Printing date 23.10.2017 Version: 2 Revision: 23.10.2017

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

- · 1.1 Product identifier
- Trade name: MadHog Mould & Mildew Remover
- · Article number: 51570003
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Sector of Use

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

- Product category PC35 Washing and cleaning products (including solvent based products)
- · Technical function Cleaning agent
- · Application of the substance / the mixture Cleaning agent
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

ZEP UK Ltd

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Widnes Cheshire, WA8 0RR

United Kingdom

Tel: +44 (0)151 422 1000 Fax: +44 (0)151 422 1011

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ZEP Industries BV

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· 1.4 Emergency telephone number:

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SECTION 2: Hazards identification

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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

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

(Contd. on page 2)

(Contd. of page 1)

Safety data sheet According to 1907/2006/EC, Article 31 REACH

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Trade name: MadHog Mould & Mildew Remover

· Hazard pictograms

(!)

· Signal word Warning

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Precautionary statements

P102 Keep out of reach of children. P260 Do not breathe spray. P280 Wear protective gloves.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

P411 Store at temperatures not exceeding 25°C.

· Additional information:

EUH031 Contact with acids liberates toxic gas.

- 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 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 7681-52-9	sodium hypochlorite, solution	1-2.5%
EINECS: 231-668-3	♦ Met. Corr.1, H290; Skin Corr. 1B, H314	
Reg.nr.: 01-2119488154-34-XXXX	♦ Aquatic Acute 1, H400	
CAS: 137-16-6	~	0.1-1%
EINECS: 205-281-5	♦ Acute Tox. 2, H330	
	Eye Dam. 1, H318	
	Skin Irrit. 2, H315	

· Ingredients according to Detergents Regulation 648/2004/EC

For the wording of the listed hazard phrases refer to section 16.

Chlorine based bleaching agents, Anionic surfactants <5%

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · 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: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)

Trade name: MadHog Mould & Mildew Remover

· 5.3 Advice for firefighters

· Protective equipment: No special measures required.

(Contd. of page 2)

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Dilute with plenty of water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, universal binders).

· 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 Keep away from heat and direct sunlight.
- · 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 upright.

Store in a cool, dry place away from direct sunlight.

- Information about storage in one common storage facility: Do not store together with acids.
- · 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

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

1310-73-2 sodium hydroxide (0.1-1%)

WEL (Great Britain) Short-term value: 2 mg/m³

· DNELs

7681-52-9 sodium hypochlorite, solution

Oral	DNEL Long term-systemic	0.26 mg/kg human/day (consumer)
Inhalative	DNEL Acute-local mg/m3	3.1 mg/m3 (worker)
	DNEL Acute-systemic mg/m3	3.1 mg/m3 (worker)
	DNEL Long term local mg/m3	1.55 mg/m3 (consumer)
		1.55 mg/m3 (worker)
	DNEL Long term-systemic mg/m3	1.55 mg/m3 (consumer)
		1.55 mg/m3 (worker)

· PNECs

7681-52-9 sodium hypochlorite, solution

PNEC Freshwater mg/L	0.21~mg/L
	0.042 mg/L
PNEC Sewage treatment Plant mg/L	0.03 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.

Wash hands before breaks and at the end of work.

• Respiratory protection: Not necessary if room is well-ventilated.

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Protection of hands:

(Contd. of page 3)

Rubber 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. Rubber gloves

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 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· Eye protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

· 9.1 Information on	hasic	nhysical	and c	homical	nronortios
7.1 Injoimanon on	vusic į	pnysicui	unu ci	nemicui	properties

· General Information

· Appearance:

Form: Liquid Colour: Yellow Odour: Like chlorine

· pH-value: 12.5

· Change in condition

Melting point/freezing point: Undetermined. Initial boiling point and boiling range: 100°C

· Flash point: Not applicable.

· Flammability (solid, gas): Not applicable.

· Ignition temperature:

Not determined. Decomposition temperature:

· Auto-ignition temperature: Product is not selfigniting.

Product does not present an explosion hazard. · Explosive properties:

Explosion limits:

Lower: Not determined. Upper: Not determined.

· Vapour pressure at 20°C: 23 hPa

Density at 20°C: 1.044 g/cm³ Not determined. · Relative density Not determined. · Vapour density Not determined. · Evaporation rate

· Solubility in / Miscibility with

Fully miscible.

Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic: Not determined. Kinematic: Not determined.

· Solvent content:

0.0% Organic solvents:

0.8 % Solids content:

· 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity

Generates toxic gas in contact with acid.

(Contd. on page 5)

Trade name: MadHog Mould & Mildew Remover

(Contd. of page 4)

- Stable under normal temperature conditions.
- · 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 acids.

Inadequately vented containers may become pressurised.

· 10.4 Conditions to avoid

Acids. Ammonium compounds. Hydrogen peroxide. Alkalis. Metal salts.

Heat and sunlight.

- · 10.5 Incompatible materials: Strong oxidizers and acids
- · 10.6 Hazardous decomposition products:

Chlorine

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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:

7681-52-9 sodium hypochlorite, solution

Oral	LD50	>2000 mg/kg (Rat)
Dermal	LD50	>2000 mg/kg (Rabbit)
	EC 50 / 48 h	0.141 mg/ltr (Daphnia magna (water flea))
	LC50 / 96 h	0.22-0.62 mg/ltr (Pimephales promelas)

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- 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: No further relevant information available.
- 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:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

In accordance with the requirements of the RVO in the Act on Detergents and Cleansing Agents, tensides are biodegradable up to at least 90 %.

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

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Trade name: MadHog Mould & Mildew Remover

(Contd. of page 5)

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

Smaller quantities can be disposed of with household waste.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information	
14.1 UN-Number ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA Class	Void
14.4 Packing group ADR, IMDG, IATA	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of the IBC Code	of Marpol and Not applicable.
Transport/Additional information:	
IMDG Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	Void

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · National regulations:
- · Waterhazard class: Water hazard class 2 (Self-assessment): 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.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

Department issuing SDS:

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Trade name: MadHog Mould & Mildew Remover

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Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods

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

Met. Corr. 1: Corrosive to metals – Category 1
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
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 Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

* Data compared to the previous version altered.

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Trade name: MadHog Mould & Mildew Remover

(Contd. of page 7)

Annex: Exposure scenario

- Short title of the exposure scenario
- · Sector of Use

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

- 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.

Smaller than 10 g per application.

- Other operational conditions
- · Other operational conditions affecting environmental exposure No special measures required.
- · 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 No special measures required.
- · Personal protective measures Do not inhale gases / fumes / aerosols.
- · Measures for consumer protection Ensure adequate labelling.
- · Environmental protection measures
- · Water No special measures required.
- · Disposal measures 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.

- GE