Revision 1





# SAFETY DATA SHEET 25L SUPER SODIUM HYPOCHLORITE 14%

According to Regulation (EU) No 453/2010

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name 25L SUPER SODIUM HYPOCHLORITE 14%

Product No. 800-104-0297 Container size 25 litres

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

Identified uses Industrial and professional cleaning.

Uses advised against None identified.

1.3. Details of the supplier of the safety data sheet

Supplier COVENTRY CHEMICALS LTD

WOODHAMS RD SISKIN DRIVE COVENTRY CV3 4FX

Tel: +44 (0) 02476639739 Fax: +44 (0) 02476639717

Email: sales@coventrychemicals.com

Contact Person For content of safety data sheet: sds@coventrychemicals.com

#### 1.4. Emergency telephone number

+44 (0) 1865407333

#### **SECTION 2: HAZARDS IDENTIFICATION**

# 2.1. Classification of the substance or mixture

Classification (1999/45/EEC) C;R34. N;R50. R31.

2.2. Label elements

Contains SODIUM HYPOCHLORITE SOLUTION, ... % CI ACTIVE

Labelling



Corrosive

Dangerous for the

Risk Phrases

R31 Contact with acids liberates toxic gas.

R34 Causes burns.

R50 Very toxic to aquatic organisms.

environment

Safety Phrases

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

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 label where possible).

S57 Use appropriate containment to avoid environmental contamination.

S60 This material and its container must be disposed of as hazardous waste.

#### 2.3. Other hazards

This product does not contain any PBT or vPvB substances.

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

N, % CI ACTIVE	10-15%
EC No.: 231-668-3	Registration Number: 01-2119488154-34-XXXX
	Classification (67/548/EEC) C:R34
	R31 N:R50
	N, % CI ACTIVE EC No.: 231-668-3

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

#### **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

General information

Provide eyewash station and safety shower. SPEED IS ESSENTIAL. OBTAIN IMMEDIATE MEDICAL ATTENTION.

Inhalation

Move into fresh air and keep at rest. Keep the affected person warm and at rest. Get prompt medical attention. For breathing difficulties oxygen may be necessary.

Ingestion

Never give liquid to an unconscious person. Immediately rinse mouth and drink plenty of water (200-300 ml). DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and hold eyelids open widely. Get medical attention immediately. Continue to rinse. Immediately transport to hospital or eye specialist.

#### 4.2. Most important symptoms and effects, both acute and delayed

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure. Seek medical attention for all burns, regardless how minor they may seem. The casualty should be transferred to hospital as soon as possible. Inhalation.

Gas (chlorine), emitted under fire or acidic conditions, is toxic by inhalation.

Ingestion

Will immediately cause corrosion of, and damage to, the gastrointestinal tract.

Skin contact

May cause serious chemical burns to the skin.

Eye contact

May cause severe inflammation, corneal ulcers and permanent impairment of vision.

## 4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment and supportive therapy as indicated. Risk of chemical pneumonia after aspiration.

## **SECTION 5: FIREFIGHTING MEASURES**

# 5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. Foam, carbon dioxide or dry powder.

# 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Fire or high temperatures create: Chlorine. Oxides of: Chlorine. Hydrogen chloride (HCI).

Unusual Fire & Explosion Hazards

Oxidising agent; may assist combustion. Containers may burst if overheated.

#### 5.3. Advice for firefighters

Special Fire Fighting Procedures

Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

#### 6.2. Environmental precautions

Avoid release to the environment. Do not discharge into drains, water courses or onto the ground.

#### 6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area.

#### 6.4. Reference to other sections

For waste disposal, see section 13. See section 11 for more detailed information on health effects and symptoms.

#### **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Avoid forming spray/aerosol mists. Provide good ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Do not eat, drink or smoke when using the product. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid contact with acids and other cleaning agents.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in a cool and well-ventilated place. Store in vented containers. Store away from: Acids. Protect from light, including direct sunrays. Suitable containers: high density polyethylene.

Storage Class

Corrosive storage.

#### 7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

Ingredient Comments

No exposure limits noted for ingredient(s). In case of chlorine emmission, the WEL for Chlorine should be observed: Short Term Exposure Limit (STEL) 0.5 ppm / 1.5 mg/m3

# 8.2. Exposure controls

Protective equipment





Process conditions

Provide eyewash, quick drench.

Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

Respiratory equipment

In case of inadequate ventilation use suitable respirator. Type approved for mists if OES likely to be exceeded. Use respiratory equipment with gas filter, type B.

Hand protection

Wear protective gloves. Neoprene, nitrile, polyethylene or PVC. EN 374

Eve protection

Wear tight-fitting goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Use barrier creams to prevent skin contact.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. Environmental Exposure Controls

Users should be aware of environmental considerations and their duties under the environmental protection act. Further information may be found on Government websites: www.dti.gov.uk/access/index/htm and www.envirowise.gov.uk.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on basic physical and chemical properties

Appearance Liquid

Colour Yellowish Green.

Odour Chlorine.

Solubility Soluble in water.

Initial boiling point and boiling range 110

Melting point (°C) -17

Relative density 1.2 - 1.3 @ 20°C

Bulk Density
Not applicable.
Vapour density (air=1)
Not determined.
Vapour pressure

No information available.

Evaporation rate

No information available. Evaporation Factor Not applicable.

pH-Value, Conc. Solution >11

Viscosity

Not determined.

