

SAFETY DATA SHEET

Professional limestone remover (hagesan blue)

4. First-aid measures

First-aid measures

- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Ingestion** : Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Skin Contact** : After contact with skin, wash immediately with plenty of Water. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Eye contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
- Notes to physician** : Not available.
- Specific treatments** : Not available.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

- Extinguishing media** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
- Special exposure hazards** : Combustible liquid and vapour. Vapour may cause flash fire. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
Not available.
- Hazardous thermal decomposition products** : These products are carbon oxides (CO, CO₂), phosphates.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal Precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dyke spilt material or otherwise contain it to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Do not get in eyes, on skin or on clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapour or mist. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended** : Use original container.
- Specific uses** : Not available.

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8. Exposure controls/personal protection

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
<u>United Kingdom (UK)</u> phosphoric acid	EH40-WEL (United Kingdom (UK), 1/2005). STEL: 2 mg/m ³ 15 minute/minutes. Form: All forms TWA: 1 mg/m ³ 8 hour/hours. Form: All forms
propan-2-ol	EH40-WEL (United Kingdom (UK), 1/2005). STEL: 1250 mg/m ³ 15 minute/minutes. Form: All forms STEL: 500 ppm 15 minute/minutes. Form: All forms TWA: 999 mg/m ³ 8 hour/hours. Form: All forms TWA: 400 ppm 8 hour/hours. Form: All forms
Oxalic acid	EH40-WEL (United Kingdom (UK), 1/2005). STEL: 2 mg/m ³ 15 minute/minutes. Form: All forms TWA: 1 mg/m ³ 8 hour/hours. Form: All forms

Exposure controls

- Occupational exposure controls** : Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection** : A respirator is not needed under normal and intended conditions of product use.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
>8 hour/hours (breakthrough time): Butyl rubber gloves.
- Eye protection** : safety glasses with side shields
- Skin protection** : Work uniform or laboratory coat.
Feet: Recommended:Boots.

9. Physical and chemical properties

General information

Appearance

- Physical state** : Liquid.
- Colour** : Clear. , Yellow.
- Odour** : Perfume

Important health, safety and environmental information

- pH** : <1 (Conc. (% w/w): 100) [Acidic.]
- Melting point** : May start to solidify at 0°C (32°F) based on data for: Water. Weighted average: -2.71°C (27.1°F)
- Boiling point** : The lowest known value is 82.5°C (180.5°F) (propan-2-ol). Weighted average: 99.5°C (211.1°F)
- Flash point** : Closed cup: Between 61°C (142°F) and 93.3°C (200°F). (Pensky-Martens.)
- Explosive properties** : Not available.
- Oxidising properties** : Not available.
- Relative density** : 1.135 g/ml (20°C / 68°F)
- Solubility** : Easily soluble in hot water, diethyl ether, acetone.
Soluble in cold water.
Partially soluble in methanol.
- Viscosity** : Dynamic: The highest known value is 157 cP (Fatalcoholethoxylate)
- Evaporation rate (butyl acetate = 1)** : 1.7 (propan-2-ol) compared with Butyl acetate.

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Other information

Auto-ignition temperature : The lowest known value is 365°C (689°F) (Fatalcoholethoxylate).

10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to Avoid** : Stable under recommended storage and handling conditions (see section 7).
- Materials to avoid** : Reactive with metals, alkalis.
- Hazardous Decomposition Products** : These products are carbon oxides (CO, CO₂), phosphates.

11. Toxicological information

Potential acute health effects

- Inhalation** : Corrosive to the respiratory system.
- Ingestion** : May cause burns to mouth, throat and stomach.
- Skin Contact** : Corrosive to the skin.
- Eye contact** : Corrosive to eyes.

Acute toxicity

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
phosphoric acid	LD50	1530 mg/kg	Oral	Rat
	LD50	2740 mg/kg	Dermal	Rabbit
gluconic acid, d-propan-2-ol	LD50	2000 mg/kg	Oral	Rat
	LD50	5045 mg/kg	Oral	Rat
	LD50	6410 mg/kg	Oral	Rabbit
	LD50	3600 mg/kg	Oral	Mouse
	LD50	12800 mg/kg	Dermal	Rabbit
	LD50	12800 mg/kg	Dermal	Rabbit
	LDLo	1537 mg/kg	Oral	Dog
Fatalcoholethoxylate	LDLo	3570 mg/kg	Oral	human
	LDLo	5272 mg/kg	Oral	man
	LD50	200 to 2000 mg/kg	Oral	Rat
	LD50	7500 mg/kg	Oral	Rat
Oxalic acid	LD50	20000 mg/kg	Dermal	Rabbit
	LD50	20000 mg/kg	Dermal	Rabbit
	LDLo	600 mg/kg	Oral	woman

- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin** : No known significant effects or critical hazards.
- Target organs** : Contains material which causes damage to the following organs: kidneys, lungs, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, nose/sinuses, throat.

