§ 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

• PRODUCT NAME: CAUSTIC SODA ANHYDROUS

Use of Substance / Preparation: Chemical manufacture and processing

Animal feed stuff processing

• Address / Phone N°:

 ${f F}$ abrication ${f D}$ iffusion ${f I}$ ndustrielle

Zone Industrielle en Lesnes

Rue de la Scierie TEL : 03.85.94.19.80 71240 SENNECEY LE GRAND FAX : 03.85.44.72.41

* Emergency Phone N°: IN AN EMERGENCY DIAL 999 (UK only)

For specialist advice in an emergency telephone Rimcom

(01928)572000

§ 2 - COMPOSITION/INFORMATION ON INGREDIENTS

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PRODUCT DESCRIPTION

Alternative names: Sodium hydroxide

EC INDEX N°: 011 - 002 - 00 - 6

HAZARDOUS INGREDIENT(S) CAS N° / EINECS N° % Symbol R Phrases

(w/w)

Sodium Hydroxide 001310-73-2/215-185-5 100 C R35

§ 3 - HAZARDS IDENTIFICATION

EU Classification CORROSIVE

Hazards

Corrosive. Causes severe burns to all parts of the body. Will cause deep ulceration with subsequent scarring.

§ 4 - FIRST – AID MESURES

SPEED IS ESSENTIAL

OBTAIN IMMEDIATE MEDICAL ATTENTION

Inhalation: Remove patient from exposure, keep warm and at rest. Administer oxygen

if necessary.

Skin Contact: Remove contaminated clothing. Drench with large quantities of water. Continue

to wash the affected ares for at least minutes.

(Revision 08 – UK08) (Date: 09/2002)

PRODUCT NAME: CAUTIC SODA ANHYDROUS

Eye Contact: Immediately irrigate with eyewash solution or clean water, holding the eyelids

Apart, for at least 15 minutes. Continue irrigation until medical can be obtained.

Ingestion: Do not induce vomiting. Provided the patient is conscious, wash out mouth with

water and give 200 – 300 ml (half a pint) of water to drink.

Further Medical Treatment

Symptomatic treatment and supportive therapy as indicated.

8.5 FIDE ENCHONIC MEASURES

§ 5 - FIRE – FIGHTING MEASURES

Non combustible.

Contact with some organic chemicals can produce violent or explosive reactions.

Can react with some metals generating hydrogen gas with its associated hazards. Reaction with moisture may generate sufficient heat to ignite combutible material.

Extinguishing Media: Foam, C02 or dry powder.

Fire Fighting Protective Equipment: A self contained breating apparatus and suitable

protective clothing must be worm in fire conditions.

§ 6 - ACCIDENTAL RELEASE MEASURES

Ensure suitable personal protection (including respiratory protection) during removal of spillages. Protect against dust. Contain spillages. Transfer to a container for disposal or recovery. Wash the spillages area with water. Water washing to drain of large amounts of caustic soda should only be carried out with the ptior consent of the National Rivers Authority or other appropriate regulatory body.

Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

§ 7 - HANDLING AND STORAGE

Avoid contact with skin and eyes. Avoid inhalation of high concentration of duts.

Keeps away from aluminium, zinc, lead, tin, acids and chlorinsted hydrocarbons. Care abould be takon when dissolving.

7.2 STORAGE

7.1 HANDLING

Keep container dry. Keep container tightly closed in a cool, well ventilated place.

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PRODUCT NAME: CAUTIC SODA ANHYDROUS

§ 8 - EXPOSURE CONTROLS / PERSONAL PROPERTIES

Wear close fitting goggles or full face shield.

Wear suitable protective clothing and gloves. PVC is recommended. Atmospheric levels should be controlled in compliance with the occupational exposure limit.

Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likaly. Whers a cartridge / canister respirator is user Type P (CEN 143)

Check with protective equipment manufacturers data.

HAZARDOUS LTEL 8hr LTEL 8hr STEL ppm STEL mg/m3 Notes TWA ppm **INGREDIENT(S)** TWA mg/m3

2 **OES** Sodium Hydroxide

§ 9 - PHYSICAL AND CHEMICAL PROPERTIES

These properties are the most relevant and no other properties are available

Form: Deliquescent solid, can be in the form of flakes, pellets or sticks.

Molecular Weight: Colour: white Boiling Point (Deg C): 1390 Melring Point (Deg C) 318

Solubility (Water): soluble with evolution of heat

alcohols, glycerol

Solubility (Other) : Specific Gravity : 2.13 (Water = 1 at 4 Deg C)

Bulk Dendity (g/ml): 1.175

§ 10 - STABILITY AND REACTIVITY

Stable

Hazardous Reactions: Can react violently if in contact with acids and chlorinated hydrocarbons.

