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

1.1 Product identifier

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

GHS07

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.
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Trade name: 01 001500 AUTOSOL® Metal Wash

- **Hazard pictograms**
  
  ![GHS05](image1)  ![GHS07](image2)

- **Signal word** Danger

- **Hazard-determining components of labelling:**  
  Sodium metasilicate pentahydrate

- **Hazard statements**  
  H314 Causes severe skin burns and eye damage.  
  H335 May cause respiratory irritation.

- **Precautionary statements**
  
  P102 Keep out of reach of children.  
  P280 Wear protective gloves/protective clothing/eye protection/face protection.  
  P260 Do not breathe dust.  
  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/doctor.  
  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.

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Description</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10213-79-3</td>
<td></td>
<td>Sodium metasilicate pentahydrate</td>
<td>25-50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Met. Corr. 1, H290; Skin Corr. 1B, H314; STOT SE 3, H335</td>
<td></td>
</tr>
<tr>
<td>497-19-8</td>
<td>207-838-8</td>
<td>Sodium carbonate</td>
<td>25-50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Irrit. 2, H319</td>
<td></td>
</tr>
<tr>
<td>29385-43-1</td>
<td>249-596-6</td>
<td>Methyl-1H-benzotriazole</td>
<td>1-10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Tox. 4, H302</td>
<td></td>
</tr>
</tbody>
</table>

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Trade name: 01 001500 AUTOSOL® Metal Wash

CAS: 68439-57-6
EINECS: 270-407-8
Reg.nr.: 01-2119513401-57-xxxx
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts
 Eye Dam. 1, H318; Skin Irrit. 2, H315
1-10%

CAS: 164462-16-2
Reg.nr.: 01-0000016977-XXXX
Reaction mass aus (2S)-Alanin, N,N-bis(carboxymethyl)-, Trinatriumsalz und (2R)-Alanin, N,N-bis(carboxymethyl)-, Trinatriumsalz
 Eye Dam. 1, H318; Met. Corr. 1, H290
1-10%

CAS: 7320-34-5
EINECS: 230-785-7
tetrapotassium pyrophosphate
 Eye Irrit. 2, H319
1-10%

 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.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

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: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
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.

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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
  Thorough dedusting.
  Ensure good ventilation/exhaustion at the workplace.
· 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

· Additional information about design of technical facilities: No further data; see item 7.
· 8.1 Control parameters
· Ingredients with limit values that require monitoring at the workplace:
  The product does not contain any relevant quantities of materials with critical values that have to be
  monitored at the workplace.
· Additional information: The lists valid during the making were used as basis.
· 8.2 Exposure controls
· Personal protective equipment:
  · 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:

  Protective 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

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substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Rubber gloves
Recommended thickness of the material: ≥ 0.5 mm

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 6).

· **Eye protection:**

Tightly sealed goggles

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**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form: Powder
  - Colour: White
  - Odour: Characteristic
  - Odour threshold: Not determined.
- **pH-value at 20 °C:**
  - 13
- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.
- **Flash point:**
  - Not applicable.
- **Flammability (solid, gaseous):**
  - Not determined.
- **Ignition temperature:**
  - Decomposition temperature: Not determined.
  - Self-igniting: Product is not selfigniting.
  - Danger of explosion: Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapour pressure:**
  - Not applicable.
- **Density at 20 °C:**
  - 1.03 g/cm³
- **Relative density**
  - Not determined.
- **Vapour density**
  - Not applicable.
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- Evaporation rate: Not applicable.
- Solubility in / Miscibility with water: Insoluble.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- 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:
      - 497-19-8 sodium carbonate
        Oral | LD50  | 4090 mg/kg (rat)
      - 68439-57-6 Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts
        Oral  | LD50  | >2000 mg/kg (rat)
        Dermal| LD50  | >2000 mg/kg (rabbit)
        Inhalative | LC50 (4 h) | >52 mg/l (rat)
      - 164462-16-2 Reaction mass aus (2S)-Alanin, N,N-bis(carboxymethyl)-, Trinatriumsalz und (2R)-Alanin, N,N-bis(carboxymethyl)-, Trinatriumsalz
        Oral  | LD50  | > 4000 mg/kg (rat)
        Dermal| LD50  | > 4000 mg/kg (rat) (OECD-Richtlinie 402)
      - 7320-34-5 tetrapotassium pyrophosphate
        Oral  | LD50  | >2000 mg/kg (mouse)

  - Primary irritant effect:
    - on the skin: Strong caustic effect on skin and mucous membranes.
    - on the eye: Strong caustic effect.
    - Sensitisation: No sensitising effects known.
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• 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
Irritant
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:

68439-57-6 Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts
EC50 (48 h) 1-10 mg/l (daphnia)
EC50 (72 h) 1-10 mg/l (alg)
7320-34-5 tetrapotassium pyrophosphate
LC50 (48 h) > 100 mg/l (daphnia)
LC50 (96 h) > 100 mg/l (fish)

• 12.2 Persistence and degradability

164462-16-2 Reaction mass aus (2S)-Alanin, N,N-bis(carboxymethyl)-, Trinatriumsalz und (2R)-Alanin, N,N-bis(carboxymethyl)-, Trinatriumsalz
log POW -4.0 (log POW)

• 12.3 Bioaccumulative potential No further relevant information available.
• 12.4 Mobility in soil No further relevant information available.
• Additional ecological information:

General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
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.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, 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
    UN1759

- 14.2 UN proper shipping name
  - ADR
    1759 CORROSIVE SOLID, N.O.S. (Sodium metasilicate pentahydrate)
  - IMDG, IATA
    CORROSIVE SOLID, N.O.S. (Sodium metasilicate pentahydrate)

- 14.3 Transport hazard class(es)
  - ADR, IMDG, IATA
    - Class
      8 Corrosive substances.
    - Label
      8

- 14.4 Packing group
  - ADR, IMDG, IATA
    III

- 14.5 Environmental hazards:
  - Marine pollutant:
    No

- 14.6 Special precautions for user
  - Danger code (Kemler):
    Warning: Corrosive substances.
  - EMS Number:
    F-A,S-B

- 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)
    5 kg
  - Excepted quantities (EQ)
    Code: E1
    Maximum net quantity per inner packaging: 30 g
    Maximum net quantity per outer packaging: 1000 g
  - Transport category
    3

(Contd. on page 9)
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.

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
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.
H335 May cause respiratory irritation.

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

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

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Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
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