SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Product Code 13680
Product Name Descaler

Other means of identification

Recommended use of the chemical and restrictions on use
Use only for the purpose on the product label.

Details of the supplier of the safety data sheet

Manufacturer / Manufactured For
Team Systems
2723 Dove Country Drive
Stafford, TX 77477
Phone: 1 (800) 652-0717

Emergency telephone number
24 Hour Emergency Phone Number 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1</td>
<td>Sub-category B</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
<td></td>
</tr>
<tr>
<td>Acute aquatic toxicity</td>
<td>Category 2</td>
<td></td>
</tr>
<tr>
<td>Chronic aquatic toxicity</td>
<td>Category 2</td>
<td></td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Danger

Hazard statements
Causes severe skin burns and eye damage
Toxic to aquatic life with long lasting effects

Appearance Clear, Red
Physical state Liquid
Odor Acrid

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Precautionary Statements - Response
Specific Treatment (See Section 4 on the SDS).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Not likely to occur under conditions of use.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Drink plenty of water. See a physician immediately.

Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed. Store in a cool, dry place away from reactive metals or concentrated bases. Keep locked up and out of the reach of children.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Other Information
Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>7664-38-2</td>
<td>10-30</td>
<td>*</td>
</tr>
<tr>
<td>Alcohols, C6-10, ethoxylated propoxylated</td>
<td>68987-81-5</td>
<td>.1-1</td>
<td>*</td>
</tr>
<tr>
<td>Nonylphenol Polyethylene Glycol Ether</td>
<td>127087-87-0</td>
<td>.1-1</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Skin Contact
Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. For minor skin contact, avoid spreading material on unaffected skin. For severe burns, immediate medical attention is required.

Eye contact
Immediate medical attention is required. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

Inhalation
Not an expected route of exposure.

Ingestion
Immediate medical attention is required. Rinse mouth. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms and effects, both acute and delayed

Symptoms
Irritation or burning to mucous membranes. May cause irritation and/or burning to eyes and skin.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media  Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions
Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Dilute material with sodium bicarbonate solution or chalk dust to a pH of greater than 6.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Always add acid to water.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

Incompatible materials
Alkaline material, zinc and aluminum.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Phosphoric Acid
7664-39-2

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>$&lt; 2$</td>
<td>1% solution</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.173</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>$&gt; 212 / ^\circ F$ Degrees</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>$&lt; 1$</td>
<td>(butyl acetate = 1)</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No Information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No Information available</td>
<td></td>
</tr>
</tbody>
</table>

Other Information

Density Lbs/Gal
VOC Content (%) 0

10. STABILITY AND REACTIVITY
Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
No special precautions beyond standard safe industrial practices.

Incompatible materials
Alkaline material, zinc and aluminum.

Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating and toxic gases and vapors. Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
The primary effects and toxicity of this material are due to it corrosive nature.

Inhalation
Causes burns.

Eye contact
Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact
The product causes burns of eyes, skin and mucous membranes.

Ingestion
Causes burns.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid 7664-38-2</td>
<td>= 1530 mg/kg (Rat)</td>
<td>= 2740 mg/kg (Rabbit)</td>
<td>&gt; 850 mg/m³ (Rat) 1 h</td>
</tr>
<tr>
<td>Alcohols, C6-10, ethoxylated propoxylated 68987-81-5</td>
<td>= 2745 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rat)</td>
<td>&gt; 50 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Nonylphenol Polyethylene Glycol Ether 127087-87-0</td>
<td>= 1310 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on toxicological effects

No Information available.

Symptoms
No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Corrosivity
Causes burns. Extremely corrosive and destructive to tissue. Risk of serious damage to eyes.

Sensitization
No Information available.

Germ cell mutagenicity
No Information available.

Carcinogenicity
No Information available.

Reproductive toxicity
No Information available.

STOT - single exposure
No Information available.

STOT - repeated exposure

Chronic toxicity
Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.

Target organ effects
EYES, Respiratory system, Skin.

Aspiration hazard
No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document.

### 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

0.76% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>-</td>
<td>3 - 3.5: 96 h Gambusia affinis mg/L LC50</td>
<td>4.6: 12 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Persistence and degradability

No Information available.

#### Bioaccumulation

No Information available.

#### Other adverse effects

No Information available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

#### Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Contaminated packaging

Do not reuse container.

#### US EPA Waste Number

D002

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>Corrosive</td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under 49 CFR, IATA and IMDG to assure regulatory compliance.

#### DOT

**DOT Proper Shipping name**

UN1760, Corrosive liquid, n.o.s. (contains phosphoric acid), 8, PG II

### 15. REGULATORY INFORMATION

#### International Inventories

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
</tr>
<tr>
<td>PICCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory.
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List.
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.
- ENCS - Japan Existing and New Chemical Substances.
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

- Acute health hazard: Yes
- Chronic Health Hazard: Yes
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>5000 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>5000 lb</td>
<td>-</td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
<td></td>
<td>RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric Acid</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7664-38-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

U.S. EPA Label Information
EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

HMIS
Health hazards 3  Flammability 0  Physical hazards 0  Personal protection X

Legend
N/A - Not Applicable
N/E - Not Established
N/D - Not Determined
N/K - Not Known

Issue Date 20-May-2014
Revision Date 21-Jan-2015
Revision Note New format
Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the
date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,
transportation, disposal and release and is not to be considered a warranty or quality specification. The information
relates only to the specific material designated and may not be valid for such material used in combination with any other
materials or in any process, unless specified in the text.

End of Safety Data Sheet