## SAFETY DATA SHEET

## PROMATIC A2

# **UNICARE (CHEMICALS) LTD**

#### 1 Identification

#### **GHS Product Identifier**

PROMATIC A2

#### Other means of identification

PROMATIC A2

## Recommended use of the chemical and restriction on use

Industrial use

Laboratory chemicals

Restrictions on use: Not for food, drug or household use

## Supplier's details

Unicare (Chemicals) Ltd Aradhippou Industrial Area

7101 Larnaca - Cyprus P.O Box 54088 **Tel.:** +357 24531766, +357 24533765

Fax: +357 24532111

## **Emergency phone number**

1401

## 2 Hazard(s) Identification

#### Classification of the substance or mixture

Skin corrosion/irritation, Category 1B H314

Serious eye damage/eye irritation, Category 1 H318

Hazardous to the aquatic environment — Acute Hazard, Category 3 H402

Full text of H statements: see section 16

#### **GHS** label elements

Danger



## **Hazard Statements:**

Causes severe skin burns and eye damage Harmful to aquatic life

## **Precautionary Statements:**

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash exposed skin thoroughly after handling.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container to comply with local, state and federal regulations.

## Other hazards which do not result in classification

No additional information available

## 3 Composition/Information on Ingredients

#### **Mixture**

Description	- CAS Number - EINECS Number - Reach registration	Concentration (% w/w)	Note / Classification
Sodium Hydroxide	number 1310-73-2	30 - 50	Acute Tox. 4 (Dermal), Skin Corr.
Socialiti Hydroxide	215-185-5	30 - 30	1A, H314,
	N/A		Eye Dam. 1, H318, Aquatic Acute 3, H402

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

#### 4 First-aid Measures

#### **Description of necessary first-aid measures**

First-aid measures general: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact: Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Do not give chemical antidote. Immediately consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.htm). Take the

container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

## Most important symptoms/effects, acute and delayed

Symptoms/injuries: Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation: EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. Risk of lung oedema. Respiratory difficulties.

Symptoms/injuries after skin contact: Caustic burns/corrosion of the skin. Slow-healing wounds.

Symptoms/injuries after eye contact: Corrosion of the eye tissue. Permanent eye damage. Causes serious eye damage.

Symptoms/injuries after ingestion: Vomiting. Diarrhoea. Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Bleeding of the gastrointestinal tract. Shock. AFTER ABSORPTION OF HIGH QUANTITIES: Disturbances of consciousness.

Chronic symptoms: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Skin rash/inflammation. Possible inflammation of the respiratory tract.

## Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

Suitable extinguishing media

## 5 Fire-fighting Measures

Suitable extinguishing media	EXTINGUISHING MEDIA FOR
	SURROUNDING FIRES: Adapt
	extinguishing media to the

environment. Foam. Dry powder. Carbon dioxide. Water spray.

Sand.

Unsuitable extinguishing media : Solid water jet ineffective as

extinguishing medium.

Specific hazards arising from the chemical

Fire hazard : DIRECT FIRE HAZARD. Non

combustible. INDIRECT FIRE HAZARD. Reactions involving a fire hazard: see "Reactivity."

fire hazard: see "Reactivity

Hazard".

Explosion hazard : INDIRECT EXPLOSION HAZARD.

Reactions with explosion hazards:

see "Reactivity Hazard".

Reactivity : Violent exothermic reaction with

water (moisture): (increased) risk of fire. On heating: release of corrosive gases/vapours. Absorbs the atmospheric CO2. Violent

exothermic reaction with (some) acids. May be corrosive to metals. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen).

## **Special protective actions for fire-fighters**

Precautionary measures fire : Exposure to fire/heat: keep

upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Cool tanks/drums with water

spray/remove them into safety. Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water

ngriting water. Use water

moderately and if possible collect

or contain it.

Protection during firefighting : Heat/fire exposure: compressed

air/oxygen apparatus.

## 6 Accidental Release Measures

## Personal precautions, protective equipment and emergency procedures

## 6.1.1. For non-emergency personnel

Protective equipment : Gloves. Face-shield. Corrosion-

proof suit. Large spills/in enclosed

spaces: compressed air

apparatus. Large spills/in enclosed

spaces: gas-tight suit. See "Material-Handling" to select

protective clothing.

Emergency procedures : Mark the danger area. No naked

flames. Wash contaminated clothes. Large spills/in confined spaces: consider evacuation. In case of hazardous reactions: keep upwind. In case of reactivity

hazard: consider evacuation.

