Section 1. Identification

GHS product identifier : SURFOX-T
Product code : 54-A 001 (100 mL), 54-A 003 (500mL), 54-A 005 (1.5 L), 54-A 006 (5 L), 54-A 007 (20 L), 54-A 008 (208 L)
SDS no. : S-01E
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Heavy duty weld cleaning electrolyte for SURFOX machines.

Manufacturer : Walter Surface Technologies Inc.
810 Day Hill Road
Windsor, CT 06095
United States
General Information: 1-866-592-5837
info.us@walter.com
www.walter.com

Emergency telephone number (with hours of operation) : INFOTRAC® 1-800-535-5053. International call collect: 1-352-323-3500
24 hours/day, 7 days/week.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture : SKIN CORROSION/IRRITATION - Category 1B
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms : 

Signal word : Danger
Hazard statements : H314 - Causes severe skin burns and eye damage.

Precautionary statements


Response : P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 + P363 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Section 2. Hazards identification

Immediately call a POISON CENTER or physician.

Storage : P405 - Store locked up.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>: Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>: 54-A 001 (100 mL), 54-A 003 (500 mL), 54-A 005 (1.5 L), 54-A 006 (5 L), 54-A 007 (20 L), 54-A 008 (208 L)</td>
</tr>
</tbody>
</table>

### Ingredient name | % | CAS number
--- | --- | ---
Phosphoric acid | ≥25 - ≤50 | 7664-38-2

The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

**Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately.

**Skin contact** : Get medical attention if irritation or discomfort occurs. Wash skin thoroughly with plenty of soap and water. Continue to rinse for at least 20 minutes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

Most important symptoms/effects, acute and delayed

Potential acute health effects
Section 4. First aid measures

Eye contact: Causes serious eye damage.
Inhalation: No known significant effects or critical hazards.
Skin contact: Causes severe burns.
Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:
- pain
- watering
- redness

Inhalation: No known significant effects or critical hazards.
Skin contact: Adverse symptoms may include the following:
- pain or irritation
- redness
- blistering may occur

Ingestion: Adverse symptoms may include the following:
- stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments: No specific treatment.
Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical

Hazardous thermal decomposition products: Decomposition products may include the following materials:
- phosphorus oxides

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**

**Small spill**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill**: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

**Precautions for safe handling**

**Protective measures**: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene**: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid</td>
<td>ACGIH TLV (United States, 3/2017). TWA: 1 mg/m³ 8 hours. STEL: 3 mg/m³ 15 minutes. NIOSH REL (United States, 10/2016). TWA: 1 mg/m³ 10 hours. STEL: 3 mg/m³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 1 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

### Appropriate engineering controls

No personal respiratory protective equipment normally required. Avoid breathing dust/ fume/gas/mist/vapors/spray. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

#### Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### Skin protection

##### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

##### Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Respiratory protection

Use a NIOSH/MSHA approved respirator if there is a risk of exposure at levels exceeding the exposure limits. Advice should be sought from respiratory protection specialists.
Section 9. Physical and chemical properties

**Appearance**
- **Physical state**: Liquid.
- **Color**: Clear.
- **Odor**: Odorless.
- **Odor threshold**: Not available.
- **pH**: <1
- **Melting point**: 0°C (32°F)
- **Boiling point**: 115°C (239°F)
- **Flash point**: Closed cup: >93.3°C (>199.9°F)
- **Evaporation rate**: Not available.
- **Flammability**: Not available.
- **Lower and upper explosive limits**: Not available.
- **Vapor pressure**: Not available.
- **Vapor density**: Not available.
- **Relative density**: 1.5 to 1.7 g/ml @ 20°C (68°F)
- **Solubility**: Soluble in the following materials: cold water and hot water.
- **Partition coefficient**: Not available.
- **Auto-ignition temperature**: Not available.
- **Decomposition temperature**: Not available.
- **Viscosity**: Not available.
- **Flow time (ISO 2431)**: Not available.
- **VOC content**: 0 % (w/w)

Section 10. Stability and reactivity

**Reactivity**: No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**: The product is stable.

**Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**: No specific data.

**Incompatible materials**: Reactive or incompatible with the following materials: metals and alkalis. Avoid contact with water. Reacts violently with: sulfides, phosphides, cyanides, silicides and carbides. The reactions release poisonous gases.

**Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Information on toxicological effects

Acute toxicity
There is no data available.