Solubility Value (G/100G H2O@20°C)

Not applicable.

Decomposition temperature (°C)

Not applicable.

Odour Threshold, Lower

Not applicable.

Odour Threshold, Upper

Not applicable. Flash point Not applicable.

Auto Ignition Temperature (°C)

Not applicable. Explosive properties Not applicable Oxidising properties Not applicable.

Comments Information applies to a solution of 15% (nominal) available chlorine.

## 9.2. Other information

Not relevant

## **SECTION 10: STABILITY AND REACTIVITY**

#### 10.1. Reactivity

Reactive substance that can react with many inorganic and organic compounds Contact with acids liberates toxic chlorine gas.

## 10.2. Chemical stability

Stable under the prescribed storage conditions. Decomposes over time. Factors that increase the rate of decomposition: increase in temperature, certain metallic impurities, high initial concentration, fall in pH below 11and exposure to light.

# 10.3. Possibility of hazardous reactions

Contact with acids liberates toxic chlorine gas. Oxidising agent; may assist combustion. Reacts with ammonia solutions and amines to form explosive compounds.

## 10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

# 10.5. Incompatible materials

Materials To Avoid

Acids. Ammonium compounds. Organic materials. Metals, particularly copper, nickel and iron. Metal salts.

#### 10.6. Hazardous decomposition products

Chlorine.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1. Information on toxicological effects

Toxicological information

Data from sodium hypochlorite solution 15% shows low acute oral toxicity. LC50(rat, oral) 1100 mg/kg (as available chlorine).

Other Health Effects

This substance has no evidence of carcinogenic properties.

Acute toxicity:

Acute Toxicity (Oral LD50)

1100 mg/kg Rat

Value used for Chemical Safety Assessment.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

Acute Toxicity (Inhalation LC50)

> 10.5 mg/l (vapours) Rat

## Respiratory or skin sensitisation:

Skin sensitisation

Guinea Pig

Not Sensitising.

General information

This product has low toxicity.

Inhalation

Spray mists irritate the respiratory system, and cause coughing and difficulties in breathing.

Ingestion

May cause burns in mucous membranes, throat, oesophagus and stomach.

Skin contact

May cause serious chemical burns to the skin.

Eye contact

Causes burns. Risk of corneal damage.

Health Warnings

Gas (chlorine), emitted under fire or acidic conditions, is toxic by inhalation.

## **SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity

High acute aquatic toxicity.

## 12.1. Toxicity

Acute Fish Toxicity

Very toxic to aquatic organisms.

LC 50, 96 Hrs, Fish mg/l 0.06 EC 50, 48 Hrs, Daphnia, mg/l 0.141

Can cause damage to aquatic plants.

Can cause damage to vegetation.

## 12.2. Persistence and degradability

## Degradability

This product contains inorganic compounds which are not biodegradable. Reacts with organic substances in soil and sediments and degrades rapidly to chloride salts. Substantially removed in biological treatment processes.

#### 12.3. Bioaccumulative potential

Bioaccumulative potential

The product is not bioaccumulating.

#### 12.4. Mobility in soil

Mobility:

The product is water soluble and may spread in water systems.

## 12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

#### 12.6. Other adverse effects

There is evidence that sodium hypochlorite inhibits the aerobic treatment process at a concentration of 0.05mg/l.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

## 13.1. Waste treatment methods

Dispose of via an authorised and appropriately licensed waste contractor.

Waste Class

EWC Code: 06 02 05

#### **SECTION 14: TRANSPORT INFORMATION**

#### 14.1. UN number

UN No. (ADR/RID/ADN) 1791 UN No. (IMDG) 1791 UN No. (ICAO) 1791

## 14.2. UN proper shipping name

Proper Shipping Name HYPOCHLORITE SOLUTION

## 14.3. Transport hazard class(es)

ADR/RID/ADN Class 8

ADR/RID/ADN Class Class 8: Corrosive substances.

ADR Label No. 8
IMDG Class 8
ICAO Class/Division 8

Transport Labels



# 14.4. Packing group

ADR/RID/ADN Packing group II
IMDG Packing group II
ICAO Packing group II

## 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



#### 14.6. Special precautions for user

IMDG Code Segregation Group 8.Hypochlorites

EMS F-A, S-B

Emergency Action Code 2X
Hazard No. (ADR) 80
Tunnel Restriction Code (E)

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

## **SECTION 15: REGULATORY INFORMATION**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Uk Regulatory References** 

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

**Environmental Listing** 

Environmental Protection Act 1990. The Hazardous Waste Regulations 2005.

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108). Technical Guidance WM2: Hazardous Waste.

**EU** Legislation

Waste Material Code 91/689/EEC

#### 15.2. Chemical Safety Assessment

A Chemical Safety Assessment (CSA) has been completed for Sodium hypochlorite. Currently we do not have information from our suppliers about this

#### **SECTION 16: OTHER INFORMATION**

Abbreviations and acronyms used in the safety data sheet

EWC European Waste Catalogue

General information

Only trained personnel should use this material.

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Risk Phrases In Full

R34 Causes burns.

R31 Contact with acids liberates toxic gas.
R50 Very toxic to aquatic organisms.

Hazard Statements In Full

H314 Causes severe skin burns and eye damage.
EUH031 Contact with acids liberates toxic gas.

H400 Very toxic to aquatic life.