

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Alkasan

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : The cleaning and disinfection of food production equipment

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

GEA Farm Technologies (UK) Ltd  
Wylle Works, Watery Lane, Bishopstrow, Warminster, Wiltshire BA12 9HT England

T: +44 (0) 1985 216 444

F: +44 (0) 1985 216 692

E-mail: info.agroserve@geagroup.com

#### 1.4. Emergency telephone number

Emergency number : +44 (0) 870 190 6777 (24 hours, 7 days)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Met. Corr. 1 H290  
Skin Corr. 1B H314  
Aquatic Acute 1 H400  
Aquatic Chronic 2 H411

Full text of H-phrases: see section 16

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

C; R34  
N; R50  
R31

Full text of R-phrases: see section 16

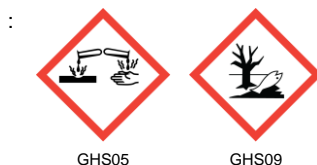
##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazardous ingredients : Sodium hydroxide, Sodium hypochlorite

Hazard statements (CLP) : H290 - May be corrosive to metals  
H314 - Causes severe skin burns and eye damage  
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing  
 P310 - Immediately call a doctor  
 P501 - Dispose of contents/container to an authorised waste collection point

EUH phrases : EUH031 - Contact with acids liberates toxic gas

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII  
 This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII  
 Other hazards not contributing to the classification : Inhalation of vapours may cause respiratory irritation.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Sodium hypochlorite	(CAS No.) 7681-52-9 (EC No.) 231-668-3 (EC index No.) 017-011-00-1	5 - 10	C; R34 R31 N; R50
Sodium hydroxide	(CAS No.) 1310-73-2 (EC No.) 215-185-5 (EC index No.) 011-002-00-6	1 - 5	C; R35
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hypochlorite	(CAS No.) 7681-52-9 (EC No.) 231-668-3 (EC index No.) 017-011-00-1	5 - 10	Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodium hydroxide	(CAS No.) 1310-73-2 (EC No.) 215-185-5 (EC index No.) 011-002-00-6	1 - 5	Met. Corr. 1, H290 Skin Corr. 1A, H314

Full text of R- and H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : 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 victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Obtain immediate medical attention.

First-aid measures after skin contact : Immediately remove contaminated clothing or footwear. Rinse skin with plenty of water or shower. Obtain immediate medical attention.

First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain immediate medical attention.

First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Give 100 - 200 ml of water to drink. Do not give an unconscious person anything to drink. Obtain immediate medical attention.

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

Symptoms/injuries after inhalation : Inhalation of vapours may cause respiratory irritation.

Symptoms/injuries after skin contact : Causes burns.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : Corrosive. Severe irritation or burns to the mouth, throat, oesophagus, and stomach.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
- Hazardous decomposition products in case of fire : Fire may produce irritating, corrosive and/or toxic gases. Chlorine.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.
- Protection during firefighting : Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel. Ensure adequate ventilation.

#### 6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing and eye or face protection.
- Emergency procedures : Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapours.

### 6.2. Environmental precautions

Collect spillage. Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

- Methods for cleaning up : Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wash spill area with soapy water. Washings must be prevented from entering surface water drains.

### 6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded. Use only outdoors or in a well-ventilated area. Avoid contact with skin, eyes and clothing.
- Hygiene measures : Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep only in the original container. Store away from. Incompatible materials. Heat sources. Direct sunlight. Protect against frost.
- Incompatible materials : Acids. Alcohols. Ammonia. Oxidizing agents. Halogenated hydrocarbons. Aldehydes. Ketones. Metals.

### 7.3. Specific end use(s)

The cleaning and disinfection of food production equipment.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Sodium hydroxide (1310-73-2)		
United Kingdom	Local name	Sodium hydroxide
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>

### 8.2. Exposure controls

- Appropriate engineering controls : Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear rubber gloves. Standard EN 374 - Protective gloves against chemicals. Gloves should be removed and replaced if there are any signs of degradation or breakthrough.
- Eye protection : Chemical goggles or face shield. Standard EN 166 - Personal eye-protection.
- Skin and body protection : PVC apron covering the tops of the boots. Rubber boots.

Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Standard EN 149 – Respiratory protective devices.
Thermal hazard protection	: Not required for normal conditions of use.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Clear. Green. Yellow.
Odour	: Chlorine.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -25 °C
Freezing point	: No data available
Boiling point	: 107 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.17 - 1.25 (Water = 1)
Solubility	: Miscible with water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts violently with acids. with: release of toxic and corrosive gases/vapours. (chlorine). Decomposes exothermically in contact with sodium or hydrogen peroxides liberating oxygen. May react with other oxidising agents liberating oxygen or chlorine. Reacts violently with oxidising agents (chlorates, nitrates, permanganates, etc.). May react explosively with ammonia and ammonium compounds.

### 10.2. Chemical stability

Slowly decomposes on contact with air.

### 10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas. (chlorine).

### 10.4. Conditions to avoid

Extremely high or low temperatures. Direct sunlight. Protect against frost.

### 10.5. Incompatible materials

Acids. Alcohols. Ammonia. Oxidizing agents. Halogenated hydrocarbons. Aldehydes. Ketones. Metals.

### 10.6. Hazardous decomposition products

Chlorine. Oxygen.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
	Based on available data, the classification criteria are not met

Sodium hydroxide (1310-73-2)	
LD50 dermal rabbit	1350 mg/kg

Sodium hypochlorite (7681-52-9)	
LD50 oral rat	8800 ml/kg (12.5% Solution)
LD50 dermal rabbit	> 20000 mg/kg (12.5% Solution)

Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Causes severe skin burns and eye damage. Inhalation of vapours may cause respiratory irritation. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water	: Very toxic to aquatic life with long lasting effects.
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Sodium hydroxide (1310-73-2)	
EC50 Daphnia	40.4 mg/l 48 h (Daphnia magna)

Sodium hypochlorite (7681-52-9)	
LC50 fish	0.032 mg/l 96 h - Oncorhynchus kisutch
EC50 Daphnia	0.035 mg/l 48 h - Daphnia magna
NOEC chronic fish	0.04 mg/l 28 d - Menidia peninsulae

### 12.2. Persistence and degradability

Alkasan	
Persistence and degradability	Not persistent.

### 12.3. Bioaccumulative potential

Alkasan	
Bioaccumulative potential	No bioaccumulation.

### 12.4. Mobility in soil

Alkasan	
Ecology - soil	Miscible with water.

### 12.5. Results of PBT and vPvB assessment

Alkasan	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

### 12.6. Other adverse effects

: Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods	: Dispose of this material and its container at hazardous or special waste collection point.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Additional information	: Handle empty containers with care.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 3266  
UN-No.(IATA) : 3266  
UN-No. (IMDG) : 3266

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR/RID) : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.  
Proper Shipping Name (IATA) : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.  
Proper Shipping Name (IMDG) : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.  
:  
Transport document description (ADR) : UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS ; Sodium hydroxide(1310-73-2) ; Sodium hypochlorite(7681-52-9)), 8, II

#### 14.3. Transport hazard class(es)

Class (ADR/RID) : 8  
Class (IATA) : 8  
Class (IMDG) : 8  
Hazard labels (ADR/RID) : 8



Hazard labels (IATA) : 8



Danger labels (IMDG) : 8



#### 14.4. Packing group

Packing group (ADR/RID) : II  
Packing group (IATA) : II  
Packing group (IMDG) : II

#### 14.5. Environmental hazards

Dangerous for the environment :  
Marine pollutant



Other information : No supplementary information available.

#### 14.6. Special precautions for user

Special transport precautions : No special precautions required.

##### 14.6.1. Overland transport

No additional information available

##### 14.6.2. Transport by sea

No additional information available

##### 14.6.3. Air transport

No additional information available

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

Not applicable

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

Authorisations and/or restrictions on use (Annex XVII):

3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Alkasan
3.c. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Alkasan

Contains no substance on the REACH candidate list

##### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of R-, H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
R31	Contact with acids liberates toxic gas
R34	Causes burns
R35	Causes severe burns
R50	Very toxic to aquatic organisms
C	Corrosive
N	Dangerous for the environment

NCEC SDS EU (REACH ANNEX II)

*The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391 and 98/24.*