1. IDENTIFICATION

Product Name: Coffee Maker DeScaler

Other means of identification:

Product Code(s): 1424192

Recommended use of the chemical and restrictions on use:

Recommended Use: General Purpose Cleaner - Non-aerosol

Restrictions on use: No information available

Details of the supplier of the safety data sheet:

Supplier Identification: SerVaas Laboratories

Address: 5240 Walt Place
Indianapolis
Indiana
46254
United States

Telephone: Phone:800-433-5818
Fax:317-264-2192

E-mail: sison@barkeepersfriend.com

Emergency telephone number:

Company Emergency Phone Number: 800-433-5818

2. HAZARDS IDENTIFICATION

Classification:

Skin corrosion/irritation: Category 1
Serious eye damage/eye irritation  Category 1

Appearance  Clear to light yellow  Physical state  Liquid  Odor  Characteristic

GHS Label elements, including precautionary statements

Danger

Hazard statements
Causes severe skin burns and eye damage

Precautionary Statements - Prevention
Do not breathe dusts or mists
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor
Specific treatment (see supplemental first aid instructions on this label)

Eyes
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

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

Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Immediately call a POISON CENTER or doctor

Ingestion
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage
Store locked up

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

Other information
Unknown acute toxicity
19.66 % of the mixture consists of ingredient(s) of unknown toxicity
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
19.66 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
19.66 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
19.66 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
12.89 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Hazardous Material Information Review Act registry number (HMIRA registry #)</th>
<th>Date HMIRA filed and date exemption granted (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid</td>
<td>77-92-9</td>
<td>≤10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycolic acid</td>
<td>79-14-1</td>
<td>≤10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfamic acid</td>
<td>5329-14-6</td>
<td>≤5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General advice

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. 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. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.

Ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms

Burning sensation.

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.

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 gases and vapors.

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact: None.
Sensitivity to Static Discharge: None.

Special protective equipment for fire-fighters
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

Other Information
Refer to protective measures listed in Sections 7 and 8.

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
Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities
Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Face protection shield.

Hand protection

Wear suitable gloves. Impervious gloves.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>2</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
</tbody>
</table>
### Upper flammability limit
No data available

### Lower flammability limit
No data available

### Vapor pressure
No data available

### Vapor density
No data available

### Relative density
1.076

### Water Solubility
Miscible in water

### Solubility
No data available

### Partition coefficient: n-octanol/water
Not applicable

### Autoignition temperature
No data available

### Decomposition temperature
No data available

### Kinematic viscosity
No data available

### Dynamic viscosity
No data available

### Other Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Softening Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Liquid Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Particle Size</td>
<td>No information available</td>
</tr>
<tr>
<td>Particle Size Distribution</td>
<td>No information available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Possibility of Hazardous Reactions</td>
<td>None under normal processing.</td>
</tr>
<tr>
<td>Hazardous Polymerization</td>
<td>Hazardous polymerization does not occur.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Exposure to air or moisture over prolonged periods.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Carbon oxides.</td>
</tr>
</tbody>
</table>

### 11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Information on likely routes of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
</tr>
</tbody>
</table>
Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact**
Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.

**Ingestion**
Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

**Information on toxicological effects**

**Symptoms**
Redness. Burning. May cause blindness. Coughing and/or wheezing.

**Numerical measures of toxicity**

**Acute Toxicity**
The following values are calculated based on chapter 3.1 of the GHS document.

<table>
<thead>
<tr>
<th>Component Information</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid</td>
<td>= 3000 mg/kg (Rat) = 3 g/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Glycolic acid</td>
<td>= 1950 mg/kg (Rat)</td>
<td>-</td>
<td>&gt; 5.2 mg/L (Rat) 4 h = 3.6 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Sulfamic acid</td>
<td>= 1450 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

**Skin corrosion/irritation**
Classification based on data available for ingredients. Causes burns.

**Serious eye damage/eye irritation**
Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.

**Respiratory or skin 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.
12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid</td>
<td>-</td>
<td>96h LC50: = 1516 mg/L (Lepomis macrochirus)</td>
<td>-</td>
<td>72h EC50: = 120 mg/L</td>
</tr>
<tr>
<td>Glycolic acid</td>
<td>-</td>
<td>96h LC50: &gt; 5000 mg/L (Brachydanio rerio)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sulfamic acid</td>
<td>-</td>
<td>96h LC50: = 14.2 mg/L (Pimephales promelas)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Persistence and Degradability
No information available.

Bioaccumulation

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid</td>
<td>-1.72</td>
</tr>
<tr>
<td>Glycolic acid</td>
<td>-1.11</td>
</tr>
</tbody>
</table>

Mobility
No information available.

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging
Do not reuse empty containers.

US EPA Waste Number
D002

California Waste Codes
791

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name
CONSUMER COMMODITY
Hazard Class
ORM-D
Description
CONSUMER COMMODITY, ORM-D
Emergency Response Guide Number
153
TDG
UN-No. UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID, GLYCOLIC ACID), 8, II

MEX
UN-No. UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID, GLYCOLIC ACID), 8, II

ICAO
UN-No. UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID, GLYCOLIC ACID), 8, II

IATA
UN-No. UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II
ERG Code 8L
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID, GLYCOLIC ACID), 8, II

IMDG/IMO
UN-No. UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II
EmS-No. F-A, S-B
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID, GLYCOLIC ACID), 8, II

RID
UN-No. UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Hazard Class 8
Packing Group II
Classification code C3
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID, GLYCOLIC ACID), 8, II
ADR/RID-Labels 8

ADR
UN-No. UN3265
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
| **Hazard Class** | 8 |
| **Packing Group** | II |
| **Classification code** | C3 |
| **Tunnel restriction code** | (E) |
| **Description** | UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID, GLYCOLIC ACID), 8, II, (E) |

**ADN**

| **UN-No.** | UN3265 |
| **Proper Shipping Name** | CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. |
| **Hazard Class** | 8 |
| **Packing Group** | II |
| **Classification code** | C3 |
| **Special Provisions** | 274 |
| **Description** | UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID, GLYCOLIC ACID), 8, II |
| **Hazard Labels** | 8 |
| **Limited Quantity** | 1 L |

### 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**International Regulations**

- **Ozone-depleting substances (ODS)** Not applicable
- **Persistent Organic Pollutants** Not applicable
- **Export Notification requirements** Not applicable

**International Inventories**

| **TSCA** | Contact supplier for inventory compliance status. |
| **DSL/NDSL** | Contact supplier for inventory compliance status. |
| **EINECS/ELINCS** | Contact supplier for inventory compliance status. |
| **ENCS** | Contact supplier for inventory compliance status. |
| **KECL** | Contact supplier for inventory compliance status. |
| **PICCS** | Contact supplier for inventory compliance status. |
| **AICS** | Contact supplier for inventory compliance status. |

**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
- **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**
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

**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)

**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>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid 77-92-9</td>
<td></td>
<td></td>
<td>RQ Section number 180.950</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>
<th>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfamic acid 5329-14-6</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**16. OTHER INFORMATION**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date
29-Nov-2017

Revision Note
No information available

**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