

1. Product and Company Identification

| | |
|--------------------------------------|--|
| Product identifier | Aquasoft 63 Water Conditioner |
| Other means of identification | Not available |
| Recommended use | Low pH Water Conditioner |
| Recommended restrictions | None known. |
| Manufacturer information | Norac Concepts P.O. Box 31097 Guelph, ON N1H 8K1 Phone: 519-821-3633 Emergency Phone: 613-787-5620 |
| Supplier | See above. |

2. Hazards Identification

| | | |
|-----------------------------------|-----------------------------------|-------------|
| Physical hazards | Corrosive to metals | Category 1 |
| Health hazards | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2B |
| Environmental hazards | Not classified. | |
| WHMIS 2015 defined hazards | Not classified | |
| Label elements | | |



Signal word Warning

Hazard statement May be corrosive to metals. Causes skin irritation. Causes eye irritation.

Precautionary statement

Prevention Keep only in original packaging. Wash thoroughly after handling. Wear protective gloves.

Response Absorb spillage to prevent material-damage. IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage Store locked up. Store in a corrosion resistant container with a resistant inner liner.

Disposal Dispose of container in accordance with local, regional, national and international regulations.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) None known

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/Information on Ingredients

Mixture

| Chemical name | Common name and synonyms | CAS number | % |
|------------------|--------------------------|------------|--------|
| Ammonium sulfate | | 7783-20-2 | 30-40* |
| Citric Acid | | 77-92-9 | 5-10* |
| Phosphoric acid | | 7664-38-2 | 10-30* |

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments *CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

| | |
|---|--|
| Inhalation | If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention. |
| Skin contact | IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. Specific treatment (see information on this label). |
| Eye contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. |
| Ingestion | DO NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention. |
| Most important symptoms/effects, acute and delayed | May cause eye irritation. Skin irritation. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Symptoms may be delayed. |
| General information | 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. Avoid contact with eyes and skin. Keep out of reach of children. |

5. Fire Fighting Measures

| | |
|--|--|
| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire-fighting equipment/instructions | Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| Hazardous combustion products | May include and are not limited to: Oxides of carbon. Oxides of phosphorus. Oxides of nitrogen. Ammonia. |

6. Accidental Release Measures

| | |
|--|---|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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 | Should not be released into the environment. Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. 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: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. |
| Environmental precautions | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters. |

7. Handling and Storage

| | |
|---|---|
| Precautions for safe handling | Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink. |
| Conditions for safe storage, including any incompatibilities | Store locked up. Store in a cool, dry place out of direct sunlight. Store in a corrosion resistant container with a resistant inner liner. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Protect from freezing. Optimal Storage Temperature: 5°C – 30°C |

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

| Components | Type | Value |
|---------------------------------|------|---------------------|
| Phosphoric acid (CAS 7664-38-2) | STEL | 3 mg/m ³ |
| | TWA | 1 mg/m ³ |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Type | Value |
|---------------------------------|------|---------------------|
| Phosphoric acid (CAS 7664-38-2) | STEL | 3 mg/m ³ |
| | TWA | 1 mg/m ³ |

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

| Components | Type | Value |
|---------------------------------|------|---------------------|
| Phosphoric acid (CAS 7664-38-2) | STEL | 3 mg/m ³ |
| | TWA | 1 mg/m ³ |

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

| Components | Type | Value |
|---------------------------------|------|---------------------|
| Phosphoric acid (CAS 7664-38-2) | STEL | 3 mg/m ³ |
| | TWA | 1 mg/m ³ |

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

| Components | Type | Value |
|---------------------------------|------|---------------------|
| Phosphoric acid (CAS 7664-38-2) | STEL | 3 mg/m ³ |
| | TWA | 1 mg/m ³ |

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value |
|---------------------------------|------|---------------------|
| Phosphoric acid (CAS 7664-38-2) | PEL | 1 mg/m ³ |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|---------------------------------|------|---------------------|
| Phosphoric acid (CAS 7664-38-2) | STEL | 3 mg/m ³ |
| | TWA | 1 mg/m ³ |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|---------------------------------|------|---------------------|
| Phosphoric acid (CAS 7664-38-2) | STEL | 3 mg/m ³ |
| | TWA | 1 mg/m ³ |

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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Impervious gloves. Confirm with reputable supplier first.

