

# SAFETY DATA SHEET SODIUM HYPOCHLORITE SOLUTION 14% - 15%

#### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME: SODIUM HYPOCHLORITE SOLUTION 14% - 15%

PART No.: RM247

SUPPLIER: J M Loveridge plc

Southbrook Road, Southampton

Hampshire SO15 1BH

Tel: 023 8022 2008 Fax: 023 8022 2117

# 2. COMPOSITION/INFORMATION ON INGREDIENTS:

EU INDEX No.: 017-011-00-1

EEC (EINECS) No. 231-668-3

CAS No.: 7681-52-9

COMPOSITION COMMENTS: Free chlorine content 14 - 15%.

## 3. HAZARDS IDENTIFICATION:

Causes burns.

Contact with acids produces highly toxic chlorine gas.

#### 4. FIRST AID MEASURES:

GENERAL: IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK

MEDICAL ATTENTION

INHALATION: Move affected person to fresh air. If recovery not rapid, seek medical attention.

If breathing stops, provide artificial respiration. Keep affected person warm and at rest.

INGESTION: Only when conscious, rinse mouth with plenty of water and give plenty of water to

drink - (approx 500ml). DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Keep

patient at rest and obtain medical attention.

SKIN: Remove contaminated clothing. Wash affected area with plenty of soap and water. If

irritation persists, seek medical attention. Launder clothing before re-use.

EYES: Keeping eye open, immediately irrigate with water or eye-wash for 15 minutes. Obtain

medical attention.

## 5. FIRE FIGHTING MEASURES:

**EXTINGUISHING MEDIA:** Use extinguishing media suitable against surrounding fire or the cause of fire.

SPECIAL FIRE FIGHTING

PROCEDURES:

Take measures to retain water used for extinguishing. Do not release contaminated water into drains, soil and surface water. Dispose of contaminated water and soil

according to local regulations.

UNUSUAL FIRE & EXPLOSION

HAZARDS:

Reaction with acids will generate toxic chlorine gas.

HAZARDOUS COMBUSTION

PRODUCTS:

Thermal decomposition may release noxious, corrosive or toxic vapours.

PROTECTIVE MEASURES IN FIRE: Fire fighters should wear self-contained breathing apparatus.

#### 6. A CCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTION IN SPILL: Avoid direct contact with skin, eyes and clothing. Wear appropriate protective clothing.

PRECAUTIONS TO PROTECT

ENVIRONMENT:

Prevent material from entering drains or water courses. Advise the Environment Agency

or relevant local authority if contamination of soil or water systems occurs.

SPILL CLEAN UP METHODS: Take-up spillage with absorbent, inert material and place in a suitable and closable

labelled container for recovery or disposal. Wash the area clean with water and

detergent, observing environmental requirements.

#### 7. HANDLING AND STORAGE:

USAGE PRECAUTIONS: HANDLING - Product should be used in accordance with good industrial principles for

handling and storing of hazardous chemicals.

Avoid contact with skin or eyes.

Exercise care when dissolving the product due to strong exothermic reaction.

STO RAGE PRECAUTIONS: Store in a cool, dry, well ventilated place, in securely closed original container.

Avoid direct sunlight. Store away from acids and reactive chemicals.

STO RAGE CRITERIA: Corrosive storage.

#### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

IN G R ED IE NT C OMMENTS: No OES assigned for sodium hypochlorite, however exposure limits for chlorine

(8-hour TWA) and (15 min STEL) are listed as 0.5 ppm and 1 ppm respectively.

**VENTILATION:** Work in a fume cupboard or use local exhaust ventilation.

Respiratory protection required if levels exceed the OES for (free) chlorine.

**PROTECTIVE GLOVES:** Use impervious gloves made of butyl rubber or PVC.

EYE PROTECTION: Approved chemical safety goggles or face protection.

OTHER PROTECTION: Wear protective clothing and closed footwear. Wear suitable personal protective

equipment appropriate to the task.

Wear apron and/or other suitable impervious clothing.

HY GIENIC WORK PRACTICES: SKIN PROTECTION - apply barrier cream to hands and exposed skin.

Promptly remove any clothing that becomes contaminated.

Wash promptly if skin becomes contaminated.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Clear, green-yellowish liquid...

