 ppm Long-term value: 1.5 mg/m³, 1.8 ppm
AGW (Germany)	Long-term value: 0.83 mg/m ³ , 1 ppm 2(I);DFG, EU, Y, H
• Regulatory information WEL (Great Britain): EH- IOELV (European Union) AGW (Germany): TRGS 9): <i>(EU) 2019/1831</i>
· Ingredients with biologic	al limit values:
CAS: 7664-39-3 hydroflu	oric acid
BGW (Germany) 7.0 mg/g Kreatinin Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Fluorid	
Untersu Probent	'g Kreatinin uchungsmaterial: Urin nahmezeitpunkt: vor nachfolgender Schicht eter: Fluorid
Additional information:	The lists valid during the making were used as basis. (Contd. on page of the second



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· 8.2 Exposure controls

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Appropriate engineering controls No further data; see item 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures: 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.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

According to EC Directive 89/686/EEC

• Respiratory protection:

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.

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.7 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 \leq *3*

 \cdot Not suitable are gloves made of the following materials:

Leather gloves Strong material gloves

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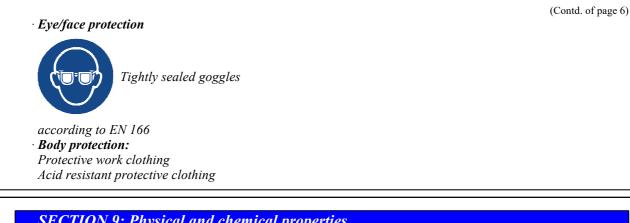
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9.1 Information on basic physical and chemical p	properties
General Information Physical state	Fluid
Colour:	Yellow
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling	Chaelel minea.
range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	Noi upplicable.
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH at 20°C (68°F)	1 1
Viscosity:	1
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	ivoi ucici mineu.
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20°C (68°F):	23 hPa (17.3 mm Hg)
Density and/or relative density	25 m a (17.5 mm 118)
Density at 20°C (68°F):	1.12 g/cm ³ (9.35 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
	0.00.0/
9.2 Other information	0.00 %
Appearance: Form:	Fluid
Important information on protection of health an environment, and on safety.	u
Auto-ignition temperature:	Product is not solficiting
Explosive properties:	Product is not selfigniting. Product does not present an explosion hazard.
Change in condition	1 rounce uoes not present un explosion nu2uru.
Evaporation rate	Not determined.
•	
Information with regard to physical hazard classe	
Explosives	Void
Flammable gases	Void

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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.

- \cdot 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 Harmful if swallowed, in contact with skin or if inhaled.

· LD/LC50	· LD/LC50 values relevant for classification:	
ATE (Acu	te Toxicity	Estimates)
Oral	LD50	1,042 mg/kg
Dermal	LD50	1,042 mg/kg
Inhalative	LC50/4 h	104 mg/l
CAS: 7664	4-39-3 hydi	rofluoric acid
Oral	LD50	5 mg/kg (ATE)
Dermal	LD50	5 mg/kg (ATE)
		0.5 mg/l (ATE)
		tion Causes severe skin burns and eye damage.
		other hazards
· Endocrine	disrupting	g properties
None of th	None of the ingredients is listed.	

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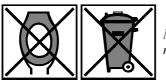
SECTION 12: Ecological information

- · 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 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.

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	UN3264
\cdot 14.2 UN proper shipping name	
·ADR	UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC
	N.O.S. (HYDROFLUORIC ACID, SULPHURIC ACID)
· IMDG, IATA	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.Ó.S
-,	(HYDROFLUORIC ACID, SULPHURIC ACID)



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14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
<u>S</u>	
в	
Class	8 Corrosive substances.
Label	8
14.4 Packing group	
ADR, IMDG, IATA	II
14.5 Environmental hazards:	Not applicable.
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
	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, INORGANI
0	N.O.S. (HYDROFLUORI \widetilde{C} ACID, SULPHURIC ACID
	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 (Contd. on page 11)

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16(1) of Directive 89/391/EEC)

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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.
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H330 Fatal if inhaled.

• 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) 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

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vPvB: very Persistent and very Bioaccumulative Met. Corr.1: Corrosive to metals – Category 1 Acute Tox. 2: Acute toxicity – Category 2 Acute Tox. 4: Acute toxicity – Category 4 Acute Tox. 1: Acute toxicity – Category 1 Skin Corr. 1A: Skin corrosion/irritation – Category 1A Skin Corr. 1C: Skin corrosion/irritation – Category 1C • * Data compared to the previous version altered.