Printing date 25.10.2017 Version: 1 Revision: 25.10.2017

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

- · 1.1 Product identifier
- Trade name: MadHog Heavy Duty Bleach Concentrate
- · Article number: 76340001
- 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/ Cleaner
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

ZEP UK Ltd

Tanhouse Lane

Widnes Cheshire, WA8 0RR

United Kingdom

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

@: info@zep.co.uk web: www.zep.co.uk

ZEP Industries BV

Vierlinghweg 30

4612 PN Bergen op Zoom

The Netherlands

Tel: (NL) + 31 164 250 100 (B) + 32 2 347 0117 Fax:(NL) + 31 164 266 710 (B) + 32 2 347 1395

@: sales@zepbenelux.com

ZEP ITALIA SRL

Via Netunese Km. 25.000

04011 Aprilia (LT) - Italy

Tel: +39.06.926691

Fax: +39.06.92747061 @: tecnico@zepeurope.com

Cita summu = am it

Sito: www.zep.it

· Further information obtainable from:

Customer Service

NL: Tel: +31 164 250 100 Fax: +31 164 266 710 B: Tel: +32 2 347 0117 Fax: +32 2 347 1395 IT: Tel: +39 069 266 91Fax: +39 06.927 470 61 UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

· 1.4 Emergency telephone number:

Customer Service

NL: Tel: +31 164 250 100 Fax: +31 164 266 710 B: Tel: +32 2 347 0117 Fax: +32 2 347 1395 IT: Tel: +39 069 266 91Fax: +39 06.927 470 61 UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

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 Dam. 1 H318 Causes serious eye damage. Aquatic Acute 1 H400 Very toxic to aquatic life.

- · 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

Trade name: MadHog Heavy Duty Bleach Concentrate

· Hazard pictograms



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

sodium hypochlorite, solution

· Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage. H400 Very toxic to aquatic life.

· Precautionary statements

P102 Keep out of reach of children. P273 Avoid release to the environment.

P280 Wear protective gloves.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

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

do. Continue rinsing.

P411 Store at temperatures not exceeding 25°C.

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

· Additional information:

EUH031 Contact with acids liberates toxic gas.

- 2.3 Other hazards
- · 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.

. Danaarous	components:
Dangerous	components.

Ingredients according to Detergents Regulation 648/2004/EC

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

Chlorine based bleaching agents <5%

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · 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.

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: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)

Printing date 25.10.2017 Version: 1 Revision: 25.10.2017

Trade name: MadHog Heavy Duty Bleach Concentrate

(Contd. of page 2)

- · 5.3 Advice for firefighters
- · Protective equipment: Mount respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

· 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).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

· 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.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store upright.

Store only in the original receptacle.

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs		
7681-52-9	7681-52-9 sodium hypochlorite, solution	
Oral	DNEL Long term-systemic	0.26 mg/kg human/day (consumer)
Inhalative	DNEL Long term-systemic mg/m3	1.55 mg/m3 (consumer)
		1.55 mg/m3 (worker)
	DNEL Long term local mg/m3	1.55 mg/m3 (consumer)
		1.55 mg/m3 (worker)
	DNEL Acute-systemic mg/m3	3.1 mg/m3 (worker)
	DNEL Acute-local mg/m3	3.1 mg/m3 (worker)

· PNECs

7681-52-9 sodium hypochlorite, solution

PNEC Freshwater mg/L	0.21 mg/L
PNEC Marinewater 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.

(Contd. on page 4)

Trade name: MadHog Heavy Duty Bleach Concentrate

(Contd. of page 3)

- · 8.2 Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Avoid contact with the skin.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not required.
- Protection of hands:



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

- · Not suitable are gloves made of the following materials: Strong material gloves
- · Eye protection: Goggles recommended during refilling

9.1 Information on basic physical and c	shamiaal nyonautias
· 9.1 Information on basic physical and c · General Information	nemicai properties
· Appearance:	
Form:	Liquid
Colour:	Light yellow
· Odour:	Chlorine-like
· Odour threshold:	Not determined.
pH-value at 20°C:	11
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range	2: 100°C
· Flash point:	Not applicable.
· Flammability (solid, gas):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20°C:	23 hPa
Density at 20°C:	1.08 g/cm^3
Relative density	Not determined.
· Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.

