

**SAFETY DATA SHEET**

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

1.1 Product identifier

- Product Name: Mossclean
- CAS Number: 7681-52-9
- EC Number: 231-668-3
- Registration Number: 01-2119488154-34

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

- Identified uses: Removing and cleaning moss, algae and stains from outside or inside paved surfaces.
- Use Advised against: None.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: PICS Ltd
- Address of Supplier: Unit 2 & 4  
Red Shute Hill Ind Estate  
Hermitage  
Newbury  
Berkshire  
RG18 9QL  
UK
- Telephone: +44 (0) 1635 202224
- Email: Info@picsuk.com

1.4 Emergency telephone number

- Emergency Telephone: +44 (0) 1635 202224  
(office hours only Mon– Fri 08:00 – 17:30)

**SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

- Type of product: Mixture
- Classification (REGULATION (EC) No 1272/2008)  
Met. Corr. 1 – H290; May be corrosive to metals.  
Skin Corr. 1B – H314; Causes severe skin burns and eye damage.  
STOT SE 3 – H314; May cause respiratory irritation.  
Aquatic Acute 1 – H400; Very toxic to aquatic life.

2.2 Label elements

This substance is classified and labelled according to the CLP regulation.

- Hazard pictograms:



**GHS05**



**GHS07**



**GHS09**

- Signal word: Danger.
- Hazard statements:  
H290; May be corrosive to metals.  
H314; Causes severe skin burns and eye damage.  
H335; May cause respiratory irritation.  
H400; Very toxic to aquatic life.
- Precautionary statements: None  
P260; Do not breathe dust/fume/gas/mist/vapours/spray.  
P273; Avoid release to the environment.  
P303+P361+P353; IF ON SKIN (or hair) take off immediately all contaminated clothing. Rinse skin with water/shower.  
P310; Immediately call a POISON CENTRE/doctor.  
P405; Store locked up.  
P501; Dispose of contents/container in accordance with local/regional/national/international regulations.
- Additional information:  
EUH301; Contact with acids liberates toxic gas.

**2.3 Other hazards**

Results of a PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

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**SECTION 3: Composition/information on ingredients****3.1 Substances**

- CAS No. Description: 7681-52-9 sodium hypochlorite, solution.
- Identification number(s): Not applicable.
- EC number: 231-668-3
- Index number: 017-011-00-1

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**SECTION 4: First aid measures****4.1 Description of first aid measures**

- General advice: Immediately remove any clothing soiled by the product.
- If inhaled: Supply fresh air. If necessary, provide artificial respiration. Keep patient warm. If symptoms persist, consult a doctor. Take affected persons into fresh air and keep quiet.
- After case of skin contact: Immediately rinse with water. Call a doctor immediately.
- In case of eye contact: Rinse opened eye for several minutes under running water. Consult a doctor.
- If swallowed: Do not induce vomiting. Rinse mouth with water. Call a doctor 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.

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**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable Extinguishing Media: Water spray.

**5.2 Special hazards arising from the substance or mixture**

- No further relevant information available.

**5.3 Advice for firefighters**

- Special protective equipment: Mount respiratory protective device. Wear self-contained respiratory protective device.
- Further information: Cool endangered receptacles with water spray.

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

- Personal precautions: Mount respiratory protective device. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

**6.2 Environmental precautions**

- 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**

- Methods for cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent. Dispose contaminated material as waste according to Section 13. Ensure adequate ventilation.

**6.4 Reference to other sections**

- For information on safe handling see Section 7.
- For personal protection see Section 8.
- Information on disposal methods see Section 13.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

- Ensure good ventilation/exhaustion at the workplace. Keep receptacles tightly sealed. No special measures required.
- Information about fire and explosion protection: No special measurements required.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements to be met by storerooms and receptacles: Provide floor trough without outlet.
- Information about storage in one common storage facility: Do not store together with acids. Store away from flammable substances.
- Further information about storage conditions: Store receptacle in fume cupboard. Store in cool, dry conditions in well-sealed receptacles. Protect from heat and direct sunlight. Keep container rightly sealed.
- Recommended storage temperature: 15-25°C.

7.3 Specific end use(s)

- See Section 1.2

**SECTION 8: Exposure controls/personal protection**

Additional information about design of technical facilities: No further data, see Section 7.

8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace: Not required.

DNELs		
Oral	DNEL Long-term – Systemic (consumer)	0.26 mg/kg bw/day (l)
Inhalative	DNEL Acute – Systemic (worker)	3.1 mg/m <sup>3</sup> (l)
	DNEL Acute – Local (worker)	3.1 mg/m <sup>3</sup>
	DNEL Long-term – Local (consumer)	1.55 mg/m <sup>3</sup>
	DNEL Long-term – Local (worker)	1.55 mg/m <sup>3</sup>
	DNEL Long-term – Systemic (consumer)	1.55 mg/m <sup>3</sup>
	DNEL Long-term – Systemic (worker)	1.55 mg/m <sup>3</sup>

PNECs	
PNEC Fresh water	0.00021 mg/l (l)
PNEC Intermittent releases	0.00026 mg/l (l)
PNEC Marine water	0.000042 mg/l (l)
PNEC STP	0.03 mg/l (l)

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

8.2 Exposure controls

Personal protective equipment.

