

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| Product name                  | : | ACID FOAM PLUS  |
|-------------------------------|---|---|
| Other means of identification | : | Not applicable  |
| Recommended use               | : | Cleaning product  |
| Restrictions on use           | : | Reserved for industrial and professional use.   |
| Product dilution information  | • | 1.0 % - 3.13 %  |
| Company                       | : | Ecolab Inc.<br>370 N. Wabasha Street<br>St. Paul, Minnesota USA 55102<br>1-800-352-5326 |
| Emergency telephone           | : | 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)                                 |
| Issuing date                  | : | 11/18/2014  |

### **SECTION 2. HAZARDS IDENTIFICATION**

#### **GHS Classification**

| <b>Product AS SOLD</b><br>Acute toxicity (Inhalation)<br>Skin corrosion<br>Serious eye damage | : Category 4<br>: Category 1A<br>: Category 1  |
|---|--|
| Product AT USE DILUTION<br>Skin corrosion<br>Serious eye damage                               | : Category 1A<br>: Category 1  |
| GHS Label element   |  |
| Product AS SOLD<br>Hazard pictograms  |  |
| Signal Word   | : Danger   |
| Hazard Statements   | : Causes severe skin burns and eye damage.<br>Harmful if inhaled.  |
| Precautionary Statements  | <ul> <li>Prevention:<br/>Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin<br/>thoroughly after handling. Use only outdoors or in a well-ventilated<br/>area. Wear protective gloves/ protective clothing/ eye protection/ face<br/>protection. Do not mix with bleach or other chlorinated products – will<br/>cause chlorine gas.</li> <li>Response:<br/>IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN<br/>(or hair): Remove/ Take off immediately all contaminated clothing.<br/>Rinse skin with water/ shower. IF INHALED: Remove victim to fresh<br/>air and keep at rest in a position comfortable for breathing. IF IN</li> </ul> |

|  | EYES: Rinse cautiously with water for several minutes. Remove<br>contact lenses, if present and easy to do. Continue rinsing.<br>Immediately call a POISON CENTER or doctor/ physician. Wash<br>contaminated clothing before reuse.<br><b>Storage:</b><br>Store locked up.<br><b>Disposal:</b><br>Dispose of contents/ container to an approved waste disposal plant.  |
|--|--|
| Product AT USE DILUTION<br>Hazard pictograms |  |
| Signal Word                                  | : Danger   |
| Hazard Statements                            | : Causes severe skin burns and eye damage.   |
| Precautionary Statements                     | <ul> <li>Prevention:</li> <li>Wash skin thoroughly after handling. Wear protective gloves/<br/>protective clothing/ eye protection/ face protection. Do not mix with<br/>bleach or other chlorinated products – will cause chlorine gas.</li> <li>Response:</li> <li>IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN<br/>(or hair): Remove/ Take off immediately all contaminated clothing.<br/>Rinse skin with water/ shower. IF INHALED: Remove victim to fresh<br/>air and keep at rest in a position comfortable for breathing. IF IN<br/>EYES: Rinse cautiously with water for several minutes. Remove<br/>contact lenses, if present and easy to do. Continue rinsing.<br/>Immediately call a POISON CENTER or doctor/ physician. Wash<br/>contaminated clothing before reuse.</li> <li>Storage:<br/>Store locked up.</li> <li>Disposal:</li> <li>Dispose of contents/ container to an approved waste disposal plant.</li> </ul> |
| Other hazards                                | : None known.  |
| SECTION 3. COMPOSITION/IN                    | FORMATION ON INGREDIENTS   |
| Product AS SOLD<br>Pure substance/mixture    | Mixture  |

| Chemical Name                 | CAS-No.    | Concentration (%) |
|-------------------------------|------------|-------------------|
| Phosphoric acid               | 7664-38-2  | 10 - 30           |
| methanesulphonic acid         | 75-75-2    | 1 - 5             |
| alcohols, c10-14, ethoxylated | 66455-15-0 | 1 - 5             |
| Product AT USE DILUTION       |            |                   |
| Chemical Name                 | CAS-No.    | Concentration (%) |
| Phosphoric acid               | 7664-38-2  | 0.1 - 1           |

