1 Identification

· **Product Identifier**
  
  · **Trade name:** Renegade Metalist
  
  · **Relevant identified uses of the substance or mixture and uses advised against:** Rust Inhibitor
  
  · **Product Description** Rust Inhibitor
  
  · **Application of the substance / the mixture:** For use in automatic style parts washers

· **Details of the Supplier of the Safety Data Sheet:**
  
  · **Manufacturer/Supplier:**
    Service Line Inc.
    2320 Zinga Drive
    Reedsburg, WI 53959
    Phone: 608-524-0204
    Fax: 608-524-1446
    www.renegadepartswashers.com
  
  · **Emergency telephone number:** 1-800-228-5635 x054

2 Hazard(s) Identification

· **Classification of the substance or mixture:**

  ![](GHS05 Corrosion)

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

  Flam. Liq. 4 H227 Combustible liquid.

· **Label elements:**

  · **GHS label elements**
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  
  · **Hazard pictograms:**

    ![](GHS05)

  · **Signal word:** Danger

  · **Hazard-determining components of labeling:**
    Monoethanolamine
  
  · **Hazard statements:**
    H227 Combustible liquid.
    H314 Causes severe skin burns and eye damage.

  · **Precautionary statements:**

    P210 Keep away from flames and hot surfaces. – No smoking.
    P260 Do not breathe dusts or mists.
    P280 Wear protective gloves / eye protection / face protection.
    P280 Wear eye protection / face protection.
    P264 Wash thoroughly after handling.
    P303+P361+P353 If on skin (or hair): 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.

(Contd. on page 2)
Trade name: Renegade Metalist

P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P363 Wash contaminated clothing before reuse.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P405 Store locked up.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 3
  - Fire = 2
  - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - HEALTH
    - Health = 4
  - FIRE
    - Fire = 2
  - REACTIVITY
    - Reactivity = 0

- Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

- Non-hazardous components:
  - 7732-18-5 Water, distilled water, deionized water 70-90%

- Chemical characterization: Mixtures
  - Description: Mixture: consisting of non-regulated material.

- Dangerous Components:
  - CAS: 141-43-5 Monoethanolamine
  - RTECS: KJ 5775000
    - Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Flam. Liq. 4, H227
    - 15-35%

4 First-Aid Measures

- Description of first aid measures:
  - General information:
    - Immediately remove any clothing soiled by the product. Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.
  - After inhalation:
    - Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
    - In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact:
    - Immediately wash with water and soap and rinse thoroughly.
    - Immediate medical treatment is necessary. Failure to treat burns can prevent wounds from healing.
    - If skin irritation occurs, consult a doctor.
  - After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  - After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed: No further relevant information available.

(Contd. on page 3)
Trade name: Renegade Metalist

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

### 5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**
  CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:**
  As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:**
  Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
  Dilute with plenty of water.
  Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
  Ensure adequate ventilation.
  Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to section 13.
- **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.

### 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
- **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 receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

### 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
  - **Components with occupational exposure limits:**
    141-43-5 Monoethanolamine
    PEL Long-term value: 6 mg/m³, 3 ppm

(Contd. on page 4)
Trade name: Renegade Metalist

<table>
<thead>
<tr>
<th>REL</th>
<th>Short-term value: 15 mg/m³, 6 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Long-term value: 8 mg/m³, 3 ppm</td>
</tr>
<tr>
<td>TLV</td>
<td>Short-term value: 15 mg/m³, 6 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 7.5 mg/m³, 3 ppm</td>
</tr>
</tbody>
</table>

- **Additional information**: The lists that were valid during the creation of this SDS were used as basis.

- **Exposure controls**:
  - **Personal protective equipment**:
    - **General protective and hygienic measures**:
      The usual precautionary measures for handling chemicals should be followed.
      Keep away from foodstuffs, beverages and feed.
      Immediately remove all soiled and contaminated clothing and wash before reuse.
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes.
      Avoid contact with the eyes and skin.
  - **Breathing equipment**: Not required.
  - **Protection of hands**:
    - **Protective gloves**
      The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
      Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
      Select glove material based on penetration times, rates of diffusion and 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 cannot be calculated in advance and has therefore to be checked prior to the application.
    - **Penetration time of glove material**:
      The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.
  - **Eye protection**:
    - **Tightly sealed goggles**

### 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance**:
    - **Form**: Liquid
    - **Color**: Clear
    - **Odor**: Odorless
    - **Odor threshold**: Not determined.
  - **pH-value @ 20 °C (68 °F)**: 8.6
  - **Change in condition**
    - **Melting point/Melting range**: Not determined.

(Contd. on page 5)
Trade name: Renegade Metalist

- Boiling point/Boiling range: Not determined.
- Flash point: None
- Flammability (solid, gaseous): Not applicable.
- Ignition temperature: Not determined
- Decomposition temperature: Not determined.
- Auto igniting: Product is not self-igniting.
- Danger of explosion: Not determined.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapor pressure @ 20 °C (68 °F): 23 hPa (17 mm Hg)
- Density @ 20 °C (68 °F): 1.002 g/cm³ (8.362 lbs/gal)
- Relative density: Not determined.
- Vapor density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with:
  - Water: Fully miscible.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Solvent content:
  - Organic solvents: 20.0 %
  - VOC content: 20.0 %
- Other information: No further relevant information available.