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12. Ecological information

Ecotoxicity data

Ingredient name

Species

Period

Result

propan-2-ol	Pimephales promelas (EC50)	48 hour/hours	10000 mg/l
	Lepomis macrochirus (LC50)	96 hour/hours	>1400 mg/l
	Pimephales promelas (LC50)	96 hour/hours	6550 mg/l
	Pimephales promelas (LC50)	96 hour/hours	9640 mg/l
	Pimephales promelas (LC50)	96 hour/hours	10400 mg/l
	Pimephales promelas (LC50)	96 hour/hours	11130 mg/l
Fatalcholethoxylate	Flora. (EC50)	72 hour/hours	1 to 10 mg/l
	LEUCISCUS IDUS (LC50)	96 hour/hours	1 to 10 mg/l
	Aquatic Invertebrates. (LC50)	48 hour/hours	1 to 10 mg/l
Oxalic acid	Daphnia magna (EC50)	48 hour/hours	136.9 mg/l
	LEUCISCUS IDUS (EC50)	48 hour/hours	242 mg/l
	DAPHNIA MAGNA (EC50)	48 hour/hours	137 mg/l

Other ecological information

Persistence/degradability

Ingredient name

Aquatic half-life

Photolysis

Biodegradability

oxalic acid	-	-	Readily
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Mobility : No known significant effects or critical hazards.

Other adverse effects : Not available.

13. Disposal considerations


Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

: Not applicable.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional Information
ADR/RID Class	1760	UN 1760, "dangerous goods in limited quantities of class 8", III, ADR (phosphoric acid)	8	III		<p>Hazard identification number 80</p> <p>Reportable quantity 12</p> <p>Remarks Limited quantity for upto 3 litre inner packing Else; UN 1760, CORROSIVE LIQUID, N.O.S., (Phosphoric acid,</p>

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						mixture), class 8, III, ADR
ADNR Class	1760	UN 1760, "dangerous goods in limited quantities of class 8", III, ADNR (phosphoric acid)	8	III		RQ (Reportable quantity) ADNR 12 Remarks Limited quantity for upto 3 litre inner packing Else; UN 1760, CORROSIVE LIQUID, N.O.S., (Phosphoric acid, mixture), class 8, III, ADNR
IMDG Class	1760	"dangerous goods in limited quantities of class 8" UN 1760, PG III (phosphoric acid)	8	III		Emergency schedules (EmS) F-A, S-B Reportable quantity 30 Remarks Limited quantity for upto 1 l inner packing. Else; CORROSIVE LIQUID, N.O.S., (Phosphoric acid, 20%, mixture), class 8, UN 1760, PG III
IATA-DGR Class	1760	"dangerous goods in limited quantities of class 8" UN 1760, PG III (phosphoric acid)	8	III		-

15. Regulatory information

EU Regulations

Hazard symbol(s) :



Corrosive

Risk Phrases :

R34- Causes burns.

Safety Phrases :

S1/2- Keep locked up and out of the reach of children.

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S27/28- After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of Water.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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This safety data sheet is prepared in accordance with EU directive 91/155/EC amended by Directive 2001/58/EC



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S64- If swallowed, rinse mouth with water (only if the person is conscious).
Contains : phosphoric acid 231-633-2
Other EU regulations : Not available.
Product use : Classification and labelling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use.
- Consumer applications.

Other EU regulations

Child protection : Yes, applicable.
Tactile warning of danger : Yes, applicable.
EC Statistical classification (Tariff Code) : 32089091
Ingredients identification information : less than 5%: non-ionic surfactants, perfumes.

16. Other information

Full text of R phrases referred to in sections 2 and 3 - United Kingdom (UK) : R11- Highly flammable.
R21/22- Harmful in contact with skin and if swallowed.
R22- Harmful if swallowed.
R34- Causes burns.
R36- Irritating to eyes.
R41- Risk of serious damage to eyes.
R67- Vapours may cause drowsiness and dizziness.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK) : F - Highly flammable
C - Corrosive
Xn - Harmful
Xi - Irritant

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Verified by T. Rutgers.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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