

**1 IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY**

**1.1 Product identifier**

Product Name: **Alu Tec**

**1.2 Relevant identified uses of the substance or mixture and uses advised against  
Identified uses:**

**Dishwash Liquid for Automatic Dishwashing Machines - For professional use only**

**Uses advised against:**

Uses other than those identified are not recommended

**1.3 Details of the supplier of the safety data sheet**

Company Name: Gannon Chemicals Ltd  
Ballindine, Claremorris  
Co. Mayo, Ireland  
Email address of SDS author: paul@gannonchemicals.ie  
Emergency Phone Number: 094 9364011 DAY (Mon – Fri 9am to 5.30pm)

**2 HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

*Classification according to Regulation (EC) No 1272/2008*

Eye Damage H318

Skin Corr. (Category 1A), H314

Met. Corr. (Category 1), H290

*Classification according to EU Directives 67/548/EEC or 1999/45/EC*

C – Corrosive R35

For the full text of the R-phrases mentioned in this Section, see below.

**2.2 Label elements**

*Labelling according Regulation (EC) No 1272/2008*

Pictogram



Signal word **Danger**

**Hazard statement(s)**

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage.

**Precautionary statement(s)**

P280 Wear protective gloves/protective clothing/eye protection/face protection

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305+351+338 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 POISON CENTER or doctor/physician.

**Supplemental Hazard:** None

*Labelling according Regulation 67/548/EEC or 1999/45/EC*

C - Corrosive

Contains Sodium Hydroxide

**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.

S28a - After contact with skin, wash immediately with plenty of water.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

#### 2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

### 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

| Product/Ingredient Name  | CAS No.   | Weight % | Classification 67/548/EEC  | Regulation (EC) No 1272/2008 [CLP]  |
|--|-----------|----------|----------------------------|---|
| Sodium Metasilicate  | 6834-92-0 | 1-5      | C: R34 - R37               | Skin Corr. 1B (H314)<br>STOT SE 3 (H335)<br>Met. Corr. 1 (H290)   |
| Sodium Hydroxide   | 1310-73-2 | 10 -25   | C, R35                     | Met. Corr. 1; H290<br>Skin Corr. 1A;<br>H314: C ≥ 5 %<br>Skin Corr. 1B; H314:<br>2 % ≤ C < 5 %<br>Skin Irrit. 2; H315:<br>0,5 % ≤ C < 2 %<br>Eye Irrit. 2; H319:<br>0,5 % ≤ C < 2 % |
| Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,Nbis( carboxymethyl)-, trisodium salt | Mixture   | 1 - 5    | No hazard warning required | Met. Corr. 1. H 290   |

### 4 FIRST AID MEASURES

#### 4.1 Description of first aid measures

- |       |                                    |   |
|-------|------------------------------------|---|
| 4.1.1 | General Information                | Immediately remove contaminated clothing.   |
| 4.1.2 | Following Inhalation               | Keep patient calm, remove to fresh air, and seek medical attention.   |
| 4.1.3 | following skin contact             | Wash thoroughly with soap and water.  |
| 4.1.4 | Following Eye Contact              | Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. |
| 4.1.5 | Following Ingestion                | Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.                               |
| 4.1.6 | Self-protection of the first aider |   |

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

Symptoms: Eye irritation, skin irritation

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

### 5 FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media:

Suitable extinguishing media:

Suitable extinguishing media: water spray, dry powder, foam

Unsuitable extinguishing media:

## 5.2 Special hazards arising from the substance or mixture

Harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

## 5.3 Advice for fire-fighters

Special protective equipment: Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves.

## 5.4 Additional information

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

# 6 ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, chapter 8.

## 6.2 Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

## 6.3 Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

## 6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

# 7 HANDLING AND STORAGE

## 7.1 Precautions for safe handling

### Measures to prevent fire and explosions:

No special precautions required.

### Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

### General precautions:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation. Store at normal room temperature and keep container tightly closed. Keep out of reach of children. No special precautions necessary for protection against fire and explosion. Store away from strong acids.

## 7.2 Conditions for safe storage, including any incompatibilities

## 7.3 Specific end uses

No specific advice for end use available.

# 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

## 8.1. Control parameters

Components with occupational exposure limits

No occupational exposure limits known.

## 8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

**Hand protection:**

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) - 0.4 mm coating thickness.

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

**Eye protection:**

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

**Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

**General safety and hygiene measures**

Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

**Respiratory protection:**

No special requirements under normal use conditions.

**Recommended safety measures for handling the diluted product**

**Recommended maximum concentration (%):** 0.5

**Appropriate engineering controls:**

The product is intended to be used in closed systems. Use only in well ventilated areas.

**Appropriate organisational controls:**

No special requirements under normal use conditions.

**Personal protective equipment**

**Eye / face protection:**

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

**Hand protection:**

If the product is applied in a closed system, as recommended, no respiratory protection equipment will be required.

**Body protection:**

No special requirements under normal use conditions.

**Respiratory protection:**

If the product is applied in a closed system, as recommended, no respiratory protection equipment will be required.

**Environmental exposure controls:**

No special requirements under normal use conditions.

