

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

1.1. Product identifier

Product form : Mixture
Product name : SOLA LEMON
Product code : 312
Type of product : Detergent
Product group : Mixture

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Cleaner

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Clover Chemicals Ltd
Clover House Macclesfield Road
SK23 7DQ Whaley Bridge – Derbyshire
United Kingdom
T 01663 733114 - F 01663 733115
info@cloverchemicals.com - www.cloverchemicals.com

Supplier

Christeyns NV
Afrikalaan 182
9000 GENT
Belgium
T +32 (0)9/ 223 38 71 - F +32 (0)9/ 233 03 44
info@christeyns.be - www.christeyns.com

1.4. Emergency telephone number

| Country | Official advisory body | Address | Emergency number | Comment |
|----------------|--|--|--|--------------------------------------|
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH | 0344 892 0111 | Only for healthcare professionals |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 1, Sub-Category 1B H314
Serious eye damage/eye irritation, Category 1 H318
Full text of H- and EUH-statements: 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

CLP Signal word : Danger
Contains : Sodium hydroxide; Isotridecanol, ethoxylated
Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.
Precautionary statements (CLP) : P102 - Keep out of reach of children.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves, eye protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water or shower.

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P332+P313 - If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.

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

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

| Component | |
|---|---|
| Isotridecanol, ethoxylated (69011-36-5) | PBT: not relevant – no registration required vPvB: not relevant – no registration required |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|-------|---|
| Isotridecanol, ethoxylated | CAS-no: 69011-36-5 Einecs nr: 931-138-8 REACH-no: Exempted | 3 – 5 | Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 |
| Sodium hydroxide substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, PL, PT, SE, SK, IS, NO, CH) | CAS-no: 1310-73-2 Einecs nr: 215-185-5 EG annex nr: 011-002-00-6 REACH-no: 01-2119457892-27 | 1 – 3 | Met. Corr. 1, H290 Skin Corr. 1A, H314 |
| Sodium gluconate substance with national workplace exposure limit(s) (GB) | CAS-no: 527-07-1 Einecs nr: 208-407-7 REACH-no: Exempted | 1 – 3 | Not classified |

| Specific concentration limits: | | |
|--------------------------------|--|--|
| Name | Product identifier | Specific concentration limits |
| Sodium hydroxide | CAS-no: 1310-73-2 Einecs nr: 215-185-5 EG annex nr: 011-002-00-6 REACH-no: 01-2119457892-27 | (0.5 \leq C < 2) Eye Irrit. 2, H319 (0.5 \leq C < 2) Skin Irrit. 2, H315 (2 \leq C < 5) Skin Corr. 1B, H314 (5 \leq C \leq 100) Skin Corr. 1A, H314 |

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation

: Allow affected person to breathe fresh air. Allow the victim to rest.

Skin contact

: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.

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/doctor.

Ingestion

: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Acute effects inhalation

: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.

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Acute effects skin : Causes severe burns. Red skin.
Acute effects eyes : Causes serious eye damage. redness, itching, tears.
Acute effects oral route : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible products : Strong acids.

Packaging materials : polyethylene. stainless steel.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| Sodium gluconate (527-07-1) | |
|---|---------------------------------------|
| United Kingdom - Occupational Exposure Limits | |
| WEL TWA (OEL TWA) [1] | 4 mg/m ³ |
| Sodium hydroxide (1310-73-2) | |
| Ireland - Occupational Exposure Limits | |
| Local name | Sodium hydroxide |
| OEL STEL | 2 mg/m ³ |
| Regulatory reference | Chemical Agents Code of Practice 2021 |

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| Sodium hydroxide (1310-73-2) | |
|---|---------------------------------------|
| United Kingdom - Occupational Exposure Limits | |
| Local name | Sodium hydroxide |
| WEL STEL (OEL STEL) | 2 mg/m ³ |
| Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

8.2.2.2. Skin protection

Protective equipment:

Wear suitable protective clothing

Hand protection:

Wear protective gloves.

