1 Identification

- **Product identifier**
  - **Trade name:** Metaterge 1405 Gel
  - **Relevant identified uses of the substance or mixture and uses advised against:** No further relevant information available.
  - **Application of the substance / the mixture:** Industrial cleaner

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Mereco Technologies
    - A Wholly owned Subsidiary of Protex International
    - 8 Ricker Avenue
    - Londonderry NH 03053
    - USA
    - Phone +1 / 603-623-8626
  - **Information department:** Technical department.
  - **Emergency telephone number:** Telephone: (603) 623-8626 (USA)

2 Hazard(s) identification

- **Classification of the substance or mixture**

  - **Carc. 2 H351** Suspected of causing cancer.
  - **STOT RE 2 H373** May cause damage to organs through prolonged or repeated exposure.

  - **Eye Irrit. 2A H319** Causes serious eye irritation.

  - **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**
    - GHS07 GHS08

- **Signal word**
  - Warning

- **Hazard-determining components of labeling:** 2,2'‐iminodiethanol
  - **Hazard statements:** H227 Combustible liquid.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

P210 Keep away from flames and hot surfaces.
     – No smoking.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves / eye protection / face protection.
P280 Wear eye protection / face protection.
P264 Wash thoroughly after handling.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
  - NFPA ratings (scale 0 - 4)
    Health = 1  
    Fire = 2  
    Reactivity = 0
  - HMIS-ratings (scale 0 - 4)
    Health = *1  
    Fire = 2  
    Reactivity = 0

- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
Trade name: Metaterge 1405 Gel

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with non-hazardous additions. Non-hazardous ingredients are not listed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Inorganic filler</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS:</td>
<td>97-99-4</td>
</tr>
<tr>
<td>EINECS:</td>
<td>202-625-6</td>
</tr>
<tr>
<td>Description</td>
<td>Eye Irrit. 2A, H319; STOT SE 3, H335</td>
</tr>
<tr>
<td>CAS:</td>
<td>111-42-2</td>
</tr>
<tr>
<td>EINECS:</td>
<td>203-868-0</td>
</tr>
<tr>
<td>Description</td>
<td>Tetrahydro-2-furylmethanol</td>
</tr>
<tr>
<td>CAS:</td>
<td>111-42-2</td>
</tr>
<tr>
<td>EINECS:</td>
<td>203-868-0</td>
</tr>
<tr>
<td>Description</td>
<td>2,2'-iminodiethanol</td>
</tr>
</tbody>
</table>

- **SVHC (Substances of Very High Concern - REACH)**
  - None of the ingredients is listed.

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

4 First-aid measures

- **Description of first aid measures**
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing: If symptoms persist consult doctor.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed: No further relevant information available.
    - 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**
  - Advice for firefighters: No further relevant information available.

- **Protective equipment:** No special measures required.
### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**: Not required.
- **Environmental precautions**: No special measures required.
- **Methods and material for containment and cleaning up**: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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**: Store in cool, dry place in tightly closed receptacles. Use only in well ventilated areas.
  - **Information about protection against explosions and fires**: No special measures required.
  - **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 item 7.
- **Control parameters**

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>97-99-4 tetrahydro-2-furylmethanol</td>
<td>Long-term value: 0.5 ppm</td>
<td>WEEL</td>
</tr>
<tr>
<td>111-42-2 2,2'-iminodiethanol</td>
<td>Long-term value: 15 mg/m³, 3 ppm</td>
<td>REL</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 1* mg/m³, 0.2* ppm</td>
<td>TLV</td>
</tr>
<tr>
<td></td>
<td>Skin; *inhalable fraction and vapor</td>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 5)
**Trade name:** Metaterge 1405 Gel

(Contd. from page 4)

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

- **Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:** 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. Avoid contact with the eyes and skin.

- **Breathing equipment:** Not required.

- **Protection of hands:**
  - 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. Selection of the glove material is based on consideration of the penetration times, rates of diffusion and the degradation of the material.

- **Material of gloves**
  - The selection of suitable gloves depends not only 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 penetration time has to be determined by the glove manufacturer and has to be observed.

- **Eye protection:**
  - Tightly sealed goggles

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**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - Form: Viscous
      - Color: Clear
      - Odor: Mild
      - Odor threshold: Not determined.

  - **pH-value:** Not determined.

- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: > 149 °C

- **Flash point:** 93 °C

(Contd. on page 6)
## 10 Stability and reactivity

### Reactivity
- Thermal decomposition / conditions to be avoided:
  - No decomposition if used according to specifications.
- Possibility of hazardous reactions:
  - Reacts with acids, alkalis and oxidizing agents.
- Conditions to avoid:
  - No further relevant information available.
- Incompatible materials:
  - No further relevant information available.
- Hazardous decomposition products:
  - Irritant gases/vapors.

### Chemical stability
- Not determined.

### Viscosity
- Dynamic:
  - Not determined.
- Kinematic:
  - Not determined.

### Solvent content
- Organic solvents:
  - 78.4 %

### Other information
- No further relevant information available.
11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    | Substance                                      | LD50   | LC50   |
    |------------------------------------------------|--------|--------|
    | 97-99-4 tetrahydro-2-furylmethanol             | 1600 mg/kg (rat) |        |
    | 112945-52-5 silicon dioxide, chemically prepared| >5000 mg/kg (rat) |        |
    | 111-42-2 2,2'-iminodiethanol                    | 1600 mg/kg (rat) | 12200 mg/kg (rabbit) |
  - Primary irritant effect:
    | on the skin:                                    | No irritant effect. |
    | on the eye:                                     | Irritating effect. |
    | Sensitization:                                  | No sensitizing effects known. |
  - Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    | Substance                                      | Carcinogenic category |
    |------------------------------------------------|-----------------------|
    | 111-42-2 2,2'-iminodiethanol                   | 2B 1-3%               |
  - NTP (National Toxicology Program)
    None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is 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:
    Water hazard class 1 (Self-assessment): slightly hazardous for water.
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
### 13 Disposal considerations

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

- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN-Number</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOT</td>
<td>Not Regulated</td>
<td></td>
</tr>
<tr>
<td>ADR, ADN, IMDG, IATA</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td><strong>Packing group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOT, ADR, IMDG, IATA</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental hazards:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marine pollutant:</strong></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td><strong>Special precautions for user</strong></td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>Transport in bulk according to Annex I I of MARPOL73/78 and the IBC Code</strong></td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>UN &quot;Model Regulation&quot;:</strong></td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - **Section 302 (extremely hazardous substances):**
      - None of the ingredients is listed.
    - **Section 313 (Specific toxic chemical listings):**
      - 111-42-2 2,2'-iminodiethanol 1-3%
    - **Sections 311/312 (Specific hazard chemical listings):**
      - 111-42-2 2,2'-iminodiethanol
Trade name: **Metaterge 1405 Gel**

### Sections 311/312 Hazard Categorizations:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>CAS Name</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-42-2</td>
<td>2,2’-iminodiethanol</td>
<td>A = Acute health hazard 1-3%</td>
</tr>
</tbody>
</table>

### TSCA (Toxic Substances Control Act):

All ingredients are listed.

### Proposition 65

- **Chemicals known to cause cancer:**
  - 111-42-2, 2,2’-iminodiethanol 1-3%
- **Chemicals known to cause reproductive toxicity for females:**
  - None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for males:**
  - None of the ingredients is listed.
- **Chemicals known to cause developmental toxicity:**
  - None of the ingredients is listed.

### Carcinogenic categories

- **EPA (Environmental Protection Agency)**
  - None of the ingredients is listed.
- **TLV (Threshold Limit Value established by ACGIH)**
  - 111-42-2, 2,2’-iminodiethanol A3 1-3%
- **MAK (German Maximum Workplace Concentration)**
  - 111-42-2, 2,2’-iminodiethanol 3B 1-3%
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - None of the ingredients is listed.

### Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

### 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**
  - H227 Combustible liquid.
  - H302 Harmful if swallowed.
  - H315 Causes skin irritation.
  - H318 Causes serious eye damage.
  - H319 Causes serious eye irritation.
  - H335 May cause respiratory irritation.
  - H351 Suspected of causing cancer.
  - H373 May cause damage to organs through prolonged or repeated exposure.

- **Department issuing SDS:** Technical department
- **Contact:** Dr. John F. Plummer
- **Date of preparation / previous revision:** 04-14-2020

(Contd. on page 10)
**Trade name: Metaterge 1405 Gel**

(Contd. from page 9)

- **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
  - 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)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - Flam. Liq. 4: Flammable liquids, Hazard Category 4
  - Acute Tox. 4: Acute toxicity, Hazard Category 4
  - 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
  - Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
  - Carc. 2: Carcinogenicity, Hazard Category 2
  - STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
  - STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

- *Data compared to the previous version altered.*