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

1.1 Product identifier

Identification of the substance/preparation: Padoma liquid descaler

UFI: 788J-RUC5-690S-U7XG

1.2 Relevant identified uses of the substance or mixture and uses advised against

Application of the substance / the mixture Descaler

Uses advised against Descaler

1.3 Details of the supplier of the safety data sheet

Company/undertaking identification:

STC GmbH

Kladower Damm 3

14089 Berlin, Germany

+49 175 9865728

service@special-trading-gmbh.com

Further information obtainable from:

+49 175 9865728

service@special-trading-gmbh.com

1.4 Emergency telephone number: +49 175 9865728

SECTION 2: Hazards identification

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



GHS05 corrosion

Skin Corr. 1C 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 CLP regulation.

Hazard pictograms GHS05

Signal word Danger

Hazard-determining components of labelling:

sulphamidic acid

L-Lactic acid

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.

P405 Store locked up.

P501 Dispose of contents/container in a safe manner.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

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vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 5329-14-6 EINECS: 226-218-8 Reg.nr.: 01-2119488633-28	sulphamidic acid Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	≥10-<25%
CAS: 79-33-4 EINECS: 201-196-2 Reg.nr.: 01-2119474164-39	L-Lactic acid ♦ Skin Corr. 1C, H314; Eye Dam. 1, H318	≥1-<3%

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

After inhalation: Supply fresh air; consult doctor in case of complaints. **After skin contact:** Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

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.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.

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).

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling No special precautions are necessary if used correctly. **Information about fire - and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

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

Exposure limit values:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

DNELs	DNELs	
CAS: 532	9-14-6 sulphamidic acid	
Oral	Systemic effect, long-term exposure	5 mg/kg bw/day (General population)
Dermal	Systemic effect, long-term exposure	5 mg/kg bw/day (General population)
		10 mg/kg bw/day (Workers)
Inhalative	Systemic effect, long-term exposure	17,4 mg/m³ (General population)
		70,5 mg/m³ (Workers)

PNECs

CAS: 5329-14-6 sulphamidic acid	
Water	1,8 mg/l (Fresh water)
	0,48 mg/l (Intermittent release (Fresh water))
	0,18 mg/l (Marine water)
Sewage treatment plant (STP)	20 mg/l (Microorganisms)
Sediment	8,36 mg/kg dw (Fresh water)
	0,84 mg/kg dw (Marine water)
Soil	5 mg/kg soil dw (Soil)

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

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

General protective and hygienic measures: Wash hands before breaks and at the end of work. **Respiratory protection:** Not required.

Hand protection

Avoid direct contact with the chemical/ the product/ the preparation by organisational measures. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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

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be checked prior to the application.

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.

Eye/face protection Goggles recommended during refilling

Body protection: Not required.

Environmental exposure controls Follow instructions for use, dosage and waste disposal.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state
Colour:
Colourless
Odour:
Odour threshold:
Melting point/freezing point:

Fluid
Colourless
Odourless
Odourless
Not determined.
Undetermined.

Boiling point or initial boiling point and boiling

range 100 °C (CAS: 7732-18-5 Water)

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 0,1-1,1

Viscosity:

Kinematic viscosity Dynamic:Not determined.
Not determined.

Solubility

water: Fully miscible.

Partition coefficient n-octanol/water (log value) Not determined.

Vapour pressure at 20 °C: 23 hPa (CAS: 7732-18-5 Water)

Density and/or relative density

Density at 20 °C:1,07 g/cm³Relative densityNot determined.Vapour densityNot relevant

Not determined.

9.2 Other information

Appearance:

Form: Fluid

Important information on protection of health

and environment, and on safety.

Ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Solvent content:

Water: 85,6 % **Solids content**: 12,1 %

Change in condition

Evaporation rate Not determined.

