



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



SAFETY DATA SHEET

Patio cleaner

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Product name : Patio cleaner
Product use : Very concentrated detergent especially for stained or dirty concrete, slabs and paving stones

Company/undertaking identification

Manufacturer : HG International b.v. **Telephone No.:** : +31 (0)36 54 94 700
Address : Damsluisweg 70 **Fax** : +31 (0)36 54 94 744
1332 EJ Almere **Internet:** : www.hginternational.com
Country : Netherlands
Importer : HG UK
Address : Unit 11 Grange Way Business Park Whitehall Road Industrial Estate
Uk Colchester Essex CO2 8HF
Telephone No.: : +44.1206.795.200
Fax : +44.1206.795.201
Country : United Kingdom (UK)

2. Composition/information on ingredients

Substance/preparation : Preparation

Ingredient name	CAS number	EC Number	%	Classification
United Kingdom (UK)				
Potassium hydroxide	1310-58-3	215-181-3	5 - 15	Xn; 22 C; 35
diphosphoric acid, tetrapotassium salt	7320-34-5	230-785-7	5 - 15	Xi; 36
Octyloxypoly(ethyleneoxy)ethyl phosphate	31800-88-1	polymer	1 - 5	C; 34

See section 16 for the full text of the R Phrases declared above

* Occupational Exposure Limit(s), if available, are listed in Section 8

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : C; R35

Human health hazards : Causes severe burns.

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

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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. Obtain 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. Obtain medical attention immediately.
- Skin Contact** : After contact with skin, wash immediately with plenty of Water. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention immediately.
- Eye contact** : In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Obtain 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** : Use an extinguishing agent suitable for surrounding fires.
- Special exposure hazards** : No specific hazard.
Not available.
- 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 spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled 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

Ingredient name

United Kingdom (UK)

Potassium hydroxide

Occupational exposure limits

EH40-OES (United Kingdom (UK), 2002). Notes:
STEL: 2 mg/m³ 15 minute(s).

Exposure controls

Occupational exposure controls

: After handling, always wash hands thoroughly with soap and water. 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

: Butyl rubber gloves. Permeation time >= 8 hours: (5 mm)

Eye protection

: splash goggles

Skin protection

: Work uniform or laboratory coat.

9. Physical and chemical properties

General information

Appearance

Physical state

: Liquid.

Colour

: Colourless. Clear.

Odour

: Characteristic.

Important health, safety and environmental information

pH

: >14 (Conc. (% w/w): 100) [Basic.]

Melting point

: May start to solidify at 360°C (680°F) based on data for: Potassium hydroxide. Weighted average: 26.35°C (79.4°F)

Boiling point

: The lowest known value is 100°C (212°F) (Water). Weighted average: 194.2°C (381.6°F)

Flash point

: Not applicable.

Explosive properties

: Not available.

Oxidising properties

: Not applicable

Relative density

: 1.116 g/cm³ (20°C / 68°F)

Solubility

: Soluble in cold water, hot water, methanol.

Viscosity

: Dynamic: The highest known value is <380 cP (Octyloxypoly(ethyleneoxy)ethyl phosphate)

Other information

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 acids.

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11. Toxicological information

Potential acute health effects

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

Acute toxicity

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Potassium hydroxide	LD50	273 mg/kg	Oral	Rat
diphosphoric acid, tetrapotassium salt	LD50	>2000 mg/kg	Oral	Rat
	LD50	>4640 mg/kg	Dermal	Rabbit
	LDLo	4640 mg/kg	Oral	Rat
Octyloxypoly(ethyleneoxy)ethyl phosphate	LD50	>2000 mg/kg	Oral	Rat

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: lungs, upper respiratory tract, skin, eye, lens or cornea.

Other adverse effects : Not available.

12. Ecological information

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
diphosphoric acid, tetrapotassium salt	Fish (LC50)	48 hour(s)	>750 mg/l
Octyloxypoly(ethyleneoxy)ethyl phosphate	Fish (LC50)	48 hour(s)	218 mg/l
	Daphnia (EC50)	48 hour(s)	79 mg/l
	Daphnia (EC50)	24 hour(s)	123 mg/l

No known significant effects or critical hazards.

Other adverse effects

13. Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilled 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.

Waste classification : Not applicable.

: Not available.

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

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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, CORROSIVE LIQUID N.O.S. (Potassium Hydroxide, 6%, mixture), class 8, II, ADR (Octyloxypoly (ethyleneoxy)ethyl phosphate)	8	II		Hazard identification number 80 Reportable quantity 4 Remarks No additional remark.
ADN Class	1760	UN 1760, CORROSIVE LIQUID N.O.S. (Potassium Hydroxide, 6%, mixture), class 8, II, ADNR (Octyloxypoly (ethyleneoxy)ethyl phosphate)	8	II		RQ (Reportable quantity) ADN 4 Remarks No additional remark.
IMDG Class	1760	CORROSIVE LIQUID N.O.S. (Potassium Hydroxide, 6%, mixture), class 8, UN 1760, PG II mixture (Potassium hydroxide)	8	II		Emergency schedules (EmS) F-A, S-B Reportable quantity 30 Remarks No additional remark.
IATA-DGR Class	1760	CORROSIVE LIQUID N.O.S. (Potassium Hydroxide, 6%, mixture), class 8, UN 1760, PG II (Potassium hydroxide)	8	II		-

15. Regulatory information

EU Regulations

Hazard symbol(s)



Corrosive

Risk Phrases

:

R35- Causes severe burns.

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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).
 S64- If swallowed, rinse mouth with water (only if the person is conscious).

Contains : Potassium hydroxide 215-181-3

Other EU regulations : Not available.

Product use : Classification and labelling have been performed according to EU directives 67/548/EEC, 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, anionic surfactants, phosphonates, phosphates.

16. Other information

Full text of R phrases referred to in sections 2 and 3 - United Kingdom (UK) : R22- Harmful if swallowed.
 R34- Causes burns.
 R35- Causes severe burns.
 R36- Irritating to eyes.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK) : 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.