Other

Wear appropriate chemical resistant clothing. As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

| | |
|---------------------------------------|---|
| Thermal hazards | Not applicable. |
| General hygiene considerations | 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. When using do not eat or drink. |

9. Physical and Chemical Properties

| | |
|---|--|
| Appearance | Clear |
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Colorless |
| Odor | Odorless |
| Odor threshold | Not available. |
| pH | 1.2 (neat) |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Pour point | Not available. |
| Specific gravity | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Flash point | > 199.9 °F (> 93.3 °C) Pensky-Martens Closed Cup |
| 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 | Not available. |
| Vapor density | Not available. |
| Relative density | 1.29 @ 20°C |
| Solubility(ies) | Miscible |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |

10. Stability and Reactivity

| | |
|---|---|
| Reactivity | Reacts violently with strong alkaline substances. This product may react with reducing agents. May be corrosive to metals. This product may react with strong oxidizing agents. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Chemical stability | Material is stable under normal conditions. |
| Conditions to avoid | Avoid temperatures exceeding the flash point. Do not mix with other chemicals. |
| Incompatible materials | Bases. Strong oxidizing agents. Reducing agents. Metals. |
| Hazardous decomposition products | May include and are not limited to: Oxides of carbon. Oxides of phosphorus. Ammonia. Oxides of nitrogen. |

11. Toxicological Information

| | |
|---|---|
| Routes of exposure | Inhalation. Ingestion. Skin contact. Eye contact. Eye, Skin contact, Inhalation, Ingestion. |
| Information on likely routes of exposure | |
| Ingestion | May cause stomach distress, nausea or vomiting. |
| Inhalation | May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |

Skin contact Causes skin irritation.
Eye contact Causes eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics Causes eye irritation. Skin irritation.

Information on toxicological effects

Acute toxicity

| Product | Species | Test Results |
|---|--------------------------------|---|
| Aquasoft 63 Water Conditioner (CAS Mixture) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 5050 mg/kg, Tested |
| <i>Oral</i> | | |
| LD50 | Rat | > 5000 mg/kg, Tested |
| Components | | |
| Species | | |
| Test Results | | |
| Ammonium sulfate (CAS 7783-20-2) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Mouse | > 2000 mg/kg, ECHA |
| | Rat | > 2000 mg/kg, ECHA |
| <i>Inhalation</i> | | |
| LC50 | Not available | |
| <i>Oral</i> | | |
| LD50 | Mouse | > 2000 mg/kg, ECHA |
| | Rat | > 2000 mg/kg, ECHA 4250 mg/kg, ECHA |
| Citric Acid (CAS 77-92-9) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rat | > 2000 mg/kg, 24 Hours, ECHA |
| <i>Inhalation</i> | | |
| LC50 | Not available | |
| <i>Oral</i> | | |
| LD50 | Mouse | 5400 mg/kg, ECHA 5040 mg/kg, HSDB |
| | Rat | 11700 mg/kg, ECHA 6730 mg/kg, HSDB |
| Phosphoric acid (CAS 7664-38-2) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 2000 mg/kg, ECHA 2740 mg/kg, RTECS |
| <i>Inhalation</i> | | |
| LC50 | Guinea pig, Mouse, Rabbit, Rat | 5337 mg/m ³ , 1 Hours, ECHA 3846 mg/m ³ , 1 Hours, ECHA 1689 mg/m ³ , 1 Hours, ECHA 1217 mg/m ³ , 1 Hours, ECHA 856 mg/m ³ , 1 Hours, ECHA 271 mg/m ³ , 1 Hours, ECHA 193 mg/m ³ , 1 Hours, ECHA 61 mg/m ³ , 1 Hours, ECHA |