### **SECTION 4. FIRST AID MEASURES**

### Product AS SOLD

In case of eye contact

: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do.

| ACID FOAM PLUS  |   |  |
|---|---|--|
|   | - | Continue rinsing. Get medical attention immediately.   |
| In case of skin contact   | : | Wash off immediately with plenty of water for at least 15 minutes. Use<br>a mild soap if available. Wash clothing before reuse. Thoroughly clean<br>shoes before reuse. Get medical attention immediately. |
| If swallowed  | : | Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.  |
| If inhaled  | : | Remove to fresh air. Treat symptomatically. Get medical attention.   |
| Protection of first-aiders  | : | If potential for exposure exists refer to Section 8 for specific personal protective equipment.  |
| Notes to physician  | : | Treat symptomatically.   |
| Most important symptoms<br>and effects, both acute and<br>delayed | : | See Section 11 for more detailed information on health effects and symptoms.   |
| Product AT USE DILUTION   |   |  |
| In case of eye contact  | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.            |
| In case of skin contact   | : | Wash off immediately with plenty of water for at least 15 minutes. Use<br>a mild soap if available. Wash clothing before reuse. Thoroughly clean<br>shoes before reuse. Get medical attention immediately. |
| If swallowed  | : | Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.  |
| If inhaled  | : | Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.   |
|   |   |  |

# SECTION 5. FIRE-FIGHTING MEASURES

| <b>Product AS SOLD</b><br>Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  |
|--|---|--|
| Unsuitable extinguishing media                         | : | None known.  |
| Specific hazards during fire fighting                  | : | Not flammable or combustible.  |
| Hazardous combustion products                          | : | Decomposition products may include the following materials:<br>Carbon oxides<br>Nitrogen oxides (NOx)<br>Sulfur oxides<br>Oxides of phosphorus |
| Special protective equipment for fire-fighters         | : | Use personal protective equipment.   |

| Specific extinguishing methods         | : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes. |  |
|--|---|--|
| SECTION 6. ACCIDENTAL RELEASE MEASURES |   |  |

#### Product AS SOLD Personal precautions, : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. protective equipment and emergency procedures When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8. **Environmental precautions** : Do not allow contact with soil, surface or ground water. Methods and materials for : Stop leak if safe to do so. Contain spillage, and then collect with noncontainment and cleaning up combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Product AT USE DILUTION Personal precautions, Ensure adequate ventilation. Keep people away from and upwind of protective equipment and spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. emergency procedures When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8. Environmental precautions : Do not allow contact with soil, surface or ground water. Methods and materials for : Stop leak if safe to do so. Contain spillage, and then collect with noncontainment and cleaning up combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### **SECTION 7. HANDLING AND STORAGE**

| <b>Product AS SOLD</b><br>Advice on safe handling         | : | Do not ingest. Do not get in eyes, on skin, or on clothing. Do not<br>breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate<br>ventilation. Wash hands thoroughly after handling. Do not mix with<br>bleach or other chlorinated products – will cause chlorine gas. |
|---|---|---|
| Conditions for safe storage                               | : | Keep away from strong bases. Keep out of reach of children. Store in suitable labeled containers.   |
| Storage temperature                                       | : | -15 °C to 45 °C   |
| <b>Product AT USE DILUTION</b><br>Advice on safe handling | : | Do not ingest. Do not get in eyes, on skin, or on clothing. Do not<br>breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate<br>ventilation. Wash hands thoroughly after handling. Do not mix with  |
|   |   | bleach or other chlorinated products - will cause chlorine gas.   |

