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

1.1 Product identifier
Product name: SODA LIME
Substance name: SODA LIME
REACH Reg. No.: No registration number is given.
Index No.: N.A.
CAS No.: See section 3
EC No.: See section 3

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Adsorption of carbon dioxide
Uses advised against: No uses advised against.

1.3 Details of the supplier of the SDS
Only Representative: N.A.
Address: N.A.
Manufacturer: UNION MEDICARE CO., LTD.
Address: RM2303 JINRUI GE, GOLDEN EAGLE, INT’L 100, SHIGU ROAD, NANJING, JIANGSU, CHINA
Tel/Fax: +86-025-51873571
Importer: N.A.
Address: N.A.
Tel/Fax: N.A.

1.4 Emergency telephone number
In China: +86-025-51873571; or call local POISON CONTROL CENTER

Section 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008[CLP] / G.H.S.
Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 3), H402
For the full text of the H-Statements mentioned in this Section, see Section 16.

N.A.

Additional information
Full text of R-phrases, S-phrases and H-statements: see section 16.
2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 [CLP] / G.H.S.

Substance name: SODA LIME

Hazard pictograms: 

Signal word: Danger

Hazard statements:
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H402 Harmful to aquatic life.

Precautionary statements:

Prevention:
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position, comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 + P310 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.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.

Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard information (EUH):
No information available.

Special rules for supplemental label elements for certain mixtures:
Does not fulfill the criteria for classification.

2.3 Other hazards:
Prolonged inhalation may cause irritation for mucous membranes and respiratory system.
Prolonged contact with the skin may cause localized irritation. The ingestion may cause gastrointestinal irritation.
During the molding process may be issued gas containing low amounts of formaldehyde (ppb or ppm), which may cause irritation of the eyes, mucous membranes of the nose and throat.

Section 3: Composition/information on ingredients

3.1 Substance information
Substance name: Calcium hydroxide, water
REACH registration No.: No registration number is given.
Index No.: N.A.
CAS No.: 1305-62-0
EC No.: 215-137-3
Synonyms: N.A.
Purity: 90%, 10%
Classification: N.A.

Section 4: First aid measures

4.1 Description of first aid measures
General notes: No special measure required.
Inhalation:
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin contact:
Wash off with soap and plenty of water. Consult a physician.
Eye contact:
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Ingestion:
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Notes for the doctor:
Treat symptomatically and supportively.

4.2 Most important symptoms and effects, both acute and delayed:
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of the immediate medical attention and special treatment needed:
No data available.
Section 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media:
Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Calcium oxide.

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.
Air and moisture sensitive. Keep in a dry place.

Storage class (TRGS 510): Non Combustible Solids

### 7.3 Specific end use(s)

A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

### Section 8 : Exposure controls/personal protection

#### 8.1 Control parameters

**Occupational exposure limit values:**

Calcium dihydroxide: 5 mg/m³ USA. ACGIH Threshold Limit Values (TLV)

**DNEL(Derived No Effect Level) for workers:**

No DNEL values for workers available.

**DNEL(Derived No Effect Level) for the general population:**

No DNEL values for the general population available.

**PNEC(Predicted No Effect Concentration) values:**

No PNEC values available.

#### 8.2 Exposure controls

**Appropriate engineering controls:**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye and face protection:**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

- Full contact
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min
  - Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

- Splash contact
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min
  - Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)
Body Protection:
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:
Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls:
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Industrial hygiene:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid, Power</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Density</td>
<td>N.A. (Air = 1)</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Oxidizing properties: No information available.
Viscosity: Not available.

9.2 Other information
No information available.

Section 10: Stability and reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
No data available.

10.5 Incompatible materials
Strong acids

10.6 Hazardous decomposition products
Other decomposition products - No data available
In the event of fire: see section 5

Section 11: Toxicological information

11.1 Toxicokinetics, metabolism and distribution
Metabolism: Not Available.
Absorption, Distribution & Excretion: No data available.

11.2 Information on toxicological effects
Acute toxicity:
LD50 Oral - Rat - 7,340 mg/kg

Skin corrosion/irritation:
Skin - Rabbit
Result: Irritating to skin.
(OECD Test Guideline 404)

Serious eye damage/irritation:
Eyes - Rabbit
Result: Severe eye irritation
Respiratory or skin sensitization: Not Available.

Potential health effects:

**Inhalation**
Causes severe irritation of the respiratory tract (nose, throat, lungs), and mucous membranes with coughing, wheezing and/or shortness of breath. Material is destructive to tissue of the mucous membranes and upper respiratory tract.

