

# SAFETY DATA SHEET

## Ecofirst Solid Mechanical Detergent

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Revision: 05/14/2014

Distributor: Southern Maintenance Supply Co. Inc. 320 Page Street, Lynchburg, VA 24501 (434)847-4396

### 1. Product and Company Identification

**Product Code:** 4583  
**Product Name:** Ecofirst Solid Mechanical Detergent  
**Company Name:** PDQ Manufacturing, Inc.  
201 Victory Circle  
Ellijay, GA 30540  
**Phone Number:** (706)636-1848

**Web site address:** www.pdqonline.com

**Emergency Contact:** Chemtrec, Use Company Code: A814 (800)424-9300  
**Information:** info@pdqonline.com (706)636-1848

**Product Category:** Warewash detergent

### 2. Hazards Identification

**Acute Toxicity: Oral, Category 4**  
**Skin Corrosion/Irritation, Category 1C**  
**Serious Eye Damage/Eye Irritation, Category 2A**



**GHS Signal Word:** Danger

**GHS Hazard Phrases:** H302 - Harmful if swallowed.  
H314 - Causes severe skin burns and eye damage.

**GHS Precaution Phrases:** P264 - Wash hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**GHS Response Phrases:** P301+312 - IF SWALLOWED: Seek medical attention if you feel unwell.  
P330 - Rinse mouth.  
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P363 - Wash contaminated clothing before reuse.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P310 - Immediately call a POISON CENTER/doctor/....

**GHS Storage and Disposal Phrases:** P501 - Dispose of contents/container via locally approved methods.  
P501 - Dispose of contents/container via locally approved methods.  
P405 - Store locked up.

**Hazard Rating System:**

|              |   |
|--------------|---|
| HEALTH       | 2 |
| FLAMMABILITY | 0 |
| PHYSICAL     | 1 |
| PPE          | B |

**HMIS:**

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## Ecofirst Solid Mechanical Detergent

**Potential Health Effects (Acute and Chronic):** Adverse reproductive effects have been reported in animals.  
Chronic: None.

**Inhalation:** No hazard expected in normal industrial use.

**Skin Contact:** Causes skin burns.

**Eye Contact:** Causes eye burns.

**Ingestion:** Harmful if swallowed. Causes burns. No hazard expected in normal industrial use.

### 3. Composition/Information on Ingredients

| CAS #      | Hazardous Components (Chemical Name)                           | Concentration |
|------------|--|---------------|
| 6834-92-0  | Silicic acid (H <sub>2</sub> SiO <sub>3</sub> ), Disodium salt | <=47.0 %      |
| 20592-85-2 | Phosphonic acid, [nitrilotris(methylene)]tri-, sodium salt     | <=3.0 %       |

### 4. First Aid Measures

#### Emergency and First Aid Procedures:

**In Case of Inhalation:** If breathed in, move person into fresh air. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**In Case of Skin Contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In Case of Eye Contact:** Flush eye with water for 15 minutes. Get medical attention.

**In Case of Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Signs and Symptoms Of Exposure:** Burning sensation, Cough, Wheezing, Laryngitis, Shortness of breath.

**Note to Physician:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. None known.

### 5. Fire Fighting Measures

**Flash Pt:** NP

**Explosive Limits:** LEL: UEL:

**Autoignition Pt:** NP

**Suitable Extinguishing Media:** Material is non-combustible. Use extinguishing agent suitable for type of surrounding fire.

**Fire Fighting Instructions:** Wear self contained breathing apparatus for fire fighting if necessary.

Further information.

The product itself does not burn. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn.

**Flammable Properties and Hazards:**

## 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Personal precautions.  
 Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation.  
 Environmental precautions.  
 Do not let product enter drains.

Use proper personal protective equipment as indicated in Section 8.  
 Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Do not let this chemical enter the environment.

## 7. Handling and Storage

**Precautions To Be Taken in Handling:** Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Precautions To Be Taken in Storing:** Keep container tightly closed in a dry and well-ventilated place. Hygroscopic.

## 8. Exposure Controls/Personal Protection

| CAS #      | Partial Chemical Name  | OSHA TWA | ACGIH TWA | Other Limits |
|------------|--|----------|-----------|--------------|
| 6834-92-0  | Silicic acid (H <sub>2</sub> SiO <sub>3</sub> ), Disodium salt |          |           |              |
| 20592-85-2 | Phosphonic acid, [nitrilotris(methylene)]tri-, sodium salt     |          |           |              |

**Respiratory Equipment (Specify Type):** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respirator protection is not normally required. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

**Eye Protection:** Face shield and safety glasses. Eye protection is not normally required. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Protective Gloves:** Handle with gloves. Protective garments not normally required. Wear appropriate protective gloves to prevent skin exposure.

**Other Protective Clothing:** Choose body protection according to the amount and concentration of the dangerous substance at the work place. Protective garments not normally required. Wear appropriate protective clothing to prevent skin exposure.

**Engineering Controls (Ventilation etc.):** There are no special ventilation requirements. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. Use only under a chemical fume hood.

