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

- **1.1 Product identifier**
- **Trade name:** e34250 AUTOSOL® Rust EX

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - **Sector of Use**
    - SU21 Consumer uses: Private households / general public / consumers
    - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
  - **Application of the substance / the mixture** Cleaning agent / Cleaner

- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - Autosol, LLC
    - P.O. Box 340358
    - Austin, TX 78734
    - Tel.: 1-512-804-9337
    - www.autosol.com
  - **Further information obtainable from:**
    - msds@autosol.com
  - **1.4 Emergency telephone number:**
    - 1-512-804-9337 or 1-800-314-5545 Toll Free US and Canada

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**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**

  - ☢️ GHS05 corrosion
    - Met. Corr. 1  H290 May be corrosive to metals.
    - Skin Corr. 1A H314 Causes severe skin burns and eye damage.

  - ⌒ GHS07
    - Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    - The product is classified and labelled according to the CLP regulation.
Hazard pictograms

GHS05

Signal word: Danger

Hazard-determining components of labelling:
- Hydrogen chloride

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

Precautionary statements:
- P102 Keep out of reach of children.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P361+P353 IF ON SKIN (or hair): Remove/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 POISON CENTER or doctor/physician.
- P390 Absorb spillage to prevent material damage.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information: Keep out of reach of children.

2.3 Other hazards

Results of PBT and vPvB assessment:
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| CAS: 7647-01-0 | Hydrogen chloride | 10-25% |
| EINECS: 231-595-7 | Skin Corr. 1B, H314; STOT SE 3, H335 |

| Polyoxy-1,2-ethanediyl), a-isodecyl-w-hydroxy | 1-10% |
| Eye Dam. 1, H318; Acute Tox. 4, H302 |

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: In case of unconsciousness place patient stably in side position for transportation.

(Contd. on page 3)
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: 11 e34250 AUTOSOL® Rust EX

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters
Protective equipment: No special measures required.

Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions: No special measures required.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

Storage class: 8 A
7.3 Specific end use(s)  No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7647-01-0 hydrogen chloride</td>
</tr>
<tr>
<td>WEL</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:
Rubber gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material
Value for the permeation: Level ≤ 0.5
For the mixture of chemicals mentioned below the penetration time has to be at least 420 minutes (Permeation according to EN 374 Part 3: Level 6).
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Trade name: 11 e34250 AUTOSOL® Rust EX

- Eye protection:
  
  Tightly sealed goggles

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  
  **General Information**
  
  **Appearance:**
  - Form: Fluid
  - Colour: White
  - Odour: Characteristic
  - Odour threshold: Not determined.

  **pH-value at 20 °C:** 0.3

- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: 100 °C

- **Flash point:** > 100 °C

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**
  - Decomposition temperature: Not determined.
  - Self-igniting: Product is not self-igniting.
  - Danger of explosion: Product does not present an explosion hazard.

- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.

- **Vapour pressure:** Not determined.

- **Density at 20 °C:** 1.229 g/cm³
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**
  - Dynamic: Not determined.
  - Kinematic: Not determined.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: 11 e34250 AUTOSOL® Rust EX

(Contd. of page 5)

9.2 Other information
No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials:
No further relevant information available.

10.6 Hazardous decomposition products:
No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity:

LD/LC50 values relevant for classification:

7647-01-0 hydrogen chloride
Oral | LD50 | 900 mg/kg (rabbit)

61827-42-7 Fatty Alcohol ethoxylated
Oral | LD50 | >2000 mg/kg (rat)

Primary irritant effect:
on the skin: Caustic effect on skin and mucous membranes.
on the eye: Strong caustic effect.
Sensitisation: No sensitising effects known.
Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Corrosive
Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:
61827-42-7 Fatty Alcohol ethoxylated
EC50 (48 h) | 10-100 mg/l (daphnia)
LC50 (96 h) | 10-100 mg/l (fish)

12.2 Persistence and degradability
No further relevant information available.

(Contd. on page 7)
12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:
Generally not hazardous for water
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number
ADR, IMDG, IATA UN1760

14.2 UN proper shipping name
ADR 1760 CORROSIVE LIQUID, N.O.S. (HYDROCHLORIC ACID)
IMDG, IATA CORROSIVE LIQUID, N.O.S. (HYDROCHLORIC ACID)

14.3 Transport hazard class(es)
ADR, IMDG, IATA

Class 8 Corrosive substances.
Label 8

14.4 Packing group
ADR, IMDG, IATA II

(Contd. on page 8)
## Safety data sheet
according to 1907/2006/EC, Article 31

**Trade name:** 11 e34250 AUTOSOL® Rust EX

### 14.5 Environmental hazards:
- No

### 14.6 Special precautions for user
- **Warning:** Corrosive substances.
- **Danger code (Kemler):** 80
- **EMS Number:** F-A,S-B
- **Segregation groups:** Acids

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- **Not applicable.**

### Transport/Additional information:
- **ADR**
  - **Limited quantities (LQ):** 1L
  - **Excepted quantities (EQ):** Code: E2
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 500 ml
- **Transport category:** 2
- **Tunnel restriction code:** E

### IMDG
- **Limited quantities (LQ):** 1L
- **Excepted quantities (EQ):** Code: E2
  - Maximum net quantity per inner packaging: 30 ml
  - Maximum net quantity per outer packaging: 500 ml

### UN "Model Regulation":
- UN1760, CORROSIVE LIQUID, N.O.S.
  - (HYDROCHLORIC ACID), 8, 1

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**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
  - H302 Harmful if swallowed.
  - H314 Causes severe skin burns and eye damage.
  - H318 Causes serious eye damage.
  - H335 May cause respiratory irritation.

- **Department issuing MSDS:**
  - Autosol, LLC
  - P.O. Box 340358
  - Austin, TX 78734

(Contd. on page 9)
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: 11 e34250 AUTOSOL® Rust EX

· Contact: msds@autosol.com
· Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the
  International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  Met. Corr.1: Corrosive to metals, Hazard Category 1
  Acute Tox. 4: Acute toxicity, Hazard Category 4
  Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
  Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
  Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
  Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
  STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3