SECTION 1: Identification

1.1 Product identifier

Trade name: LF2100®

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

Relevant identified uses: Professional use - Cleaners

Uses advised against: Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

International Products Corporation
201 Connecticut Drive
Burlington, NJ 08016
United States
https://www.ipcol.com/
+1 6093868770

e-mail (competent person): tmcguckin@ipcol.com (Thomas P. McGuckin)

1.4 Emergency telephone number

Emergency information service: 1-609-386-8770

This number is only available during the following office hours: Mon-Fri 08:00 AM - 04:30 PM, Eastern Time

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Section</th>
<th>Hazard class</th>
<th>Category</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.9</td>
<td>specific target organ toxicity - repeated exposure</td>
<td>2</td>
<td>STOT RE 2</td>
<td>H373</td>
</tr>
</tbody>
</table>

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word: warning
- Pictograms: GHS08

Hazard statements:

H373 May cause damage to organs through prolonged or repeated exposure.
Safety Data Sheet
acc. to 29 CFR 1910.1200 App D

LF2100®
Liquid Low-Foam Cleaner

Date of issue: October 1, 2019
Replaces version of December 21, 2018

- Precautionary statements
  P260  Do not breathe dust/fume/gas/mist/vapors/spray.
P314  Get medical advice/attention if you feel unwell.
P501  Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling
  Tetrasodium ethylenediaminetetraacetate

2.3 Other hazards
Hazards not otherwise classified
Toxic to aquatic life with long lasting effects (GHS category 2: aquatic toxicity - acute and/or chronic).
Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances
Not relevant (mixture)

3.2 Mixtures
Description of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Classification acc. to GHS</th>
<th>Pictograms</th>
</tr>
</thead>
</table>
| Tetrasodium ethylenediaminetetraacetate        | CAS No 64-02-8 | 10 – < 25 | Acute Tox. 4 / H302  
Acute Tox. 4 / H332  
Eye Dam. 1 / H318  
STOT RE 2 / H373  
Aquatic Acute 3 / H402 | ![Pictograms] |
| EO PO Isodecyl Alcohol                         | CAS No 37251-67-5 | 5 – < 10 | Skin Irrit. 2 / H315  
Eye Dam. 1 / H318  
Aquatic Acute 1 / H400  
Aquatic Chronic 1 / H410 | ![Pictograms] |
| Citric Acid                                    | CAS No 77-92-9 | 1 – < 5 | Acute Tox. 5 / H313  
Aquatic Chronic 4 / H413 | ![Pictograms] |
| sodium hydroxide                               | CAS No 1310-73-2 | < 1 | Skin Corr. 1A / H314  
Eye Dam. 1 / H318  
Aquatic Acute 3 / H402  
Aquatic Chronic 3 / H412 | ![Pictograms] |

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first-aid measures
General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.
Following skin contact
   Wash with plenty of soap and water.

Following ingestion
   Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 **Most important symptoms and effects, both acute and delayed**
   Symptoms and effects are not known to date.

4.3 **Indication of any immediate medical attention and special treatment needed**
   none

**SECTION 5: Fire-fighting measures**

5.1 **Extinguishing media**
   Suitable extinguishing media
   Water spray, BC-powder, Carbon dioxide (CO2)

   Unsuitable extinguishing media
   Water jet

5.2 **Special hazards arising from the substance or mixture**
   Hazardous combustion products
   Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 **Advice for firefighters**
   Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

**SECTION 6: Accidental release measures**

6.1 **Personal precautions, protective equipment and emergency procedures**
   For non-emergency personnel
   Remove persons to safety.

   For emergency responders
   Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 **Environmental precautions**
   Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 **Methods and material for containment and cleaning up**
   Advice on how to clean up a spill
   Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: Sawdust, Kieselgur (diatomite), Sand, Universal binder

   Appropriate containment techniques
   Use of adsorbent materials.
6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Recommendations
- Measures to prevent fire as well as aerosol and dust generation
  Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene
Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities
- Specific designs for storage rooms or vessels
- Storage temperature
  Recommended storage temperature: 2 – 43 °C
- Packaging compatibilities
  Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)
See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
This information is not available.

### Relevant DNELs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Protection goal, route of exposure</th>
<th>Used in</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>DNEL</td>
<td>1.5 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - local effects</td>
</tr>
<tr>
<td>Tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>DNEL</td>
<td>3 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>acute - local effects</td>
</tr>
</tbody>
</table>

### Relevant PNECs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>PNEC</td>
<td>2.2 mg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>PNEC</td>
<td>0.22 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>
### Relevant PNECs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrasodium ethylene-diaminetetraacetate</td>
<td>64-02-8</td>
<td>PNEC</td>
<td>43 mg/l</td>
<td>aquatic organisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Tetrasodium ethylene-diaminetetraacetate</td>
<td>64-02-8</td>
<td>PNEC</td>
<td>0.72 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>

### Exposure controls

#### 8.2 Exposure controls

**Appropriate engineering controls**

General ventilation.

**Individual protection measures (personal protective equipment)**

**Eye/face protection**

Wear eye/face protection.

**Skin protection**

- **Hand protection**
  
  Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- **Other protection measures**
  
  Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

**Respiratory protection**

- In case of inadequate ventilation wear respiratory protection.