**Work/Hygienic/Maintenance Practices:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. Physical and Chemical Properties

|   |   |            |             |
|---|---|------------|-------------|
| <b>Physical States:</b>                   | [ ] Gas   | [ ] Liquid | [ X ] Solid |
| <b>Appearance and Odor:</b>               | White solid with bland odor.                      |            |             |
| <b>Melting Point:</b>                     | NP  |            |             |
| <b>Boiling Point:</b>                     | NP  |            |             |
| <b>Autoignition Pt:</b>                   | NP  |            |             |
| <b>Flash Pt:</b>                          | NP  |            |             |
| <b>Explosive Limits:</b>                  | LEL:  |            | UEL:        |
| <b>Specific Gravity (Water = 1):</b>      | NP  |            |             |
| <b>Density:</b>                           | >=1.5 G/CC  |            |             |
| <b>Vapor Pressure (vs. Air or mm Hg):</b> | NP  |            |             |
| <b>Vapor Density (vs. Air = 1):</b>       | NP  |            |             |
| <b>Evaporation Rate:</b>                  | NP  |            |             |
| <b>Solubility in Water:</b>               | 100%  | at         | 72.0 F      |
| <b>Solubility Notes:</b>                  | Soluble in water. Soluble in ethanol and acetone. |            |             |
| <b>Saturated Vapor Concentration:</b>     | NP  |            |             |
| <b>Viscosity:</b>                         | NP  |            |             |
| <b>pH:</b>                                | > 11.5  |            |             |
| <b>Percent Volatile:</b>                  | NP  |            |             |

## 10. Stability and Reactivity

|   |   |                      |
|---|---|----------------------|
| <b>Stability:</b>                                 | Unstable [ ]  | Stable [ X ]         |
| <b>Conditions To Avoid - Instability:</b>         | Strong oxidizing agents. Strong acids.  |                      |
| <b>Incompatibility - Materials To Avoid:</b>      | Strong bases, Strong acids.   |                      |
| <b>Hazardous Decomposition Or Byproducts:</b>     | formed under fire conditions. Sodium oxides, silicon oxides. None. Carbon monoxide, Carbon dioxide. |                      |
| <b>Possibility of Hazardous Reactions:</b>        | Will occur [ ]  | Will not occur [ X ] |
| <b>Conditions To Avoid - Hazardous Reactions:</b> |   |                      |

## 11. Toxicological Information

**Toxicological Information:** Epidemiology: No data available.  
 Teratogenicity: No data available.  
 Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: No information found.  
 Teratogenicity: No information available.

**Irritation or Corrosion:** Skin - rabbit - Severe skin irritation - -24 h.

Acute toxicity. .The acute oral toxicity of this product has not been tested. When sodium silicates were tested on a 100% solids basis, their single dose acute oral LD50 in rats ranged from 1500 mg/kg to 3200 mg/kg. Acute lethality resulted from nonspecific causes.

**Carcinogenicity/Other Information:** Carcinogenicity.  
 IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
 ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 68-04-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 497-19-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

| CAS #      | Hazardous Components (Chemical Name)                           | NTP  | IARC | ACGIH | OSHA |
|------------|--|------|------|-------|------|
| 6834-92-0  | Silicic acid (H <sub>2</sub> SiO <sub>3</sub> ), Disodium salt | n.a. | n.a. | n.a.  | n.a. |
| 20592-85-2 | Phosphonic acid, [nitrilotris(methylene)]tri-, sodium salt     | n.a. | n.a. | n.a.  | n.a. |

## 12. Ecological Information

**General Ecological Information:** Environmental: Not regulated.  
 Physical: No information available.  
 Other: Do not empty into drains.

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.

## 13. Disposal Considerations

**Waste Disposal Method:** Product.  
 Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging.  
 Dispose of as unused product. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
 RCRA P-Series: None listed.  
 RCRA U-Series: None listed.

## 14. Transport Information

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Not regulated as a hazardous material.

**DOT Hazard Class:** NA                      None

**UN/NA Number:**

## 15. Regulatory Information

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

| CAS #      | Hazardous Components (Chemical Name)                           | S. 302 (EHS) | S. 304 RQ | S. 313 (TRI) |
|------------|--|--------------|-----------|--------------|
| 6834-92-0  | Silicic acid (H <sub>2</sub> SiO <sub>3</sub> ), Disodium salt | No           | No        | No           |
| 20592-85-2 | Phosphonic acid, [nitrilotris(methylene)]tri-, sodium salt     | No           | No        | No           |

| CAS #      | Hazardous Components (Chemical Name)                           | Other US EPA or State Lists   |
|------------|--|---|
| 6834-92-0  | Silicic acid (H <sub>2</sub> SiO <sub>3</sub> ), Disodium salt | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No |
| 20592-85-2 | Phosphonic acid, [nitrilotris(methylene)]tri-, sodium salt     | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No |

## 16. Other Information

**Revision Date:** 05/14/2014

**Preparer Name:** Regulatory Affairs

**Additional Information About This Product:**