## 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

**Environmental precautions** 

Prevent soil and water pollution. Prevent spreading in sewers. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

## Methods and materials for containment and cleaning up

For containment :

Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Hazardous reaction: measure explosive gasair mixture. Reaction: dilute combustible gas/vapour with

water curtain. Heat exposure: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.

Take up liquid spill into absorbent material, e.g.: sand, saw dust, kieselguhr. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Small quantities of liquid spill: neutralize with acid solution. Wash away neutralized product with plentiful water. Damaged/cooled tanks must be emptied. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment

Methods for cleaning up

# 7 Handling and Storage

## Precautions for safe handling

Precautions for safe handling

Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle and open the container with care. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed. Measure the concentration in the

after handling.

air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

Hygiene measures : Wash exposed skin thoroughly

after handling.

Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable

regulations.

Storage conditions : Keep only in the original container

in a cool, well ventilated place away from : incompatible

materials. Keep container closed when not in use.

when not in use.

Incompatible products : Strong bases. Strong acids. Incompatible materials : Sources of ignition. Direct

Storage temperature : sunlight.

Heat and ignition sources : KEEP SUBSTANCE AWAY

FROM: heat sources.

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY

FROM: combustible materials.

Storage area : (strong) acids. metals.

Storage area : Store in a dry area. Keep container in a well-ventilated

place. Keep locked up. Protect against frost. Provide for a tub to collect spills. Unauthorized

persons are not admitted. Meet the legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS:

hermetical. dry. clean. correctly

labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: stainless

steel. nickel. polyethylene.

polypropylene, glass.

stoneware/porcelain. MATERIAL

TO AVOID: lead. aluminium. copper. tin. zinc. bronze.

## 8 Exposure Controls/Personal Protection

## **Control parameters**

Sodium Hydroxide, 50% w/w (1310-73-2)		
OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³
IDLH	US IDLH (mg/m³)	10 mg/m³
NIOSH	NIOSH REL (ceiling) (mg/m³)	2 mg/m³

Sodium Hydroxide (1310-73-2)		
ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³ (Sodium hydroxide;
		USA; Momentary value; TLV -
		Adopted Value)
OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³
IDLH	US IDLH (mg/m³)	10 mg/m³
NIOSH	NIOSH REL (ceiling) (mg/m³)	2 mg/m³

## Appropriate engineering controls

Appropriate engineering controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

Personal protective equipment

: Protective goggles. Gloves. Protective clothing. Face shield.



Materials for protective clothing

: GIVE EXCELLENT RESISTANCE: nitrile rubber. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: chlorinated polyethylene. styrene-butadiene rubber. nitrile rubber/PVC. GIVE POOR RESISTANCE: PVA. natural fibres.

Hand protection

: Wear protective gloves.

Eye protection

: Chemical goggles or face shield. Face shield.

Skin and body protection

: Corrosion-proof clothing.

Respiratory protection

: Wear gas mask with filter type B if conc. in air > exposure limit.

Other information

: Do not eat, drink or smoke during use.

## 9 Physical and Chemical Properties

## Physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Colour : Colourless
Odour : Odourless
Odour threshold : No data available

Odour threshold : No data availabl
pH : 14 (8 %)

 pH
 :
 14 (8

 pH solution
 :
 8 %

 Melting point
 :
 12 °C

Freezing point : No data available

Boiling point : 143 °C

Flash point : Not applicable
Relative evaporation rate : No data available

(butylacetate=1)

Molecular mass

Flammability (solid, gas) : Non flammable.

Vapour pressure : 1.2 hPa (20 °C)

Relative vapour density at 20 °C : No data available

Relative density : 1.5

Density : 1525 kg/m³

Solubility : Exothermically soluble in water.

Soluble in ethanol. Soluble in methanol. Soluble in glycerol.

40 g/mol

Water: Complete
Log Pow

Auto-ignition temperature

Decomposition temperature

Viscosity, kinematic

Viscosity, dynamic

Explosive limits

Water: Complete
No data available
Not applicable
Not available
To mPa.s (20 °C)
Not available
Not applicable.

Oxidising properties : None.

## 10 Stability and Reactivity

## Reactivity

Violent exothermic reaction with water (moisture): (increased) risk of fire. On heating: release of corrosive gases/vapours. Absorbs the atmospheric CO2. Violent exothermic reaction with (some) acids. May be corrosive to metals. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen).

#### Chemical stability

Stable under normal conditions. Absorbs the atmospheric CO2. Hygroscopic. Not established.

#### Possibility of hazardous reactions

Not established.

#### **Conditions to avoid**

Direct sunlight. Extremely high or low temperatures.