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Product AS SOLD

Ingredients with workplace control parameters

| Ingredients                                     | CAS-No.                                    | Form of exposure                           | Permissible concentration  | Basis                             |
|---|--|--|--|-----------------------------------|
| Phosphoric acid                                 | 7664-38-2                                  | TWA  | 1 mg/m3  | ACGIH                             |
|   |  | STEL                                       | 3 mg/m3  | ACGIH                             |
|   |  | TWA  | 1 mg/m3  | NIOSH REL                         |
|   |  | STEL                                       | 3 mg/m3  | NIOSH REL                         |
|   |  | TWA  | 1 mg/m3  | OSHA Z1                           |
| Engineering measures                            |  | haust ventilation s<br>pational exposure   | ystem. Maintain air co<br>standards.   | oncentrations                     |
| Personal protective equipm                      | nent                                       |  |  |                                   |
| Eye protection                                  | : Safety gogg<br>Face-shield               |  |  |                                   |
| Hand protection                                 | Standard gl<br>Gloves sho                  | ove type.                                  | rotective equipment:<br>nd replaced if there is<br>kthrough.   | any indication of                 |
| Skin protection                                 |  | otective equipmen<br>les and protective    | t comprising: suitable clothing  | protective gloves,                |
| Respiratory protection                          |  | ers are facing conc<br>propriate certified | centrations above the respirators.   | exposure limit they               |
| Hygiene measures                                | practice. Re<br>Wash face,<br>Provide suit | move and wash c<br>hands and any ex        | od industrial hygiene<br>ontaminated clothing<br>posed skin thoroughly<br>uick drenching or flus<br>r splash hazard. | before re-use.<br>after handling. |
| Product AT USE DILUTION<br>Engineering measures |  | haust ventilation s<br>pational exposure   | ystem. Maintain air co<br>standards.   | oncentrations                     |
| Personal protective equipm                      | nent                                       |  |  |                                   |
| Eye protection                                  | : Safety gogg<br>Face-shield               |  |  |                                   |
| Hand protection                                 | Standard gl<br>Gloves sho                  | ove type.                                  | rotective equipment:<br>nd replaced if there is<br>kthrough.   | any indication of                 |
| Skin protection                                 |  | otective equipmen<br>les and protective    | t comprising: suitable clothing  | protective gloves,                |

| Respiratory protection                      | : | When workers are facing c<br>must use appropriate certif | oncentrations above the exposure limit they ied respirators. |  |
|---|---|--|--|--|
| SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES |   |  |  |  |
|   |   | Product AS SOLD  | Product AT USE DILUTION                                      |  |
| Appearance                                  | : | liquid   | liquid   |  |
| Color                                       | : | clear, brown   | colored  |  |
| Odor  | : | slight   | odorless   |  |
| рН  | : | 0.5 - 1.5, 100 %   | 1.2 - 2.4  |  |
| Flash point                                 | : | Not applicable   |  |  |
| Odor Threshold                              | : | No data available  |  |  |
| Melting point/freezing point                | : | No data available  |  |  |
| Initial boiling point and boiling range     | : | > 100 °C   |  |  |
| Evaporation rate                            | : | No data available  |  |  |
| Flammability (solid, gas)                   | : | No data available  |  |  |
| Upper explosion limit                       | : | No data available  |  |  |
| Lower explosion limit                       | : | No data available  |  |  |
| Vapor pressure                              | : | No data available  |  |  |
| Relative vapor density                      | : | No data available  |  |  |
| Relative density                            | : | 1.165 - 1.205  |  |  |
| Water solubility                            | : | soluble  |  |  |
| Solubility in other solvents                | : | No data available  |  |  |
| Partition coefficient: n-<br>octanol/water  | : | No data available  |  |  |
| Autoignition temperature                    | : | No data available  |  |  |
| Thermal decomposition                       | : | No data available  |  |  |
| Viscosity, kinematic                        | : | No data available  |  |  |
| Explosive properties                        | : | No data available  |  |  |
| Oxidizing properties                        | : | No data available  |  |  |
|   |   |  |  |  |

# SECTION 10. STABILITY AND REACTIVITY

: No data available

: No data available

| Product AS SOLD<br>Chemical stability | : | Stable under normal conditions.   |
|---------------------------------------|---|---|
| Possibility of hazardous reactions    | : | Do not mix with bleach or other chlorinated products – will cause chlorine gas. |
| Conditions to avoid                   | : | None known.   |
| Incompatible materials                | : | Metals<br>Bases   |