Irritation/Corrosion
There is no data available.

Sensitization
There is no data available.

Mutagenicity
There is no data available.

Carcinogenicity
There is no data available.

Reproductive toxicity
There is no data available.

Teratogenicity
There is no data available.

Specific target organ toxicity (single exposure)
There is no data available.

Specific target organ toxicity (repeated exposure)
There is no data available.

Aspiration hazard
There is no data available.

Information on the likely routes of exposure
- Dermal contact.
- Eye contact.
- Inhalation.
- Ingestion.

Potential acute health effects

Eye contact
- Causes serious eye damage.

Inhalation
- No known significant effects or critical hazards.

Skin contact
- Causes severe burns.

Ingestion
- No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact
- Adverse symptoms may include the following:
  - pain
  - watering
  - redness

Inhalation
- No known significant effects or critical hazards.

Skin contact
- Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur

Ingestion
- Adverse symptoms may include the following:
  - stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
Section 11. Toxicological information

**Potential immediate effects**
No known significant effects or critical hazards.

**Potential delayed effects**
No known significant effects or critical hazards.

**Long term exposure**
No known significant effects or critical hazards.

**Potential immediate effects**
No known significant effects or critical hazards.

**Potential delayed effects**
No known significant effects or critical hazards.

**Potential chronic health effects**

- **General**
  No known significant effects or critical hazards.

- **Carcinogenicity**
  No known significant effects or critical hazards.

- **Mutagenicity**
  No known significant effects or critical hazards.

- **Teratogenicity**
  No known significant effects or critical hazards.

- **Developmental effects**
  No known significant effects or critical hazards.

- **Fertility effects**
  No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**
There is no data available.

Section 12. Ecological information

**Toxicity**
There is no data available.

**Persistence and degradability**
There is no data available.

**Bioaccumulative potential**
There is no data available.

**Mobility in soil**

- **Soil/water partition coefficient (K_{OC})**
  Not available.

**Other adverse effects**
No known significant effects or critical hazards.

Section 13. Disposal considerations

**Disposal methods**
The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Section 14. Transport information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN1805</td>
<td>UN1805</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>PHOSPHORIC ACID, SOLUTION</td>
<td>PHOSPHORIC ACID, SOLUTION</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

**DOT-RQ Details**
- Phosphoric acid
- **Reportable quantity**: 12066.4 lbs / 5478.1 kg [1340 gal / 5072.3 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**Special precautions for user**
- **Transport within user’s premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Protect from freezing. Freezing will damage product and render it unusable.

**AERG**: 154

Section 15. Regulatory information

**U.S. Federal regulations**
- **United States inventory (TSCA 8b)**: All components are listed or exempted.
- **Clean Water Act (CWA) 311**: Phosphoric acid

**Clean Air Act Section 112**
- (b) Hazardous Air Pollutants (HAPs): Not listed
- Class I Substances: Not listed
- Class II Substances: Not listed

**DEA List I Chemicals**
- (Precursor Chemicals): Not listed
- (Essential Chemicals): Not listed

**SARA 302/304**
- **Composition/information on ingredients**: No products were found.
- **SARA 304 RQ**: Not applicable.
Section 15. Regulatory information

SARA 311/312

Classification: SKIN CORROSION/IRRITATION - Category 1B
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>Classification</th>
</tr>
</thead>
</table>
| Phosphoric acid | SKIN CORROSION/IRRITATION - Category 1B
               | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1     |

SARA 313

There is no data available.

State regulations

Massachusetts: The following components are listed: Phosphoric acid
New York: The following components are listed: Phosphoric acid
New Jersey: The following components are listed: Phosphoric acid
Pennsylvania: The following components are listed: Phosphoric acid

California Prop. 65

No products were found.

International lists

National inventory

Australia: All components are listed or exempted.
Canada: All components are listed or exempted.
China: All components are listed or exempted.
Europe: All components are listed or exempted.
Malaysia: All components are listed or exempted.
New Zealand: All components are listed or exempted.
Philippines: All components are listed or exempted.
Republic of Korea: All components are listed or exempted.
Taiwan: All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKIN CORROSION/IRRITATION - Category 1B</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1</td>
<td>On basis of test data</td>
</tr>
</tbody>
</table>

History

Date of issue mm/dd/yyyy: 07/30/2018
Date of previous issue: 05/15/2018
Version: 4
Prepared by: KMK Regulatory Services Inc.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.