**Ingestion**
Causes gastrointestinal tract irritation with vomiting, diarrhea, severe pain. Vomits may contain blood and desquamated mucosal lining. May cause delayed gastrointestinal burns and perforation (gastric or esophageal) with severe abdominal pain and rapid fall in blood pressure.

**Skin**
Causes skin irritation.

**Eyes**
Causes severe irritation of the eyes. Can cause "Lime Burns" of the eye. Clumps may lodge deep in the recesses of the eye, releasing calcium hydroxide over a long period of time. Severe burns of the cornea with possible damage to corneal nerves can occur.

CMR effects (Carcinogenicity, Mutagenicity and Toxicity for Reproduction):
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.

STOT-single exposure and repeated exposure:
Specific target organ toxicity - single exposure: Not Available.
Specific target organ toxicity - repeated exposure: Not Available.

Additional information:
RTECS: EW2800000

Section 12: Ecological information

**12.1 Toxicity**

Acute toxicity to fish: LC50 - Clarias gariepinus - 33.884 mg/l - 96 h

Acute toxicity to daphnia: EC50 - Daphnia magna (Water flea) - 49.1 mg/l - 48 h

Acute toxicity to algae: EC50 - Pseudokirchneriella subcapitata (green algae) - 184.6 mg/l - 72 h

**12.2 Persistence and degradability**
The methods for determining biodegradability are not applicable to inorganic substances.

**12.3 Bioaccumulative potential**
Does not bioaccumulate.

**12.4 Mobility in soil**
No data available
12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

Section 13: Disposal considerations

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste
disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

Section 14: Transport information

14.1 Land transport (ADR/RID/GGVSE)
Official transport designation: N/A
UN-No.: N/A
Class: N/A
Packing group: N/A
Classification Code: N/A
Hazard label: N/A

14.2 Sea transport (IMDG-Code/GGVSee)
Proper Shipping Name: N/A
UN-No.: N/A
Class: N/A
Packing group: N/A
EmS No.: N/A

14.3 Air transport (ICAO-TI/IATA-DGR)
Proper Shipping Name: N/A
UN-No.: N/A
Class: N/A
Packing group: N/A

14.4 Additional information
Section 15: Regulatory information

EU regulation:
Authorisations: No information available.
Restrictions on use: No information available.
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

DSD: Not Available.
Other chemical regulation: Not available.
USA - TSCA: Not Listed.
Canada - DSL: Not Controlled.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Not available.

15.2 Chemical Safety Assessment
Not available.

Section 16: Other information

16.1 Revision Information
Date of the previous revision: Not applicable.
Date of this revision: Aug.30th, 2018.
Revision summary: The first new SDS

16.2 Abbreviations and acronyms
CLP: EU regulation (EC) No 1272/2008 on classification, labeling and packaging of chemical substances and mixtures.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
EINECS: European Inventory of Existing Commercial Chemical Substances.
RID: European Rail Transport.
IATA: International Air Transport Association.
OSHA: The United States Occupational Safety and Health Administration.
TSCA: Toxic Substances Control Act, The American chemical inventory.
IECSC: Inventory of existing chemical substances in China.
DSL: Domestic Substances List, The Canadian chemical inventory.
AICS: The Australian Inventory of Chemical Substances.
ECL: Existing Chemicals List, the Korean chemical inventory.
ENCS: Japanese Existing and New Chemical Substances.

16.3 **Key literature references and sources for data**

ESIS Dataset: European chemical Substances Information System.
GESTIS-database: Information system on hazardous substances of the German Social Accident Insurance.
HSDB: Hazardous Substances Data Bank.
The Chemical Database.

16.4 **Relevant R-phrases and H-statements**

R-phrases (code and full text): None.
S-phrases (code and full text): None.
H-statements (code and full text):
Aquatic Acute Acute aquatic toxicity
Eye Dam. Serious eye damage
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H402 Harmful to aquatic life.
Skin Irrit. Skin irritation
STOT SE Specific target organ toxicity - single exposure

16.5 **Training advice**

Provide adequate information, instruction and training for operators.

16.6 **Declare to reader**

The information in this Safety Data Sheet (SDS) was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. According to REACH Article 31(5), the SDS shall be supplied in an official language of the Member State(s) where the substance or mixture is placed on the market, unless the recipient Member State(s) concerned provide otherwise. It should also be noted that this SDS is applicable to the countries with English as an official language.

********************************************** THE END OF SDS **********************************************

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