Molecular weight

VOC

|  | Organic materials   |
|--|---|
| Hazardous decomposition products         | <ul> <li>Decomposition products may include the following materials:<br/>Carbon oxides<br/>Nitrogen oxides (NOx)<br/>Sulfur oxides</li> </ul> |
|  | Oxides of phosphorus  |
| SECTION 11. TOXICOLOGICA                 |   |
| Information on likely routes of exposure | : Inhalation, Eye contact, Skin contact   |
| Potential Health Effects                 |   |
| Product AS SOLD                          |   |
| Eyes                                     | : Causes serious eye damage.  |
| Skin                                     | : Causes severe skin burns.   |
| Ingestion                                | : Causes digestive tract burns.   |
| Inhalation                               | : Harmful if inhaled. May cause nose, throat, and lung irritation.  |
| Chronic Exposure                         | : Health injuries are not known or expected under normal use.   |
| Product AT USE DILUTION                  |   |
| Eyes                                     | : Causes serious eye damage.  |
| Skin                                     | : Causes severe skin burns.   |
| Ingestion                                | : Causes digestive tract burns.   |
| Inhalation                               | : May cause nose, throat, and lung irritation.  |
| Chronic Exposure                         | : Health injuries are not known or expected under normal use.   |
| Experience with human expos              | sure  |
| Product AS SOLD                          |   |
| Eye contact                              | : Redness, Pain, Corrosion  |
|  |   |

| Eye contact             | • | Redness, Pain, Corrosion      |
|-------------------------|---|-------------------------------|
| Skin contact            | : | Redness, Pain, Corrosion      |
| Ingestion               | : | Corrosion, Abdominal pain     |
| Inhalation              | : | Respiratory irritation, Cough |
| Product AT USE DILUTION |   |                               |
| Eye contact             | • | Redness, Pain, Corrosion      |
| Skin contact            | : | Redness, Pain, Corrosion      |
| Ingestion               | : | Corrosion, Abdominal pain     |
| Inhalation              | : | Respiratory irritation, Cough |
|                         |   |                               |

Toxicity

| Product AS SOLD                   |   |   |
|-----------------------------------|---|---|
| Acute oral toxicity               | : | Acute toxicity estimate : > 5,000 mg/kg |
| Acute inhalation toxicity         | : | 4 h Acute toxicity estimate : 3.54 mg/l |
| Acute dermal toxicity             | : | Acute toxicity estimate : > 5,000 mg/kg |
| Skin corrosion/irritation         | : | No data available                       |
| Serious eye damage/eye irritation | : | No data available                       |
| Respiratory or skin sensitization | : | No data available                       |
| Carcinogenicity                   | : | No data available                       |
| Reproductive effects              | : | No data available                       |
| Germ cell mutagenicity            | : | No data available                       |
| Teratogenicity                    | : | No data available                       |
| STOT-single exposure              | : | No data available                       |
| STOT-repeated exposure            | : | No data available                       |
| Aspiration toxicity               | : | No data available                       |

# SECTION 12. ECOLOGICAL INFORMATION

#### Product AS SOLD Ecotoxicity

| Ecotoxicity   |    |   |
|---|----|---|
| Environmental Effects                               |    | Harmful to aquatic life.                                    |
| Product   |    |   |
| Toxicity to fish                                    | :  | No data available   |
| Toxicity to daphnia and other aquatic invertebrates | :  | No data available   |
| Toxicity to algae                                   | :  | No data available   |
| Ingredients   |    |   |
| Toxicity to fish                                    | :  | Phosphoric acid<br>96 h LC50: 75.1 mg/l                     |
|   |    | alcohols, c10-14, ethoxylated<br>96 h LC50 Fish: 1.125 mg/l |
| Ingredients   |    |   |
| Toxicity to daphnia and other aquatic invertebrates | :  | methanesulphonic acid<br>48 h EC50 Daphnia : 70 mg/l        |
| Persistence and degradabili                         | ty |   |
| No data available                                   |    |   |
| Bioaccumulative potential                           |    |   |
| No data available                                   |    |   |
| Mobility in soil                                    |    |   |
| No data available                                   |    |   |
|   |    |   |