> Highly reactive with aluminium, zinc, lead, tin, and alloys of these metals Producing flammable hydrogen gas. Can react violently if in contact with water

§ 11 - TOXICOLOGICAL INFORMATION

Dust is severely irritant to the respiratory tract. Effect may vary from irritation of the mucous membrane to severe lung irritation.

Skin Contact

Corrosive. May cause severe burns with permanent skin damage which are slow to heal.

Eye Contact

Extremely severe irritant/corrosive.

May cause severe damage with formation of corneal ulcers and permanent impairment of vision.

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

Lethal dose for man approximately 5 g.

Long Term Exposure

The severity of acute effects is such that significant repeated or prolonged exposure is unlekeli.

(Revision 08 – UK08) (Date: 09/2002) PRODUCT NAME: CAUTIC SODA ANHYDROUS

RODUCT VANIE : CAUTIC SODA ANTIDROUS

§ 12 - ECOLOGICAL INFORMATION

Environmental Fate and Distribution

High tonnage material used in partially contained systems.

Solid with low volatility. The substance is soluble in water. The substance does not bioaccumulate.

Persistence and Degradation

Sodium hydroxide degrades readily by reaction with the natural carbon dioxide in the air.

Toxicity

Concentrations greater than 10 ppm, especially in fresh water, or a pH value equal to or greater than 10.5 may be fatal to fish and other aquatic organisms.

Can cause damage to aquatic plants. Can cause damage to vegetation.

Effect ou Effluent Treatment

Concentrations sufficient to render effluent alkaline may cause damage to effluent treatment organisms

§ 13 - DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national treatment organisms.

§ 14 - TRANSPORT INFORMATION

UN N°.. 1823 UN Pack. Group: 11

AIR 8
ICAO/IATA
-primary: 8
UN Packing group Air: 11

SEA IMDG

-primary: 8 U.N. Packing group Sea: 11

Proper shipping Name : SODIUM HYDROXIDE, SOLID

ROAD/RAIL

ADR/RID Class: 8 ADR Sin: 1823

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§ 15 - REGULATORY INFORMATION

Name & Address of Supplier: INEOS Chlor Limited

Runcorn Site HQ South Parade, PO Box 9 Runcorn, Cheshire, WA7 4JE

Tel: (01928) 561111, Fax: (01928) 516632

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PRODUCT NAME: CAUTIC SODA ANHYDROUS

Name of Substance or Preparation: CAUSTIC SODA ANHYDROUS

Hazard(s) and Symbol(s) CORROSIVE : C

Risk Phrases: R35: Causes severe burns.

Safety Phrases: S26: In case of contact with eyes, rinse immediately with

plenty of water and seek medical advice.

S37/39: Wear suitable gloves and eye/face protection. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

EC Number: 215-185-5 EC Label

Control of Substances Hazardous to Health Regulations (COSHH) 1999 SL 1999 / 437 and COSHH essentials: Eassy steps to control chemicals – Control of Substances Hazardous to health Regulations HSG193.

§ 16 - OTHER INFORMATION

This data sheet was prepared in accordance with Directive 2001 / 58 / EC.

The following sections contain revisions or new statements: 1, 2, 3, 9, 15, 16.

Information in this publication is believed to be accurate and is given in good faith, but it is for the Customer to satisfy itself of the suitability for its own particular purpose. Accordingly, Ineos Chlor Limited gives no warranty as to the fitness of the Product for any particular purpose and any implied Warranty or condition (statutory or otherwise) is ewcluded except to the extent that such exclusion is prevented by law. Freedom under Patent, Copyright and Designs cannot be assumed. Any trade marks herein identified are trade marks of companies within the Ineos Chlor Group.

GLOSSARY

OES: Occupational Exposure Standard (UK HSE EH40)

MEL: Maximum Exposure Limit (UK HSE EH40)

COM: The company aims to control exposure in its workplace to this limit.

TLV: The company aims to control exposure in its workplace to the ACGIH limit.

TLV – C: The company aims to control exposure in its workplace to the ACGIH Ceiling limit.

MAK: The company aims to control exposure in its workplace to the German limit.

SK: Can be absorbed through skin.

Sen: Capable of causing respiratory sensitisation.

Bmgv: Biological monitoring guidance value (UK HSE EH40)

ILV : Indicative Limit Value (UK HSE EH40)
Ioelv : Indicative Occupational Exposure Limit Value.