

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

1.1. Product identifier

Product form : Mixture
Product name : Alkadex Forte

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. 1A H314

Full text of H-phrases: see section 16

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

C; R35

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) :



GHS05

Signal word (CLP) : Danger

Hazardous ingredients : Sodium hydroxide

Hazard statements (CLP) : H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage

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

2.3. Other hazards

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

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according to Regulation (EC) No. 453/2010



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 hydroxide	(CAS No.) 1310-73-2 (EC No.) 215-185-5 (EC index No.) 011-002-00-6	20 - 30	C; R35
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hydroxide	(CAS No.) 1310-73-2 (EC No.) 215-185-5 (EC index No.) 011-002-00-6	20 - 30	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	: May cause irritation to the respiratory tract.
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. Respiratory symptoms, including pulmonary oedema, may be delayed.

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	: None known.

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.
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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

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 in corrosive resistant container with a resistant inner liner. Store away from incompatible materials. Direct sunlight. Protect against frost.
- Incompatible materials : Acids. 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 ³)	2 mg/m ³

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 : Nitrile 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. Yellow. brown.
- Odour : Slight. Sweet.
- Odour threshold : No data available
- pH : 12.8 - 14
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : No data available
- Freezing point : ≈ 0 °C

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Boiling point	: > 100 °C
Flash point	: Not flammable
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	: 1.3 - 1.36 (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. Reacts with aluminium and zinc liberating extremely flammable hydrogen gas. Attacks copper, aluminium, zinc, magnesium, tin, and their alloys.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with aluminium and zinc liberating extremely flammable hydrogen gas.

10.4. Conditions to avoid

Direct sunlight. Protect against frost.

10.5. Incompatible materials

Acids. Metals.

10.6. Hazardous decomposition products

Hydrogen.

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
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 12.8 - 14
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: 12.8 - 14
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

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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	: Not classified, however the product is likely to be hazardous to aquatic life due to extreme pH.
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Sodium hydroxide (1310-73-2)

EC50 Daphnia	40.4 mg/l 48 h (Daphnia magna)
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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Bioaccumulative potential	No bioaccumulation.
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12.4. Mobility in soil

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Ecology - soil	Miscible with water.
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12.5. Results of PBT and vPvB assessment

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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)	: 1824
UN-No.(IATA)	: 1824
UN-No. (IMDG)	: 1824

14.2. UN proper shipping name

Proper Shipping Name (ADR/RID)	: SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (IATA)	: SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (IMDG)	: SODIUM HYDROXIDE SOLUTION
	:
Transport document description (ADR)	: UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

14.3. Transport hazard class(es)

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



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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

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

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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

Indication of changes:

SECTION 2. SECTION 3. SECTION 11. SECTION 12. SECTION 14.

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:

Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
R35	Causes severe burns

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C	Corrosive
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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.