**Environmental exposure controls**

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

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

**Appearance**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>clear - yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>characteristic</td>
</tr>
</tbody>
</table>
### Other safety parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (value)</td>
<td>9 – 9.9 (25 °C)</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-8 °C</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>0 hPa at 25 °C</td>
</tr>
<tr>
<td>Density</td>
<td>1.16 – 1.18 g/ml at 25 °C</td>
</tr>
<tr>
<td>Vapor density</td>
<td>this information is not available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>not determined</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td></td>
</tr>
<tr>
<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>- Kinematic viscosity</td>
<td>8.475 mm²/s</td>
</tr>
<tr>
<td>- Dynamic viscosity</td>
<td>10 cP at 25 °C</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>none</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>none</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 Chemical stability

See below "Conditions to avoid".

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.
10.4 **Conditions to avoid**
Do not mix with other chemicals.

10.5 **Incompatible materials**
Avoid extended contact with uncured paint, zinc, aluminum, cold rolled steel, or copper and its alloys. Avoid contact with polycarbonate, polymethyl methacrylate, and polyphenylene oxide as these plastics may craze over time. Refer to product's compatibility sheets for further details.

10.6 **Hazardous decomposition products**
Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

---

**SECTION 11: Toxicological information**

11.1 **Information on toxicological effects**
Basis of test data.

**Classification procedure**
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**

**Acute toxicity**
Shall not be classified as acutely toxic.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Exposure route</th>
<th>ATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>oral</td>
<td>1,913 mg/kg</td>
</tr>
<tr>
<td>Tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>inhalation: dust/mist</td>
<td>1.5 mg/4h</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
Shall not be classified as corrosive/irritant to skin.

**Serious eye damage/eye irritation**
Shall not be classified as seriously damaging to the eye or eye irritant.

**Respiratory or skin sensitization**
Shall not be classified as a respiratory or skin sensitizer.

**Germ cell mutagenicity**
Shall not be classified as germ cell mutagenic.

**Carcinogenicity**
Shall not be classified as carcinogenic.

**Reproductive toxicity**
Shall not be classified as a reproductive toxicant.

**Specific target organ toxicity - single exposure**
Shall not be classified as a specific target organ toxicant (single exposure).
Specific target organ toxicity - repeated exposure
May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity
Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrasodium ethylene-diaminetetraacetate</td>
<td>64-02-8</td>
<td>LC50</td>
<td>41</td>
<td>fish</td>
<td>96 h</td>
</tr>
<tr>
<td>Tetrasodium ethylene-diaminetetraacetate</td>
<td>64-02-8</td>
<td>EC50</td>
<td>140</td>
<td>aquatic invertebrates</td>
<td>48 h</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability
Data are not available.

12.3 Bioaccumulative potential
Data are not available.

12.4 Mobility in soil
Data are not available.

12.5 Results of PBT and vPvB assessment
Data are not available.

12.6 Other adverse effects
Endocrine disrupting potential
None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages
Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number

3082

14.2 UN proper shipping name

not assigned

Technical name (hazardous ingredients)

EO PO Isodecyl Alcohol

14.3 Transport hazard class(es)

Class

(environmentally hazardous)

14.4 Packing group

not assigned

14.5 Environmental hazards

hazardous to the aquatic environment

Environmentally hazardous substance (aquatic environment)

EO PO Isodecyl Alcohol

14.6 Special precautions for user

There is no additional information.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA)

all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III )

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

  None of the ingredients are listed.

- Specific Toxic Chemical Listings (EPCRA Section 313)

  None of the ingredients are listed

Clean Air Act

None of the ingredients are listed.

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Not applicable.

Industry or sector specific available guidance(s)

NPCA-HMIS® III


<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic</td>
<td>*</td>
<td>chronic (long-term) health effects may result from repeated overexposure</td>
</tr>
<tr>
<td>Health</td>
<td>0</td>
<td>no significant risk to health</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
<td>material that must be preheated before ignition can occur</td>
</tr>
</tbody>
</table>
### NFPA® 704

<table>
<thead>
<tr>
<th>Category</th>
<th>Degree of hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
<td>material that must be preheated before ignition can occur</td>
</tr>
<tr>
<td>Health</td>
<td>0</td>
<td>material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material</td>
</tr>
<tr>
<td>Instability</td>
<td>0</td>
<td>material that is normally stable, even under fire conditions</td>
</tr>
<tr>
<td>Special hazard</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### National inventories

<table>
<thead>
<tr>
<th>Country</th>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>REACH Reg.</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>US</td>
<td>TSCA</td>
<td>all ingredients are listed</td>
</tr>
</tbody>
</table>

Legend
- REACH Reg.: REACH registered substances
- TSCA: Toxic Substance Control Act

15.2 Chemical Safety Assessment
Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information, including date of preparation or last revision

Key literature references and sources for data

Classification procedure
- Physical and chemical properties: The classification is based on tested mixture.
- Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)
# Safety Data Sheet

**acc. to 29 CFR 1910.1200 App D**

## LF2100®

**Liquid Low-Foam Cleaner**

Date of issue: October 1, 2019

Replaces version of December 21, 2018

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H313</td>
<td>May be harmful in contact with skin.</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H402</td>
<td>Harmful to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H413</td>
<td>May cause long lasting harmful effects to aquatic life.</td>
</tr>
</tbody>
</table>

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.