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------------------|-----------------|
| Physical state | : Liquid |
| Colour | : Green. |
| Physical state/form | : Liquid. |
| Odour | : Lemon. |
| Odour threshold | : Not available |
| Melting point/range | : 0 °C |
| Freezing point | : Not available |
| Boiling point/Boiling range | : 100 °C |

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| | |
|---|---------------------|
| Flammability | : Non flammable. |
| Explosive limits | : Not available |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : Not available |
| Autoignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : 13 – 14 |
| Viscosity, kinematic | : Not available |
| Solubility | : Soluble in water. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : Not available |
| Relative density | : 1.05 |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

| | |
|-----------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

| Sodium gluconate (527-07-1) | |
|---|--|
| ATE CLP (oral) | 2000 mg/kg bodyweight |
| Isotridecanol, ethoxylated (69011-36-5) | |
| LD50 oral rat | > 300 (≤ 2000) mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| ATE CLP (oral) | 500 mg/kg bodyweight |
| Skin corrosion/irritation | : Causes severe skin burns. pH: 13 – 14 |
| Additional information | : Based on available data, the classification criteria are not met |
| Sodium gluconate (527-07-1) | |
| pH | 6.5 – 7.5 |

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| Isotridecanol, ethoxylated (69011-36-5) | |
|--|-------|
| pH | 5 – 7 |

Serious eye damage/irritation : Causes serious eye damage.
pH: 13 – 14

| Sodium gluconate (527-07-1) | |
|------------------------------------|-----------|
| pH | 6.5 – 7.5 |

| Isotridecanol, ethoxylated (69011-36-5) | |
|--|-------|
| pH | 5 – 7 |

Respiratory or skin sensitisation : Not classified
Additional information : Based on available data, the classification criteria are not met
Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Carcinogenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Reproductive toxicity : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

| Isotridecanol, ethoxylated (69011-36-5) | |
|--|------------------------|
| NOAEL (oral, rat) | > 250 mg/kg bodyweight |

STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met
Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Not rapidly degradable

| Sodium gluconate (527-07-1) | |
|------------------------------------|-------------|
| EC50 - Other aquatic organisms [2] | > 1000 mg/l |

| Sodium hydroxide (1310-73-2) | |
|-------------------------------------|--------------------------|
| LC50 - Fish [1] | > 35 mg/l |
| EC50 - Crustacea [1] | 40.4 mg/l (Ceriodaphnia) |
| EC50 - Other aquatic organisms [1] | > 33 mg/l waterflea |

| Isotridecanol, ethoxylated (69011-36-5) | |
|--|-------------|
| LC50 - Fish [1] | > 1 mg/l |
| EC50 - Crustacea [1] | > 1 mg/l |
| ErC50 algae | 1 – 10 mg/l |

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12.2. Persistence and degradability

| SOLA LEMON | |
|---|---|
| Persistence and degradability | Biodegradable. The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. |
| Sodium hydroxide (1310-73-2) | |
| Persistence and degradability | Not applicable. |
| Isotridecanol, ethoxylated (69011-36-5) | |
| Persistence and degradability | Readily biodegradable, according to appropriate OECD test. Not established. |

12.3. Bioaccumulative potential

| SOLA LEMON | |
|---|--------------------------------------|
| Bioaccumulative potential | No bioaccumulation. |
| Sodium gluconate (527-07-1) | |
| Log Pow | -5.99 |
| Partition coefficient n-octanol/water (Log Kow) | -5.99 |
| Sodium hydroxide (1310-73-2) | |
| Log Pow | -3.88 |
| Bioaccumulative potential | No bioaccumulation. |
| Isotridecanol, ethoxylated (69011-36-5) | |
| Bioaccumulative potential | No bioaccumulation. Not established. |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

| SOLA LEMON | |
|--|---|
| 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 | |
| Component | |
| Isotridecanol, ethoxylated (69011-36-5) | PBT: not relevant – no registration required vPvB: not relevant – no registration required |

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Waste / unused products : Avoid release to the environment.