9

**PHYSICAL AND CHEMICAL PROPERTIES**

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

|     |                                   |                |
|-----|-----------------------------------|----------------|
| (a) | Form                              | Liquid         |
| (b) | Colour                            | Colourless     |
| (c) | Odour                             | Faint          |
| (d) | pH value(1% solution)             | >13            |
| (e) | Melting point/range (°C):         | Not Determined |
| (f) | Initial boiling point/range (°C): | Not Determined |
| (g) | Decomposition temperature (°C)    | Not Determined |
| (h) | Flash point (°C):                 | Not Determined |
| (i) | Ignition temperature (°C)         | Not Determined |
| (j) | Vapour pressure (hPa) at ...°C    | Not Determined |

|     |                                      |                |
|-----|--------------------------------------|----------------|
| (k) | Vapour density (air=1)               | Not Determined |
| (l) | Density (g/cm <sup>3</sup> ) at 20°C | 1.09           |
| (m) | Bulk density (kg/m <sup>3</sup> )    | Not Determined |
| (n) | Water solubility (20°C in g/l)       | Completely     |
| (o) | Solubility(ies):                     | Not Determined |
| (p) | Partition coefficient                | Not Determined |
| (q) | Viscosity, dynamic (mPa s):          | Not Determined |

## 9.2 Other information

Incompatible with strong acids

## 10 STABILITY AND REACTIVITY

### 10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### 10.2 Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### 10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

### 10.4 Conditions to avoid

See MSDS section 7 - Handling and storage.

### 10.5 Incompatible materials

Substances to avoid: Halogens, Acids, Reactive Chemicals

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.

## 11 TOXICOLOGICAL INFORMATION

### 11.2.2 Mixtures

No test data is available on the mixture.

Substance data, where relevant and available, are listed below

| Substance  | Acute toxicity  | Skin corrosion/irritation                            | Serious eye damage/eye irritation                     | Respiratory or skin sensitisation                                   |
|--|---|--|---|---|
| Sodium Metasilicate  | LD50 Oral - rat - 1,152 - 1,349 mg/kg                           | Skin - rabbit<br>Result: Corrosive - 4h              | No Data Available                                     | in vivo assay - mouse<br>Result: Does not cause skin sensitisation. |
| Sodium Hydroxide   | Toxic Dose 1 – LD 50 - 325 mg/kg (oral rat)                     | Skin - rabbit<br>Result: Causes severe burns. - 24 h | Eyes - rabbit<br>Result: Corrosive - 24 h             | Will not occur  |
| Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,Nbis( carboxymethyl)-, trisodium salt | Experimental/calculated data:<br>LD50 rat (oral): > 4,000 mg/kg | Skin corrosion/irritation<br>rabbit: non-irritant    | Serious eye damage/irritation<br>rabbit: Non Irritant | Guinea pig maximization test: No sensitizing effect.                |

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**12 ECOLOGICAL INFORMATION**

| Substance  | Toxicity   | Persistence and Degradability   | Bioaccumulative potential  | Mobility in soil   |
|--|--|---|--|--|
| Sodium Metasilicate  | Toxicity to fish semi-static test<br>LC50 - Danio rerio (zebra fish) - 210 mg/l - 96 h | No Data Available   | No Data Available  | No Data Available  |
| Sodium Hydroxide   | LC50 - Oncorhynchus mykiss (rainbow trout) - 45.4 mg/l - 96 h                          | The methods for determining the biological degradability are not applicable to inorganic substances | The product is not bioaccumulating.  | No Data Available  |
| Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,Nbis( carboxymethyl)-, trisodium salt | Toxicity to fish:<br>LC50 (96 h) > 200 mg/l, Brachydanio rerio                         | Readily biodegradable.<br>80 - 90 % BOD of the ThOD (28 d)  | Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected. | The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is not expected. |

**Results of PBT and vPvB assessment**

The product does not fulfil the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

**13 DISPOSAL**

This product does not contain any prescribed substance under the Environmental Protection Act (Prescribed Processes and Substances) Regulations 1991 and is not classified as special waste under the Control of Substances (Special Waste) Regulations 1996, but is classified as controlled waste under the Environmental Protection Act 1990. For small quantities, dilute with water to at least 2.5% w/v (25 g/litre) and pour down a wastewater drain (foul sewer). Rinse out containers at least twice and recycle if facilities exist or dispose of as commercial waste. For larger quantities dispose of safely as commercial waste. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

**Empty packaging**

Dispose of observing national or local regulations.

**Suitable cleaning agents:**

Water, if necessary with cleaning agent.

**14 TRANSPORT INFORMATION**



ADR, RID, ADN, IMO/IMDG, ICAO/IATA

14.1 UN number: 1824

14.2 UN proper shipping name:

Sodium hydroxide solution

14.3 Transport hazard class(es):

Class: 8

Label(s): 8

**14.4 Packing group:** II

**14.5 Environmental hazards:**  
**Environmentally hazardous:** No  
**Marine pollutant:** No

**14.6 Special precautions for user:** None known.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** The product is not transported in bulk tankers.

**Other relevant information:**

**ADR**

**Classification code:** C5  
**Tunnel restriction code:** E  
**Hazard identification number:** 80

**IMO/IMDG**

**EmS: F-A, S-B**

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

## 15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

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

No data available

### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## 16 OTHER INFORMATION

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

### Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

### Abbreviations and acronyms:

- STOT - Specific Target Organ Toxicity
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

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