| Components | Species | Test Results |
|---|--|--|
| Oral LD50 | Rat | 1530 mg/kg, RTECS 1.7 ml/100g, ECHA |
| Skin corrosion/irritation | Causes irritation. | |
| Exposure minutes | Not available. | |
| Erythema value | Not available. | |
| Oedema value | Not available. | |
| Serious eye damage/eye irritation | Causes irritation. | |
| Corneal opacity value | Not available. | |
| Iris lesion value | Not available. | |
| Conjunctival reddening value | Not available. | |
| Conjunctival oedema value | Not available. | |
| Recover days | Not available. | |
| Respiratory or skin sensitization | | |
| Canada - Alberta OELs: Irritant | | |
| Phosphoric acid (CAS 7664-38-2) | Irritant | |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | This product is not expected to cause skin sensitization. | |
| Mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | |
| Carcinogenicity | | |
| US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | Not listed. | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | |
| Teratogenicity | Not available. | |
| Specific target organ toxicity - single exposure | Not classified. | |
| Specific target organ toxicity - repeated exposure | Not classified. | |
| Aspiration hazard | Not an aspiration hazard. | |
| Chronic effects | Prolonged inhalation may be harmful. | |

12. Ecological Information

| Components | Species | Test Results |
|--|-----------|--|
| Ecotoxicity | See below | |
| Ecotoxicological data | | |
| Ammonium sulfate (CAS 7783-20-2) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (Ceriodaphnia dubia) |
| Fish | LC50 | Rainbow trout, donaldson trout (Oncorhynchus mykiss) |
| Citric Acid (CAS 77-92-9) <i>Acute</i> | | |
| Crustacea | EC50 | Daphnia magna |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) |
| Phosphoric acid (CAS 7664-38-2) Aquatic | | |
| <i>Acute</i> | | |
| Crustacea | LC50 | Water flea (Daphnia magna) |
| Fish | LC50 | Mosquitofish (Gambusia affinis affinis) |

| | |
|--------------------------------------|---|
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| Mobility in general | Not 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. Do not allow this material to drain into sewers/water supplies. 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 | D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] 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

Transport of Dangerous Goods (TDG) Proof of Classification Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

| | |
|-----------------------------|---|
| UN number | UN3264 |
| Proper shipping name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. |
| Technical name | Phosphoric acid |
| Hazard class | 8 |
| Packing group | III |
| Special provisions | 16 |
| Packaging exceptions | <5L - Limited Quantity |

TDG



15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Phosphoric acid (CAS 7664-38-2) Listed.

US. 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 - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

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.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Phosphoric acid (CAS 7664-38-2) Listed.

US - Illinois Chemical Safety Act: Listed substance

Phosphoric acid (CAS 7664-38-2)

US - Louisiana Spill Reporting: Listed substance

Phosphoric acid (CAS 7664-38-2) Listed.

US - Minnesota Haz Subs: Listed substance

Phosphoric acid (CAS 7664-38-2) Listed.

US - New Jersey RTK - Substances: Listed substance

Phosphoric acid (CAS 7664-38-2)

US - Texas Effects Screening Levels: Listed substance

Ammonium sulfate (CAS 7783-20-2) Listed.

Citric Acid (CAS 77-92-9) Listed.

Phosphoric acid (CAS 7664-38-2) Listed.

US. Massachusetts RTK - Substance List

Ammonium sulfate (CAS 7783-20-2)

Phosphoric acid (CAS 7664-38-2)

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

Not regulated.

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

Ammonium sulfate (CAS 7783-20-2)

Phosphoric acid (CAS 7664-38-2) **US.**

Rhode Island RTK

Ammonium sulfate (CAS 7783-20-2)

Phosphoric acid (CAS 7664-38-2)

US. California Proposition 65

Not Listed.

Inventory status

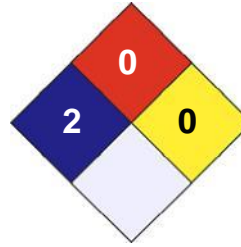
| Country(s) or region | Inventory name | On inventory (yes/no) * |
|-----------------------------|---|-------------------------|
| Canada | Domestic Substances List (DSL) | YES |
| Canada | Non-Domestic Substances List (NDSL) | NO |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | YES |

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

16. Other Information

| LEGEND | |
|----------|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

| | |
|----------------------------|-----|
| HEALTH | / 2 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 0 |
| PERSONAL PROTECTION | x |



Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

03312019

Version #

01

Effective date

03312019

Prepared by

Norac Concepts Inc.: (519) 821-3633

Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.