HP Code : HP8 - "Corrosive:" waste which on application can cause skin corrosion.

SECTION 14: Transport information




In accordance with ADR / IMDG / IATA

| ADR | IMDG | IATA |
|---|---|---|
| 14.1. UN number or ID number | | |
| UN 1760 | UN 1760 | UN 1760 |
| 14.2. UN proper shipping name | | |
| CORROSIVE LIQUID, N.O.S. (Sodium hydroxide) | CORROSIVE LIQUID, N.O.S. (Sodium hydroxide) | Corrosive liquid, n.o.s. (Sodium hydroxide) |

SOLA LEMON

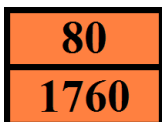
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| ADR | IMDG | IATA |
|---|---|---|
| Transport document description | | |
| UN 1760 CORROSIVE LIQUID, N.O.S. (Sodium hydroxide), 8, III, (E) | UN 1760 CORROSIVE LIQUID, N.O.S. (Sodium hydroxide), 8, III | UN 1760 Corrosive liquid, n.o.s. (Sodium hydroxide), 8, III |
| 14.3. Transport hazard class(es) | | |
| 8 | 8 | 8 |
|  |  |  |
| 14.4. Packing group | | |
| III | III | III |
| 14.5. Environmental hazards | | |
| Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No |
| No supplementary information available | | |

14.6. Special precautions for user

Overland transport

| | |
|---|---|
| Classification code (ADR) | : C9 |
| Special provisions (ADR) | : 274 |
| Limited quantities (ADR) | : 5I |
| Packing instructions (ADR) | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (ADR) | : MP19 |
| Portable tank and bulk container instructions (ADR) | : T7 |
| Portable tank and bulk container special provisions (ADR) | : TP1, TP28 |
| Tank code (ADR) | : L4BN |
| Vehicle for tank carriage | : AT |
| Transport category (ADR) | : 3 |
| Special provisions for carriage - Packages (ADR) | : V12 |
| Hazard identification number (Kemler No.) | : 80 |
| Orange plates | :  |

| | |
|-------------|------|
| Tunnel code | : E |
| EAC code | : 2X |
| APP code | : B |

Transport by sea

| | |
|---------------------------------|--------------|
| Special provisions (IMDG) | : 223, 274 |
| Limited quantities (IMDG) | : 5 L |
| Packing instructions (IMDG) | : P001, LP01 |
| IBC packing instructions (IMDG) | : IBC03 |

Air transport

| | |
|--|------------|
| PCA Limited quantities (IATA) | : Y841 |
| PCA limited quantity max net quantity (IATA) | : 1L |
| PCA packing instructions (IATA) | : 852 |
| PCA max net quantity (IATA) | : 5L |
| CAO packing instructions (IATA) | : 856 |
| CAO max net quantity (IATA) | : 60L |
| Special provisions (IATA) | : A3, A803 |

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14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Detergent Regulation (648/2004)

Allergenic fragrances > 0.01 %:

LINALOOL

D-Limonene

CITRONELLOL

Labelling of contents

| Component | % |
|---|-----|
| non-ionic surfactants, amphoteric surfactants | <5% |
| perfumes | |
| LINALOOL | |
| D-LIMONENE | |
| CITRONELLOL | |

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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 H- and EUH-statements:

| | |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |

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Full text of H- and EUH-statements:

| | |
|---------------|--|
| H290 | May be corrosive to metals. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| Met. Corr. 1 | Corrosive to metals, Category 1 |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1, Sub-Category 1A |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| | | |
|---------------|------|--------------------|
| Skin Corr. 1B | H314 | Calculation method |
| Eye Dam. 1 | H318 | Calculation method |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.