1 Identification

- **Product identifier**
  - **Trade name:** 69501, 69508 Rust Mort
  - **Article number:** 69501, 69508, 69504
- **Application of the substance / the mixture** Coating
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** SEM Products Inc.
    - 1685 Overview Drive
    - Rock Hill, SC 29730
    - 803 207 8225
  - **Information department:**
    - cust_care@semproducts.com : SEM Products Inc. 1685 Overview Dr. Rock Hill, SC 29730 : phone 1-800-831-1122, M - TH 7am - 4pm EDT
  - **Emergency telephone number:** CHEMTREC 1-800-424-9300

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.

- **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:**
  - phosphoric acid
- **Hazard statements**
  - H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
  - P260  Do not breathe dusts or mists.
  - 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.
  - P321  Specific treatment (see on this label).
  - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - P363  Wash contaminated clothing before reuse.

(Contd. on page 2)
* **Trade name:** 69501, 69508 Rust Mort

(Contd. of page 1)

**42.2.28**

P301+P330+P331  If swallowed: Rinse mouth. Do NOT induce vomiting.
P405  Store locked up.
P501  Dispose of contents/container in accordance with local/regional/national/international regulations.

* Classification system:
  
  * NFPA ratings (scale 0 - 4)
    
    ![NFPA Ratings]
    
    Health = 3
    Fire = 1
    Reactivity = 0

  * HMIS-ratings (scale 0 - 4)
    
    ![HMIS Ratings]
    
    Health = 3
    Fire = 1
    Reactivity = 0

* Other hazards

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

* **3 Composition/information on ingredients**

  * Chemical characterization: Mixtures
  * Description:
    Mixture: consisting of the following components.
  
  * Weight percentages

<table>
<thead>
<tr>
<th>Substance</th>
<th>Weight Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>phosphoric acid</td>
<td>40 - 60%</td>
</tr>
<tr>
<td>propan-2-ol</td>
<td>1.5 - 5%</td>
</tr>
</tbody>
</table>

* **4 First-aid measures**

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

* **5 Fire-fighting measures**

  * Extinguishing media
  * Suitable extinguishing agents: Use fire fighting measures that suit the environment.
Trade name: 69501, 69508 Rust Mort

- Special hazards arising from the substance or mixture
  During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
  - Protective equipment: Mouth respiratory protective device.

# 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Mount respiratory protective device.
  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:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Use neutralizing agent.
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- 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
    No special measures required.
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  - Information about protection against explosions and fires: Keep respiratory protective device available.
  - 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
  - Components with limit values that require monitoring at the workplace:
    7664-38-2 phosphoric acid
    PEL Long-term value: 1 mg/m³

(Contd. on page 4)
Trade name: 69501,69508 Rust Mort

- REL Short-term value: 3 mg/m³
  Long-term value: 1 mg/m³
- TLV Short-term value: 3 mg/m³
  Long-term value: 1 mg/m³

67-63-0 propan-2-ol

- PEL Long-term value: 980 mg/m³, 400 ppm
- REL Short-term value: 1225 mg/m³, 500 ppm
  Long-term value: 980 mg/m³, 400 ppm
- TLV Short-term value: 984 mg/m³, 400 ppm
  Long-term value: 492 mg/m³, 200 ppm

BEI

- Ingredients with biological limit values:
  67-63-0 propan-2-ol

  - BEI 40 mg/L
    Medium: urine
    Time: end of shift at end of workweek
    Parameter: Acetone (background, nonspecific)

- 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:
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- Protection of hands:
  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 on consideration of the penetration times, rates of diffusion and the degradation

  Protective gloves

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- 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
  The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Trade name: 69501, 69508 Rust Mort

- 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: Liquid
    - Color: According to product specification
  - Odor: Characteristic
  - Odor threshold: Not determined.
  - pH-value: Not determined.
- 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.
  - Auto igniting: Product is not selfigniting.
  - Danger of explosion: Product does not present an explosion hazard.
    In use, may form flammable/explosive vapour-air mixture.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapor pressure at 20 °C: 23 hPa
- Density at 20 °C: 1.18364 g/cm³
- 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: 3.2 %

(Contd. on page 6)
Trade name: 69501, 69508 Rust Mort

Water: 51.6 %
VOC content: 3.2 %
Solids content: 0.3 %

Other information: No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**
  - **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**:
    - **Primary irritant effect**:
      - **on the skin**: Caustic effect on skin and mucous membranes.
      - **on the eye**: Strong caustic effect. Strong irritant with the danger of severe eye injury.
    - **Sensitization**: No sensitizing effects known.
  - **Additional toxicological information**: The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive, Irritant. Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - 67-63-0 propan-2-ol 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.
Trade name: 69501, 69508 Rust Mort

- **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.
    - 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.