## Incompatible materials

Strong acids. metals.

## Hazardous decomposition products

Sodium oxide. Thermal decomposition generates: Corrosive vapours.

## 11 Toxicological Information

#### Toxicological (health) effects

Likely routes of exposure : Skin and eyes contact

Acute toxicity : Not classified

Sodium Hydroxide (1310-73-2)

ATE US (dermal) 1350.000 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 14 (8 %)

Serious eye : Causes serious eye damage.

damage/irritation pH: 14 (8 %)
Respiratory or skin : Not classified

sensitisation

Germ cell mutagenicity : Not classified

Carcinogenicity : Based on available data, the classification criteria are Not

classified

Reproductive toxicity : Not classified Based on available data, the classification

criteria

Specific target organ toxicity

(single exposure) Aspiration hazard : Not classified

Potential adverse human health

effects and symptoms

: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat.

Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. Risk of lung oedema.

Respiratory difficulties.

Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin. Slow-healing wounds.

Symptoms/injuries after eye contact : Corrosion of the eye tissue. Permanent eye damage. Causes seriou

Symptoms/injuries after ingestion : Vomiting. Diarrhea. Burns to the gastric/intestinal mucosa. Possible

perforation. Bleeding of the gastrointestinal tract. Shock. AFTER AB

QUANTITIES: Disturbances of consciousness.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. S

Possible inflammation of the respiratory tract.

## Information on the likely routes of exposure

No other relevant information is available

## Symptoms related to the physical, chemical and toxicological characteristics

No other relevant information is available

## Delayed and immediate effects and also chronic effects from short and long term exposure

No other relevant information is available

#### Numerical measures of toxicity (such as acute toxicity estimates)

No other relevant information is available

## Interactive effects

No other relevant information is available

## Where specific chemical data are not available

No other relevant information is available

**Mixtures** 

No other relevant information is available

## Mixture versus ingredient information

No other relevant information is available

#### Other information

No other relevant information is available

## **Ecological Information**

**Toxicity** 

Ecology - general Not classified as dangerous for the

> environment according to the criteria of Regulation (EC) No

1272/2008.

Ecology - air Not classified as dangerous for the

> ozone layer (Regulation (EC) No 1005/2009). None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006).

Ground water pollutant. Maximum Ecology - water

concentration in drinking water: 200 mg/l (sodium) (Directive 98/83/EC). Harmful to fishes. Harmful to invertebrates

(Daphnia), pH shift.

Sodium Hydroxide (1310-73-2)	
LC50 fish 1	45.4 mg/l (LC50; Other; 96 h; Salmo gairdneri;
	Static system; Fresh water; Experimental value)

## Persistence and degradability

Sodium Hydroxide, 50% w/w (1310-73-2)

Persistence and degradability Biodegradability: not applicable. No (test) data on mobility

components available. Sodium Hydroxide (1310-73-2)

Persistence and degradability Biodegradability: not applicable. No (test)data on

mobility of the substance available.

Biochemical oxygen demand (BOD) Not applicable Not applicable Chemical oxygen demand (COD) Not applicable

ThOD

## Bioaccumulative potential

Sodium Hydroxide, 50% w/w (1310-73-2)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).
Sodium Hydroxide (1310-73-2)	
Bioaccumulative potential	No bioaccumulation data available.

## **Mobility** in soil

No additional information available

Other adverse

effects

Effect on the global warming No known effects from this product. **GWPmix** comment No known effects from this product. Other information Avoid release to the environment

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## 13 Disposal Considerations

## **Disposal methods**

Waste disposal recommendations

Additional information :

Ecology - waste materials :

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove for physicochemical/biological treatment. Do not discharge into drains or the environment. LWCA (the Netherlands): KGA category 05. Hazardous waste

according to Directive 2008/98/EC.

Avoid release to the environment.

# 14 Transport Information

#### **UN Number**

UN1824

#### **UN Proper Shipping Name**

Sodium Hydroxide Solution

#### Transport hazard class(es)

8 - Class 8 - Corrosive material 49 CFR 173.136

## Packing group, if applicable

II - Medium Danger

## **Environmental hazards**

8 - Corrosive

## Special precautions for user

8 - Corrosive



### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

DOT Packaging Bulk (49 CFR 173.xxx):

2

2

# 15 Regulatory Information

## Safety, health and environmental regulations specific for the product in question

No additional information available

#### 16 Other Information

### Other information

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OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Material Safety Data Sheet available to your employees.

Full text of H-statements: see section 16:

H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H402	Harmful to aquatic life