- General protective and hygienic measure: 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: Use suitable respiratory protective device in case of insufficient ventilation.
- Protection of hands: Wear PVC gloves. Recommended thickness of the material ≥ 1-1.2mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Wear tightly sealed goggles.
- Body protection: Use protective suit.



**SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

- Appearance: Fluid, yellowish.
- Odour: Chlorine-like.
- pH-value: Not determined.
- Melting point/melting range: -16°C.
- Boiling point/Boiling range: >100°C.
- Flashpoint: >111°C.
- Autoignition temperature: No information available.
- Decomposition temperature: Not determined.
- Danger of explosion: Product does not present an explosion hazard.
- Upper & lower explosion limits: Not determined.
- Vapour pressure at 20°C: 20 hPa.
- Density at 20°C: 1.150 1.240 g/cm<sup>3</sup>.
- Solubility in/Miscibility with water: Fully miscible.

- Partition coefficient (n-octanol/water) at 20°C: -3.42 log POW.
- Viscosity dynamic at 20°C: 2.8 mPas.
- Viscosity kinematic: Not determined.

9.2 Other information

- No further relevant information available.

**SECTION 10: Stability and reactivity**

10.1 Reactivity

- Not determined.

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 flammable substance.
- Reacts with acids.

10.4 Conditions to avoid

- No further relevant information available.

10.5 Incompatible materials

- Metals.

10.6 Hazardous decomposition products

- Chlorine.

**SECTION 11: Toxicological information**

11.1 Information on toxicological effects

- Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:		
Oral	LD50	>2000 mg/kg (rat)

- Primary irritant effect:  
Skin corrosion/irritation; Causes severe skin burns and eye damage.  
Serious eye damage/eye irritation; Causes severe skin burns and eye damage.  
Respiratory or skin sensitisation; Based on available data, the classification criteria are not met.  
Respiratory sensitisation; Not classified based on available information.
- CMR effect (carcinogenicity 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: May cause respiratory irritation.
- 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:		
Dermal	LD50 EC50 EC50 (48 u) LC50 (96 u)	>2000 ml/kg (rabbit) 3 mg/l (activated sludge) 0.01 – 0.1 mg/l (daphnia magna) 0.01 – 0.1 mg/l (fish)

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
- Additional ecological information:  
General notes; Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water. Do not allow

product to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or unnaturalised. Danger to drinking water if even small quantities leak into the ground.

- 12.5 Results of the 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 not be disposed together with household garbage. Do not allow product to reach sewage system.
  - Unclean packaging recommendation: Disposal must be made according to official regulation.
  - Recommended cleansing agents: Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

14.1 UN-Number

ADR, IMDG, IATA	UN1791
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14.2 UN Proper shipping name

ADR/RID IMDG IATA	1791 Hypochlorite solutions, environmentally hazardous Hypochlorite solutions, marine pollutant Hypochlorite solution
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14.3 Transport hazard class(es)

<p>ADR, IMDG</p>  <p>Class Label</p>	<p>8 Corrosive substances 8</p>
<p>IATA</p>  <p>Class Label</p>	<p>8 Corrosive substances 8</p>

14.4 Packaging group

ADR, IMDG, IATA	III
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14.5 Environmental hazards:  
Environmentally hazardous substance, liquid; Marine Pollutant

Marine pollutant	Yes
Special marking (ADR/RID)	

14.6 Special precautions for user  
Warning: Corrosive substances.

Danger code (Kemler):	80
EMS Number:	F-A, S-B
Segregation groups:	Hypochlorites

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code  
Not applicable. Transport additional information:

ADR Limited quantities (LQ) Excepted quantities (EQ)	5l Code: E1 Maximum net quantity per inner packaging: 30ml Maximum net quantity per outer packaging: 1000ml
Transport category Tunnel restriction code	E

IMDG Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30ml Maximum net quantity per outer packaging: 1000ml
UN "Model Regulation"	UN1791, Hypochlorite solution, environmentally hazardous, 8, III

**SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture labelling according to Regulation (EC) No 1272/2008 GHS label elements

- National Regulations  
Water hazard class: Water hazard class 2 (Assessment by list): hazardous for water.

15.2 Chemical Safety Assessment

- A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

Abbreviations and acronyms:

- RID: Regulations concerning the International Transport of Dangerous Goods by Rail.
- ICAO: International Civil Aviation Organisation.
- ADR: 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.
- 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%.
- LD50: Lethal Dose, 50%.
- PBT: Persistent, Bioaccumulative and Toxic.
- vPvB: very Persistent and very Bioaccumulative.
- Met. Corr. 1: Corrosive to metals, Hazard Category 1.
- Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B.
- STOT SE 3: Specific target organ toxicity – single exposure, Hazard Category 3.
- Aquatic Acute 1: Hazardous to the aquatic environment – Acute Hazard, Category 1.

The information provided in these documents is based on our present state of knowledge of the product and is given in good faith and to the best of our experience. However, it should not be construed as a technical specification or as guaranteeing specific properties. In no event we will be responsible for damages or effects of any nature whatsoever, either express or implied, resulting from the use of this information. It is the responsibility of the consignee and the user of the product to comply with all prevailing and applicable laws, regulations and directives. They should also make their own determination as to the suitability of the product for a particular use or application.

--End of Safety Data Sheet--