Printing date 13.01.2021 Version: 13 Revision: 13.01.2021

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

- · 1.1 Product identifier
- · Trade name: HOUSE ACID SAFE
- · Article number: 07100005
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Life cycle stages PW Widespread use by professional workers
- · Product category PC35 Washing and cleaning products (including solvent based products)
- · Process category

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC19 Manual activities involving hand contact

· Environmental release category

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

· Application of the substance / the mixture

Deliming agent

Descaler

· 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

ZEP ŬK Ltd

Tanhouse Lane

Widnes Cheshire, WA8 0RD

United Kingdom

Tel: +44 (0)151 422 1000 Fax: +44 (0)151 422 1011 @: info@zep.co.uk web: www.zep.co.uk

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T: +39.06.926691

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Sito: www.zep.it

· Further information obtainable from:

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1.4 Emergency telephone number: NHS +44 0845 46 47 (England or Wales); +44 08454 24 24 (Scotland)

SECTION 2: Hazards identification

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

Acute Tox. 4 H302 Harmful if swallowed.

Skin Corr. 1B 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.

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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 13.01.2021 Version: 13 Revision: 13.01.2021

Trade name: HOUSE ACID SAFE

· Hazard pictograms



- · Signal word Danger
- Hazard-determining components of labelling:

phosphoric acid

· Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P260 Do not breathe mist/vapours/spray. P264 Wash thoroughly after handling.

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].

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- 2.3 Other hazards The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.
- · 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:		
CAS: 7664-38-2	phosphoric acid	50-75%
EINECS: 231-633-2	♦ Met. Corr.1, H290; Skin Corr. 1B, H314	
Index number: 015-011-00-6	Acute Tox. 4, H302	
Reg.nr.: 01-2119485924-24-xxxx	Specific concentration limits: Skin Corr. 1B; H314: $C \ge 25 \%$	
	Skin Irrit. 2; H315: 10 % ≤ C < 25 %	
	Eye Irrit. 2; H319: 10 % ≤ C < 25 %	
CAS: 5949-29-1	1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate	≥5-<10%
EC number: 611-842-9		

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · 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.

Seek medical treatment.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; call for medical help immediately.
- · 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:

Carbon dioxide

Dry sand

Water spray

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.

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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 13.01.2021 Version: 13 Revision: 13.01.2021

Trade name: HOUSE ACID SAFE

· 5.3 Advice for firefighters

· Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear fully protective suit.

Wear self-contained respiratory protective device.

· Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: 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, universal binders).

Use neutralising agent.

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

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Use only in well ventilated areas.

- 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:

Store only in the original receptacle.

Store in a cool location.

- · Information about storage in one common storage facility: Do not store together with alkalis (caustic solutions).
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:		
CAS: 7664-38-2 phosphoric acid		
WEL (Great Britain)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³	
IOELV (European Union)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³	

· DNELs

CAS: 7664-38-2 phosphoric acid

	F F	
Inhalative I	DNEL Long term local mg/m3	0.73 mg/m3 (consumer)
		2.92 mg/m3 (worker)
İ	DNEL Acute-local mg/m3	2 mg/m3 (worker)

· PNECs

CAS: 5949-29-1 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate

PNEC Freshwater mg/L	0.44 mg/L
	0.044 mg/L
	3.46 mg/Kg

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Trade name: HOUSE ACID SAFE

PNEC Marine water sediment 34.6 mg/KgPNEC Soil 33.1 mg/KgPNEC Sewage treatment Plant mg/L >1,000 mg/L

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · 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.

- Avoid contact with the eyes and skin.
- · Respiratory protection: Not required.
- · Protection of hands:



Protective gloves

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 be checked prior to the application.

· Penetration time of glove material

The exact break through 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.

· Eye protection:



Tightly sealed goggles

· Body protection: Acid resistant protective clothing

SECTION 9: Physical and chemical properties

<u> </u>				
· 9.1 Information on basic physical and chemical properties · General Information				
· Appearance:				
Form:	Fluid			
Colour:	Dark red			
· Odour:	Characteristic			
· Odour threshold:	Not determined.			
· pH-value at 20 °C:	0.5			
· Change in condition Melting point/freezing point: Initial boiling point and boiling range	Undetermined. v: 108°C			
· Flash point:	Not applicable.			
· Flammability (solid, gas):	Not applicable.			
· Decomposition temperature:	Not determined.			
· Auto-ignition temperature:	Product is not selfigniting.			
Explosive properties:	Product does not present an explosion hazard. Not determined.			
· Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
· Vapour pressure at 20 °C:	23 hPa			

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Trade name: HOUSE ACID SAFE

	(Contd. c	f page
· Density at 20 °C:	1.418 g/cm^3	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Insoluble.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic at 20 °C:	20 s (DIN 53211/4)	
· Solvent content:		
Organic solvents:	0.0 %	
Swiss VOC:	0.01 %	
· 9.2 Other information	No further relevant information available.	

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

Flammable if water content dries out.

Reacts violently with water.

Reacts with metals forming hydrogen.

Reacts with various metals.

Reacts with reducing agents.

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Do not store together with alkalis (caustic solutions).
- · 10.6 Hazardous decomposition products:

No dangerous decomposition products known.

