



# SAFETY DATA SHEET

## 1. Identification

|   |  |                |
|---|--|----------------|
| <b>Product identifier</b>                                     | <b>QUANTAVENE 500 CONCENTRATE</b>                            |                |
| <b>Other means of identification</b>                          |  |                |
| <b>Product code</b>   | 016931   |                |
| <b>Recommended use</b>  | Algae stain removal  |                |
| <b>Recommended restrictions</b>                               | None known.  |                |
| <b>Manufacturer/Importer/Supplier/Distributor information</b> |  |                |
| <b>Manufacturer</b>   |  |                |
| <b>Company name</b>   | Kemin Industries, Inc.                                       |                |
| <b>Address</b>  | 2100 Maury Street<br>Des Moines, Iowa 50317<br>United States |                |
| <b>Telephone</b>  | (515) 559-5100   |                |
| <b>Website</b>  | <a href="http://www.kemin.com/">http://www.kemin.com/</a>    |                |
| <b>E-mail</b>   | media@kemin.com  |                |
| <b>Emergency phone number</b>                                 | CHEMTREC   | 1-800-424-9300 |

## 2. Hazard(s) identification

|                              |   |   |
|------------------------------|---|---|
| <b>Physical hazards</b>      | Flammable liquids                               | Category 4                              |
| <b>Health hazards</b>        | Acute toxicity, oral                            | Category 4                              |
|                              | Skin corrosion/irritation                       | Category 1                              |
|                              | Serious eye damage/eye irritation               | Category 1                              |
|                              | Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |
| <b>Environmental hazards</b> | Not classified.                                 |   |
| <b>OSHA defined hazards</b>  | Not classified.                                 |   |
| <b>Label elements</b>        |   |   |



|  |  |
|--|--|
| <b>Signal word</b>                               | Danger   |
| <b>Hazard statement</b>                          | Combustible liquid. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.  |
| <b>Precautionary statement</b>                   |  |
| <b>Prevention</b>                                | Keep away from flames and hot surfaces-No smoking. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.  |
| <b>Response</b>                                  | If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish. |
| <b>Storage</b>                                   | Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.   |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national/international regulations.  |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None known.  |
| <b>Supplemental information</b>                  | 14.52% of the mixture consists of component(s) of unknown acute oral toxicity.   |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                            | Common name and synonyms | CAS number | %         |
|--|--------------------------|------------|-----------|
| Propionic Acid                           |                          | 79-09-4    | 70 - < 80 |
| Ammonium Propionate                      |                          | 17496-08-1 | 10 - < 20 |
| SODIUM ACETATE                           |                          | 127-09-3   | 10 - < 20 |
| Other components below reportable levels |                          |            | 3 - < 5   |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| <b>Skin contact</b>   | Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.   |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.  |
| <b>Ingestion</b>  | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.  |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| <b>General information</b>  | If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.   |

### 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).  |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.   |
| <b>Specific hazards arising from the chemical</b>                    | The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  |
| <b>Fire fighting equipment/instructions</b>                          | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.   |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.   |
| <b>General fire hazards</b>  | Combustible liquid.  |

### 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
|--|--|

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

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

**Environmental precautions**

**7. Handling and storage**

**Precautions for safe handling**

Keep away from open flames, hot surfaces and sources of ignition. Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection**

**Occupational exposure limits**

**US. ACGIH Threshold Limit Values**

| Components                   | Type | Value  |
|------------------------------|------|--------|
| Propionic Acid (CAS 79-09-4) | TWA  | 10 ppm |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                   | Type | Value    |
|------------------------------|------|----------|
| Propionic Acid (CAS 79-09-4) | STEL | 45 mg/m3 |
|                              | TWA  | 15 ppm   |
|                              |      | 30 mg/m3 |
|                              |      | 10 ppm   |

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear safety glasses with side shields (or goggles) and a face shield.

**Skin protection**

**Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Wear appropriate chemical resistant clothing.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

|                       |         |
|-----------------------|---------|
| <b>Physical state</b> | Liquid. |
| <b>Form</b>           | Liquid. |
| <b>Color</b>          | Blue    |

**Odor** Acidic

**Odor threshold** Not available.

**pH** 5.0 - 6.0

**Melting point/freezing point** -6.7 °F (-21.5 °C) estimated

**Initial boiling point and boiling range** 285.98 °F (141.1 °C) estimated

**Flash point** 189.0 °F (87.2 °C)

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** 4.07 hPa estimated

**Vapor density** Not available.

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Not available.

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** 870 °F (465.56 °C) estimated

**Decomposition temperature** Not available.

**Viscosity** Not available.

### Other information

**Density** 1.07 g/cm<sup>3</sup>

**Explosive properties** Not explosive.

**Flammability class** Combustible IIIA

**Oxidizing properties** Not oxidizing.

**Percent volatile** 72.24 % estimated

**Specific gravity** 1.01 - 1.09

**VOC (Weight %)** 79.4 % estimated

## 10. Stability and reactivity

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.

**Conditions to avoid** Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

|                            |  |
|----------------------------|--|
| <b>Inhalation</b>          | May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |
| QUANTAVENE 500 CONCENTRATE | 2.06 mg/l  |
| <b>Skin contact</b>        | Causes severe skin burns.  |
| <b>Eye contact</b>         | Causes serious eye damage.   |
| <b>Ingestion</b>           | Causes digestive tract burns. Harmful if swallowed.                                  |

**Symptoms related to the physical, chemical and toxicological characteristics** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

### Information on toxicological effects

**Acute toxicity** Harmful if swallowed. May cause respiratory irritation.

| Components | Species | Test Results |
|------------|---------|--------------|
|------------|---------|--------------|

Propionic Acid (CAS 79-09-4)

**Acute**

**Dermal**

|      |     |            |
|------|-----|------------|
| LD50 | Rat | 3235 mg/kg |
|------|-----|------------|

**Oral**

|      |       |             |
|------|-------|-------------|
| LD50 | Mouse | 5100 mg/kg  |
|      | Rat   | > 400 mg/kg |

SODIUM ACETATE (CAS 127-09-3)

**Acute**

**Oral**

|      |       |            |
|------|-------|------------|
| LD50 | Mouse | 4960 mg/kg |
|      | Rat   | 3500 mg/kg |

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Causes severe skin burns and eye damage.

**Corrosivity**

QUANTAVENE 500 CONCENTRATE 25.95 - 30.7643 mg/day

**Serious eye damage/eye irritation** Causes serious eye damage.

### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### Carcinogenicity

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential****Mobility in soil** No data available.**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.**13. Disposal considerations****Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.**Local disposal regulations** Dispose in accordance with all applicable regulations.**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.**14. Transport information****DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.**15. Regulatory information****US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
One or more components are not listed on TSCA.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Propionic Acid (CAS 79-09-4) Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No**SARA 313 (TRI reporting)**

| Chemical name       | CAS number | % by wt.  |
|---------------------|------------|-----------|
| Ammonium Propionate | 17496-08-1 | 10 - < 20 |

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Propionic Acid (CAS 79-09-4)

**US. New Jersey Worker and Community Right-to-Know Act**

Propionic Acid (CAS 79-09-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Propionic Acid (CAS 79-09-4)

**US. Rhode Island RTK**

Propionic Acid (CAS 79-09-4)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | No                     |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 08-05-2015**Revision date** 08-13-2015**Version #** 02**Disclaimer** Kemin Industries, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.**Revision Information** Physical & Chemical Properties: Multiple Properties