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

  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **UN-Number**
  - DOT, ADR, IMDG, IATA: UN1760

- **UN proper shipping name**
  - DOT: Corrosive liquids, n.o.s. (Phosphoric acid solution)
  - ADR: 1760 Corrosive liquids, n.o.s. (Phosphoric acid solution)
  - IMDG, IATA: CORROSIVE LIQUID, N.O.S. (PHOSPHORIC ACID, SOLUTION)

- **Transport hazard class(es)**
  - **DOT**
    - **Class:** 8 Corrosive substances
    - **Label:** 8

  - **ADR, IMDG, IATA**
    - **Class:** 8 Corrosive substances
    - **Label:** 8
Trade name: 69501, 69508 Rust Mort

<table>
<thead>
<tr>
<th>Packing group</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental hazards:</td>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>EMS Number:</td>
<td>F-A,S-B</td>
</tr>
<tr>
<td>Segregation groups</td>
<td>Acids</td>
<td></td>
</tr>
<tr>
<td>Stowage Category</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Stowage Code</td>
<td>SW2 Clear of living quarters.</td>
<td></td>
</tr>
</tbody>
</table>

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

Transport/Additional information:

<table>
<thead>
<tr>
<th>DOT</th>
<th>Quantity limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On passenger aircraft/rail: 5 L</td>
</tr>
<tr>
<td></td>
<td>On cargo aircraft only: 60 L</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ADR</th>
<th>Excepted quantities (EQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Code: E1</td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per inner packaging: 30 ml</td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMDG</th>
<th>Limited quantities (LQ)</th>
<th>Excepted quantities (EQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5L</td>
<td>Code: E1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per inner packaging: 30 ml</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum net quantity per outer packaging: 1000 ml</td>
<td></td>
</tr>
</tbody>
</table>

UN "Model Regulation": UN 1760 CORROSIVE LIQUIDS, N.O.S. (PHOSPHORIC ACID SOLUTION), 8, III

15 Regulatory information

<table>
<thead>
<tr>
<th>Safety, health and environmental regulations/legislation specific for the substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sara</td>
</tr>
<tr>
<td>Section 355 (extremely hazardous substances):</td>
</tr>
<tr>
<td>None of the ingredient is listed.</td>
</tr>
<tr>
<td>Section 313 (Specific toxic chemical listings):</td>
</tr>
<tr>
<td>7664-38-2 phosphoric acid</td>
</tr>
<tr>
<td>67-63-0 propan-2-ol</td>
</tr>
<tr>
<td>TSCA (Toxic Substances Control Act):</td>
</tr>
<tr>
<td>7664-38-2 phosphoric acid</td>
</tr>
<tr>
<td>67-63-0 propan-2-ol</td>
</tr>
<tr>
<td>39430-51-8 CHROMIC ACETATE</td>
</tr>
<tr>
<td>7732-18-5 water, distilled, conductivity or of similar purity</td>
</tr>
</tbody>
</table>
Trade name: 69501, 69508 Rust Mort

· Proposition 65
  · Chemicals known to cause cancer: None of the ingredients is listed.
  · 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.

· Cancerogenity categories
  · EPA (Environmental Protection Agency) None of the ingredients is listed.
  · TLV (Threshold Limit Value established by ACGIH) 67-63-0 propan-2-ol A4
  · NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients is 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: phosphoric acid

· Hazard statements
  H314 Causes severe skin burns and eye damage.

· Precautionary statements
  P260 Do not breathe dusts or mists.
P280 Wear eye protection / face protection.
P264 Wash thoroughly after handling.
P303+P361+P335 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.
P321 Specific treatment (see on this label).
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.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Steve Gaver (sgaver@semproducts.com)
- **Date of preparation / last revision:** 05/31/2016 / 8
- **Abbreviations and acronyms:**
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organisation
  - 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)
  - VOC: Volatile Organic Compounds (USA, EU)
  - 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
  - BEI: Biological Exposure Limit
  - Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1

* Data compared to the previous version altered.