Trade name: MadHog Heavy Duty Bleach Concentrate

		(Contd. of page 4)
Kinematic:	Not determined.	
Solvent content: Swiss VOC:	0.00 %	
Solids content: 9.2 Other information	0.7 % No further relevant information available.	

SECTION 10: Stability and reactivity

· 10.1 Reactivity

Generates toxic gas in contact with acid.

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	>2,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rabbit)
	LC50 / 96 h	0.22-0.62 mg/ltr (Pimephales promelas)
	EC 50 / 48 h	0.141 mg/ltr (Daphnia magna (water flea))

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

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye damage.

- · 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.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Ecotoxical effects:
- · Remark: Very toxic for fish
- Additional ecological information:
- · General notes:

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

Printing date 25.10.2017 Version: 1 Revision: 25.10.2017

Trade name: MadHog Heavy Duty Bleach Concentrate

(Contd. of page 5)

- Very toxic for aquatic organisms
- · 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

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

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

· 14.1 UN-Number	
ADR, IMDG, IATA	UN3082
14.2 UN proper shipping name	
ADR	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
· IMDG	LIQUID, N.O.S. (HYPOCHLORITE SOLUTION) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
· IMDG	N.O.S. (HYPOCHLORITE SOLUTION), MARINE POLLUTAN
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
	N.O.S. (HYPOCHLORITE SOLUTION)
14.3 Transport hazard class(es)	
· ADR	
· Class · Label	9 (M6) Miscellaneous dangerous substances and articles.
· Lubet · IMDG, IATA	<u> </u>
1 1 1 2 2 2 3 3 4 3 3 4 3 4 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3	
Class	9 Miscellaneous dangerous substances and articles.
Label	9
· 14.4 Packing group	
ADR, IMDG, IATA	III
14.5 Environmental hazards:	Product contains environmentally hazardous substances: sodium
Marina pollutanti	hypochlorite, solution
· Marine pollutant: · Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
Danger code (Kemler):	90
EMS Number:	F- A , S - F
Segregation groups	Hypochlorites
· Stowage Category	A

Printing date 25.10.2017 Version: 1 Revision: 25.10.2017

Trade name: MadHog Heavy Duty Bleach Concentrate

	(Contd. of page
· 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
· Remarks:	Packaging containing 5Lt/Kg or less of product do NOT requir
	labelling as hazardous for transport.
· 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 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
•	LIQUID, N.O.S. (HYPOCHLORITE SOLUTION), 9, 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. 1907/2006 - Reach;

Reg. (EC) n. 2015/830 annex II of REACH;

Reg. (EC) n. 648/04 (Detergents);

Reg. (EC) n. 528/12 (Biocides BPR);

Reg. (EC) n. 1223/2009 (Cosmetics);

Dir. 06/08 ADR - RID - IMDG - IATA;

Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);

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

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category E1 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- 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.

H400 Very toxic to aquatic life.

Department issuing SDS:

Customer Service

NL: Tel: +31 164 250 100 Fax: +31 164 266 710 B: Tel: +32 2 347 0117 Fax: +32 2 347 1395 IT: Tel: +39 069 266 91Fax: +39 06.927 470 61 UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

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NL: Tel: +31 164 250 100 Fax: +31 164 266 710 B: Tel: +32 2 347 0117 Fax: +32 2 347 1395 IT: Tel: +39 069 266 91Fax: +39 06.927 470 61 UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

(Contd. on page 8)

Printing date 25.10.2017 Version: 1 Revision: 25.10.2017

Trade name: MadHog Heavy Duty Bleach Concentrate

(Contd. of page 7)

· 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

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative
Met. Corr.1: Corrosive to metals – Category 1
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

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

(Contd. on page 9)

Printing date 25.10.2017 Version: 1 Revision: 25.10.2017

Trade name: MadHog Heavy Duty Bleach Concentrate

(Contd. of page 8)

Annex: Exposure scenario

· Short title of the exposure scenario

For the finished product.

MadHog Heavy Duty Bleach Concentrate

· 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 Use only on hard ground.
- Other operational conditions affecting worker exposure

Avoid contact with eyes.

Avoid contact with the skin.

- · Other operational conditions affecting consumer exposure Keep out of the reach of children.
- 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

Use product only in enclosed systems.

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

- · 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.

Do not allow to reach sewage system.

- · Soil Prevent contamination of soil.
- 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
- Guidance for downstream users No further relevant information available.

GB