Information with regard to physical hazard

classes

ExplosivesVoidFlammable gasesVoidAerosolsVoid

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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.
- 10.2 Chemical stability

Conditions to avoid: No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 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 Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:
CAS: 5329-14-6 sulphamidic acid

Oral LD_{50} >2.000 mg/kg/bw (Rat) Dermal LD_{50} >2.000 mg/kg/bw (Rat) (OECD 402)

Inhalative $\left| ATE_{mix} \right| > 20 \text{ mg/l (unspecified)}$

CAS: 79-33-4 L-Lactic acid

 Oral
 LD₅₀
 3.543 mg/kg/bw (Rat) (EPA OPP 81-1)

 Dermal
 LD₅₀
 >2.000 mg/kg/bw (Rat) (EPA OPP 81-2)

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/irritation Causes serious eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

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11.2 Information on other hazards

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic to	xicity:	
CAS: 5329	-14-6 sulphamidic acid	
LC ₅₀ /96h	70,3 mg/l (Pimephales promelas) (OECD 203)	
EC ₅₀ /48h	71,6 mg/l (Daphnia magna) (OECD 202)	
EC ₅₀ /72h	72h 48 mg/l (Algae) (OECD 201)	
NOEC/72h	18 mg/l (Algae) (OECD 201)	
CAS: 79-33	3-4 L-Lactic acid	
LC ₅₀ /96h	195 mg/l (Danio rerio) (OECD 203)	
EC ₅₀ /48h	EC ₅₀ /48h 130 mg/l (Daphnia magna) (OECD 202)	
EC ₅₀ /72h	EC ₅₀ /72h >2.800 mg/l (Pseudokirchneriella subcapitata) (OECD 201)	
NOEC/96h	180 mg/l (Danio rerio) (OECD 203)	

General information:

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

12.2 Persistence and degradability

CAS: 79-33-4 L-Lactic acid

Biodegradability >60 % (28d)

12.3 Bioaccumulative potential

CAS: 5329-14-6 sulphamidic acid

Bioaccumulation potential <1 log K_{ow} (calculated value)

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

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

Behaviour in sewage processing plants:

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge. Before allowing large quantities to be fed into sewage plants, obtain the approval of the responsible authorities.

Other information:

General information:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow to reach ground water/water course. Do not allow undiluted product or large quantities of it to reach sewage system.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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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.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

4441111	
14.1 UN number or ID number ADR/RID, IMDG, IATA	UN1760
14.2 UN proper shipping name ADR/RID IMDG IATA	UN1760 CORROSIVE LIQUID, N.O.S. (SULPHAMIC ACID) CORROSIVE LIQUID, N.O.S. (SULPHAMIC ACID CORROSIVE LIQUID, N.O.S. (containing SULPHAMIC ACID)
14.3 Transport hazard class(es)	
ADR/RID	
Class Label	8 (C9) Corrosive substances.
IMDG, IATA	
<u>**</u> 3k	
Class Label	8 Corrosive substances.
14.4 Packing group ADR/RID, IMDG, IATA	III
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category Stowage Code	Warning: Corrosive substances. 80 F-A,S-B A SW2 Clear of living quarters.
14.7 Maritime transport in bulk according to IM instruments	O Not applicable.
Transport/Additional information:	
ADR/RID 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

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Transport category	3
Tunnel restriction code	E
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 m
	Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1760 CORROSIVE LIQUID, N.O.S.
•	(SULPHAMIC ACID), 8, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Labelling according to EC guidelines: .

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

Regulation (EU) No 649/2012

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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.

Relevant phrases

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning

the International Transport of Dangerous Goods by Rail) 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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Safety data sheet

according to 1907/2006/EC, Article 31

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PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative EC50: effective concentration, 50 percent

OECD: Organization for Economic Co-operation and Development

ADN: Accord européen relativ au transport international des marchandises dangereuses par voie de navigation intérieure

IBC: Intermediate bulk container

MARPOL: Marine Pollution

Skin Corr. 1C: Skin corrosion/irritation - Category 1C

Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

DE