### Other adverse effects

No data available

| SECTION 13. DISPOSAL CONSIDERATIONS  |  |  |  |
|--|--|--|--|
| Product AS SOLD<br>Disposal methods  | : The product should not be allowed to enter drains, water courses or<br>the soil. Where possible recycling is preferred to disposal or<br>incineration. If recycling is not practicable, dispose of in compliance<br>with local regulations. Dispose of wastes in an approved waste<br>disposal facility. |  |  |
| Disposal considerations  | : Dispose of as unused product. Empty containers should be taken to<br>an approved waste handling site for recycling or disposal. Do not re-<br>use empty containers. Dispose of in accordance with local, state, and<br>federal regulations.  |  |  |
| RCRA - Resource<br>Conservation and Recovery<br>Authorization Act Hazardous<br>waste | : D002 (Corrosive)   |  |  |
| Product AT USE DILUTION<br>Disposal methods  | : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.   |  |  |
| Disposal considerations  | : Dispose of as unused product. Empty containers should be taken to<br>an approved waste handling site for recycling or disposal. Do not re-<br>use empty containers. Dispose of in accordance with local, state, and<br>federal regulations.  |  |  |

### **SECTION 14. TRANSPORT INFORMATION**

### Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

### Land transport (DOT)

| UN number  | : | 1805   |
|--|---|--|
| Description of the goods   | : | Phosphoric acid solution                           |
| Class  | : | 8  |
| Packing group  | : | 111  |
| Environmentally hazardous  | : | no   |
| <b>Sea transport (IMDG/IMO)</b><br>UN number<br>Description of the goods<br>Class<br>Packing group<br>Marine pollutant | : | 1805<br>PHOSPHORIC ACID SOLUTION<br>8<br>III<br>no |

### Product AT USE DILUTION

Not intended for transport.

### SECTION 15. REGULATORY INFORMATION

### Product AS SOLD

### **EPCRA - Emergency Planning and Community Right-to-Know**

#### **CERCLA Reportable Quantity**

| Ingredients     | CAS-No.   | Component RQ (lbs) | Calculated product RQ |
|-----------------|-----------|--------------------|-----------------------|
|                 |           |                    | (lbs)                 |
| Phosphoric acid | 7664-38-2 | 5000               | 18416                 |

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

| SARA 311/312 Hazards | : | Acute Health Hazard   |
|----------------------|---|---|
| SARA 302             | : | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.   |
| SARA 313             | : | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |

#### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

#### The ingredients of this product are reported in the following inventories:

#### United States TSCA Inventory :

On TSCA Inventory

#### Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL.

### Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

#### New Zealand. Inventory of Chemical Substances :

On the inventory, or in compliance with the inventory

#### Japan. ENCS - Existing and New Chemical Substances Inventory :

On the inventory, or in compliance with the inventory

#### Japan. ISHL - Inventory of Chemical Substances (METI) :

On the inventory, or in compliance with the inventory

#### Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

#### Philippines Inventory of Chemicals and Chemical Substances (PICCS) : On the inventory, or in compliance with the inventory

#### China. Inventory of Existing Chemical Substances in China (IECSC) :

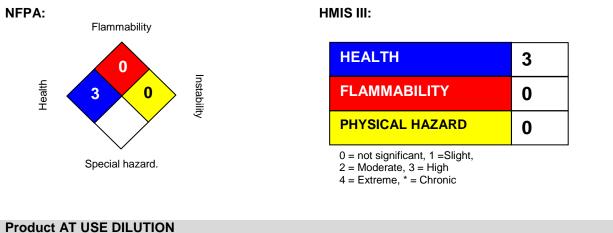
On the inventory, or in compliance with the inventory

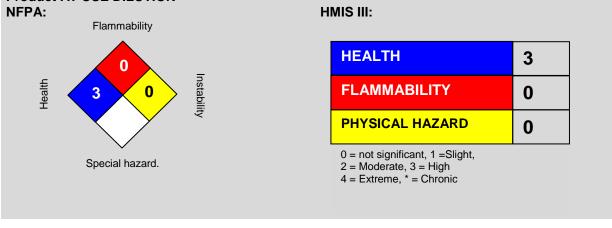
#### **SECTION 16. OTHER INFORMATION**

### **Product AS SOLD**

# SAFETY DATA SHEET

## ACID FOAM PLUS





| Issuing date | : | 11/18/2014                |
|--------------|---|---------------------------|
| Version      | : | 1.0                       |
| Prepared by  | : | <b>Regulatory Affairs</b> |

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material 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.