Organic phosphorus compounds

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- Acute toxicity

Harmful if swallowed

ATE (Acute Toxicity Estimates)			
Oral	LD50	LD50 557 mg/kg (Rat)	
CAS: 766	4-38-2 phosp	horic acid	
Oral	LD50	300 mg/kg (Rat)	
Dermal	LD50	2,740 mg/kg (Rabbit)	
Inhalative	LC50/8 h	>214 mg/m3 (Rat)	
	LC50/ 24 h	245 mg/ltr (Brachydanio rerio)	
CAS: 594	9-29-1 1,2,3-1	Propanetricarboxylic acid, 2-hydroxy-, monohydrate	
Oral	LD50	5,400 mg/kg (Mouse)	
		3,000 mg/kg (Rat)	
Dermal	LD50	>2,000 mg/kg (Rat)	
Dermai		1,535 mg/ltr (Daphnia magna (water flea))	
Dermai	LC50/24 h	1,555 mg/ii (Daphila magna (water flea))	
Dermai	LC50/ 24 h	440 mg/ltr (fish)	

- Skin corrosion/irritation

Causes severe skin burns and eye damage.

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Trade name: HOUSE ACID SAFE

Serious eye damage/irritation

(Contd. of page 5)

- Causes serious eye damage.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Additional toxicological information:
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

CAS: 7664-38-2 phosphoric acid

LC50 / 96 h | 138 mg/ltr (blu)

98-106 mg/ltr (fish)

CAS: 5949-29-1 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate

LC50 / 96 h >400 mg/ltr (Leuciscus idus)

- · 12.2 Persistence and degradability No further relevant information available.
- · Other information: The product is biodegradable.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- **Recommendation** Must be specially treated adhering to official regulations.

· Europear	· European waste catalogue		
	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED		
15 01 00	packaging (including separately collected municipal packaging waste)		
15 01 02	02 plastic packaging		
HP6	HP6 Acute Toxicity		
HP8	Corrosive		

- Uncleaned packaging:
- · Recommendation: Disposal in accordance with administrative provisions

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		Transport	tintorm	ation
	// 17.			******

- · 14.1 UN-Number
- · ADR, IMDG, IATA UN3264
- · 14.2 UN proper shipping name
- 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. $\cdot ADR$ (PHOSPHORIC ACID, SOLUTION)
- CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. · IMDG, IATA (PHOSPHORIC ACID, SOLUTION)

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Trade name: HOUSE ACID SAFE

	(Contd. of pag
14.3 Transport hazard class(es)	
ADR	
Class	8 (C1) Corrosive substances.
Label	8
IMDG, IATA	
▼	
Class	8 Corrosive substances.
Label	8
14.4 Packing group	•••
ADR, IMDG, IATA	III
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	Acids
Stowage Category	A CIV. CIV.
Stowage Code	SW2 Clear of living quarters.
14.7 Transport in bulk according to Annex II of Mar	
the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
_	Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	E
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S
	(PHOSPHORIC ACID, SOLUTION), 8, III

SECTION 15: Regulatory information

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

Reg. (EC) n. 1272/2008 - CLP;

Reg. (EC) n. 2015/830 annex II of REACH; Dir. 06/08 ADR – RID - IMDG - IATA;

Dir. 12/18 (Seveso III);

Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

· Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation. (Contd. on page 8)

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Safety data sheet according to 1907/2006/EC, Article 31

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Trade name: HOUSE ACID SAFE

· Hazard pictograms



- · Signal word Danger
- Hazard-determining components of labelling:

phosphoric acid

· Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe mist/vapours/spray. P264 Wash thoroughly after handling.

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].

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- 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
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment

 Annex II

None of the ingredients is listed.

- · National regulations:
- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has 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

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

· Classification according to Regulation (EC) No 1272/2008 Calculation method

· Department issuing SDS:

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Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport 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)

DNEL: Derived No-Effect Level (REACH)

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Trade name: HOUSE ACID SAFE

PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative WELL: The highest acceptable concentration 10ELV: Indicative occupational exposure limit values Met. Corr. 1: Corrosive to metals – Category 1 Acute Tox. 4: Acute toxicity - oral – Category 4 Skin Corr. 1B: Skin corrosion/irritation – Category 1B Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 · * Data compared to the previous version altered.

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Trade name: HOUSE ACID SAFE

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Annex: Exposure scenario

Short title of the exposure scenario

HOUSE ACID SAFE

SX 11

X-SCALE

INDUSTRIAL SCALE REMOVER

• Product category PC35 Washing and cleaning products (including solvent based products)

· Process category

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC19 Manual activities involving hand contact

· Environmental release category

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

- Description of the activities / processes covered in the Exposure Scenario See section 1 of the annex to the Safety Data Sheet.
- · Conditions of use
- · Duration and frequency 5 workdays/week.
- · Physical parameters
- · Physical state Fluid
- · Concentration of the substance in the mixture The substance is main component.
- · Used amount per time or activity According to directions for use.
- · Other operational conditions
- · Other operational conditions affecting environmental exposure No special measures required.
- Other operational conditions affecting worker exposure

Avoid contact with eyes.

Avoid contact with the skin.

Indoor application.

Outdoor application.

- · Other operational conditions affecting consumer exposure No special measures required.
- Other operational conditions affecting consumer exposure during the use of the product Not applicable.
- · Risk management measures
- · Worker protection
- · Organisational protective measures No special measures required.
- · Technical protective measures Ensure that suitable extractors are available on processing machines
- · Personal protective measures

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes.

Tightly sealed goggles

Protective gloves

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

- · Measures for consumer protection Ensure adequate labelling.
- · Environmental protection measures
- · Water Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.
- Disposal measures

Disposal in accordance with administrative provisions

Ensure that waste is collected and contained.

- · Disposal procedures Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- · Waste type Partially emptied and uncleaned packaging
- · Exposure estimation
- · Consumer Not relevant for this Exposure Scenario.
- · Guidance for downstream users No further relevant information available.

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