10 Stability and Reactivity

- Reactivity: No further relevant information available.
- Chemical stability: Stable under normal conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

- Information on toxicological effects:
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    141-43-5 Monoethanolamine
    | Route  | LD50   |
    |--------|--------|
    | Oral   | 2050 mg/kg (rat) |
    | Dermal | 1000 mg/kg (rabbit) |
- Primary irritant effect:
  - On the skin: Strong caustic effect on skin and mucous membranes.

(Contd. on page 6)
Trade name: Renegade Metalist

- **On the eye:**
  - Strong irritant with the danger of severe eye injury.
  - Corrosive effect.
  - Causes serious eye irritation.
- **Additional toxicological information:**
  - The product shows the following dangers according to internally approved calculation methods for preparations:
    - Harmful
    - Corrosive
    - Irritant
  - Swallowing will lead to a corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories:**
  - **IARC (International Agency for Research on Cancer):**
    - None of the ingredients are listed.
  - **NTP (National Toxicology Program):**
    - None of the ingredients are listed.
  - **OSHA-Ca (Occupational Safety & Health Administration):**
    - None of the ingredients are listed.

**12 Ecological Information**

- **Toxicity:**
  - **Aquatic toxicity:** No further relevant information available.
  - **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
  - **Bioaccumulative potential:** No further relevant information available.
  - **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
  - **General notes:**
    - Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
    - Must not reach bodies of water or drainage ditch undiluted or unneutralized.
  - **Results of PBT and vPvB assessment:**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.
  - **Other adverse effects:** No further relevant information available.

**13 Disposal Considerations**

- **Waste treatment methods:**
  - **Recommendation:**
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
    - Observe all federal, state and local environmental regulations when disposing of this material.
  - **Uncleaned packagings**
    - **Recommendation:** Disposal must be made according to official regulations.
    - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

(Contd. on page 7)
14 Transport Information

- UN-Number:
  - DOT, ADR, ADN, IMDG, IATA: Non-Regulated Material

- UN proper shipping name:
  - DOT, ADR, ADN, IMDG, IATA: Non-Regulated Material

- Transport hazard class(es):
  - DOT, ADR, ADN, IMDG, IATA: Non-Regulated Material

- Class:
  - DOT, ADR, ADN, IMDG, IATA: Non-Regulated Material

- Packing group:
  - DOT, ADR, IMDG, IATA: Not applicable.

- Environmental hazards:
  - Not applicable.

- Special precautions for user:
  - Not applicable.

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

- UN "Model Regulation":
  - Non-Regulated Material

15 Regulatory Information

- Safety, health and environmental regulations/legislation specific for the substance or mixture:
  - SARA (Superfund Amendments and Reauthorization):
    - Section 355 (extremely hazardous substances):
      - None of the ingredients are listed.
    - Section 313 (Specific toxic chemical listings):
      - None of the ingredients are listed.
  - TSCA (Toxic Substances Control Act):
    - All ingredients are listed or exempt from listing.
  - California Proposition 65:
    - Chemicals known to cause cancer:
      - None of the ingredients are listed.
    - Chemicals known to cause reproductive toxicity for females:
      - None of the ingredients are listed.
    - Chemicals known to cause reproductive toxicity for males:
      - None of the ingredients are listed.
    - Chemicals known to cause developmental toxicity:
      - None of the ingredients are listed.
  - New Jersey Right-to-Know List:
    - 141-43-5 Monoethanolamine
  - New Jersey Special Hazardous Substance List:
    - 141-43-5 Monoethanolamine
  - Pennsylvania Special Hazardous Substance List:
    - None of the ingredients are listed.
  - Carcinogenic categories:
    - None of the ingredients are listed.

(Contd. on page 8)
Trade name: Renegade Metalist

- **TLV (Threshold Limit Value established by ACGIH):**
  None of the ingredients are listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health):**
  None of the ingredients are listed.

- **GHS label elements**
  The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**
  ![GHS05]

- **Signal word:** Danger

- **Hazard-determining components of labeling:**
  Monoethanolamine

- **Hazard statements:**
  H227 Combustible liquid.
  H314 Causes severe skin burns and eye damage.

- **Precautionary statements:**
  P210 Keep away from flames and hot surfaces. – No smoking.
  P260 Do not breathe dusts or mists.
  P280 Wear protective gloves / eye protection / face protection.
  P280 Wear eye protection / face protection.
  P264 Wash thoroughly after handling.
  P303+P361+P353 If on skin (or hair): 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.
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  P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  P363 Wash contaminated clothing before reuse.
  P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
  P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  P405 Store locked up.
  P403+P235 Store in a well-ventilated place. Keep cool.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations:**
  The product is subject to be classified according with the latest version of the regulations on hazardous substances.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision:** 03/07/2016 / 1

(Contd. on page 9)
Abbreviations and acronyms:

- ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- 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)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Flam. Liq. 4: Flammable liquids, Hazard Category 4
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
- Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

* Data compared to the previous version altered.

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