BOILING POINT (°C, interval): 1390 Pressure:

DENSITY/SPECIFIC GRAVITY (g/ml): ~ 1.1 Temperature (°C): 20

VAPOUR DENSITY (air=1): 1.26

pH-VALUE, DILUTED SOLUTION: > 13 Concentration % M:

**SOLUBILITY DESCRIPTION:** Miscible with water in all proportions.

#### 10. STABILITY AND REACTIVITY:

STABILITY: Unstable, decomposes slowly on standing liberating oxygen.

Avoid long storage and large quantities.

CONDITIONS TO A VOID: Avoid excessive moisture. Material is hygroscopic.

MATERIALS TO AVOID: Reacts violently with acids with rapid evolution of chlorine.

Avoid: oxidising agents, alcohols, ketones.

Explosive reaction possible with ammonia and ammonium compounds.

Avoid contact with metals (all except titanium) and alloys.

HAZARDOUS DECOMP. PRODUCTS: Oxygen and chlorine.

#### 11. TOXICOLOGICAL INFORMATION:

**HEALTH HAZARDS**, **GENERAL**: Corrosive to eyes, skin and mucous membranes.

Vapour will cause irritation to eyes and respiratory system.

INHALATION: Exposure to mist or spray will cause irritation of the mucous membranes and respiratory

tract.

INGESTION: May cause burns to mucous membranes, throat and stomach.

Risk of perforation in the oesophagus and stomach.

SKIN: Contact with concentrated material may cause severe skin damage.

**EYES:** Corrosive to eyes. May cause severe damage even on short contact.

## 12. ECOLOGICAL INFORMATION:

ECOLOGICAL INFORMATION: Prevent contamination of soil, drains or surface water, use appropriate containment

method to avoid environmental contamination.

Harmful effect due to pH shift.

Available chlorine is toxic to aquatic life. 1 ppm of chlorine is toxic to fish.

BIO A CC UMULATION: Not expected to bio-accumulate.

DEGRADABILITY:

Degrades slowly to sodium chloride, sodium chlorate and oxygen.

#### 13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS: This material and/or its container must be disposed of as hazardous waste according to

Special Waste Regulations 1996 or according to local regulations, in compliance with

Duty of Care Regulations and Special Waste Regulations.

WASTE CLASS: WASTE CODE:0705\*\* HAZARDOUS PROPERTY: H8 H14, H2

# 14. TRANSPORT INFORMATION:

UK ROAD PACK GR.: III

ADR CLASS No.: 8

ADR CLASS: Class 8: Corrosive substances.

**ADR ITEM No.:** 61°(c)

HAZARD No. (ADR): 80 Corrosive or slightly corrosive substance.

ADR MARGINAL: 2801

ADR LABEL No.: 8

HAZCHEM CODE: 2R

PROPER SHIPPING NAME I: HYPOCHLORITE SOLUTION

UN No. SEA: UN 1791

IM DG CLASS: 8

IM DG PAGE No.: 8186

IM DG PACK GR::

UN No., AIR: UN-ID 1791

ICAO CLASS: 8
AIR PA CK GR.: III

#### 15. REGULATORY INFORMATION:

#### LABEL FOR SUPPLY:



RISK PHRASES: R-34 Causes burns.

R-31 Contact with acids liberates toxic gas.

SAFETY PHRASES: S-1/2 Keep locked up and out of the reach of children.

S-28 After contact with skin, wash immediately with plenty of water.

S-45 In case of accident or if you feel unwell, seek medical advice immediately (show

the label where possible). S-50A Do not mix with acids.

UK REGULATORY REFERENCES: Chemicals (Hazard Information & Packaging) Regulations 1993. Classification,

Packaging and Labelling Regulations 1984.

#### 16. OTHER INFORMATION:

INFORMATION SOURCES: This product has been classified in accordance with CHIP3 regulations.

**REVISION COMMENTS:** Edition 01; Revised item(s): all sections.

ISSUED BY: MK

SDS No.: 425

**DATE:** 12/07/02

**DISCLAIMER:** The foregoing data has been compiled for safety information only and does not form

part of any selling specification. Information contained in this Data Sheet is to the best of JMLs knowledge correct at the time of publication. Customers should always satisfy themselves, that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulations. For

any further information, please contact the supplier.