

# SAFETY DATA SHEET

## 1. Chemical Product and Company Identification

Description: Quinhydrone powder, 97%  
Product Code: 3822-7115  
Product Type: Crystalline solid  
Application: ORP sensor calibration

## Manufacturer/Supplier Information

Manufactured for and SDS prepared by:  
Georg Fischer Signet LLC  
3401 Aero Jet Ave.  
El Monte, California 91731

Date Prepared: 05/07/2015

For additional health, safety or regulatory information, call (626) 571-2770

**For Chemical Emergency  
Spill Leak Fire Exposure or Accident  
Call CHEMTREC Day or Night**

**DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)**

## 2. Hazard(s) Identification

### Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 3), H301  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335  
For the full text of the H-Statements mentioned in this Section, see Section 16.

#### GHS Label elements, including precautionary statements

Pictogram



Signal word:	Danger
Hazard statement(s)	
H301	Toxic if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P330 Rinse mouth.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS - none**

**3. Composition/Information on Ingredient**

*Chemical* CAS No SARA 313  
Quinhydrone 106-34-3 No

**Formula:** C<sub>6</sub>H<sub>6</sub>O<sub>2</sub> · C<sub>6</sub>H<sub>4</sub>O<sub>2</sub>  
**Synonyms:** p-Benzoquinhydrone  
p-Benzoquinone, compd. with hydroquinone (1:1) (8CI)  
Chinhydron (Czech)  
2,5-Cyclohexadiene-1,4-dione compd. with 1,4-benzenediol (1:1)  
Green hydroquinone  
Hydroquinone, compd. with p-benzoquinone  
Quinhydrone  
beta-Quinhydrone  
**Molecular Weight:** 218.21 g/mol

Component	Classification	Concentration
Quinhydrone	Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H301, H315, H319, H335	-

**4. First Aid Measures**

**Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

No data available

**5. Firefighting Measures****Extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Carbon oxides

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

No data available

**6. Accidental Release Measures****Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

**7. Handling and Storage****Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. For precautions see section 2.

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

Keep container tightly closed in a dry and well-ventilated place. Air and light sensitive.

**Specific end use(s)**

Apart from the uses mentioned in section 1, no other specific uses are stipulated

## 8. Exposure Controls/Personnel Protection

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Form: crystalline Color: dark green
<b>Molecular Weight</b>	218.21 AMU
<b>pH</b>	N/A
<b>BP/BP Range</b>	N/A
<b>MP/MP Range</b>	167 - 172 °C
<b>Freezing Point</b>	N/A
<b>Vapor Pressure</b>	N/A
<b>Vapor Density</b>	N/A
<b>Saturated Vapor Conc.</b>	N/A
<b>Bulk Density</b>	N/A
<b>Odor Threshold</b>	N/A
<b>Volatile%</b>	N/A
<b>VOC Content</b>	N/A
<b>Water Content</b>	N/A
<b>Solvent Content</b>	N/A
<b>Evaporation Rate</b>	N/A
<b>Viscosity</b>	N/A
<b>Surface Tension</b>	N/A
<b>Partition Coefficient</b>	N/A

<b>Decomposition Temp.</b>	N/A
<b>Flash Point</b>	N/A
<b>Explosion Limits</b>	N/A
<b>Flammability</b>	N/A
<b>Autoignition Temp</b>	N/A
<b>Refractive Index</b>	N/A
<b>Optical Rotation</b>	N/A
<b>Miscellaneous Data</b>	N/A
<b>Solubility</b>	N/A

N/A = no data available

## 10. Stability and Reactivity

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

No data available

### Conditions to avoid

Air, Light.

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

## 11. Toxicological Information

### Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - 225 mg/kg

Dermal: no data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

### 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.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: VA4550000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. Ecological Information

**Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

No data available

## 13. Disposal Considerations

**Waste treatment methods**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

## 14. Transportation Information

### DOT (US)

**PROPER SHIPPING NAME:** Toxic solids, organic, n.o.s. (Quinhydrone)  
**UN#:** 2811  
**CLASS:** 6.1  
**PACKING GROUP:** Packing Group III  
**HAZARD LABEL:** Toxic substances.  
**PIH:** Not PIH

### IATA

**PROPER SHIPPING NAME::** Toxic solid, organic, n.o.s.  
**IATA UN NUMBER:** 2811  
**HAZARD CLASS:** 6.1  
**PACKING GROUP:** III

### IMDG

**UN number:** 2811  
**Class:** 6.1  
**Packing group:** III  
**EMS-No:** F-A, S-A  
**Proper shipping name:** TOXIC SOLID, ORGANIC, N.O.S. (Quinhydrone)

## 15. Regulatory Information

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

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.

### SARA 311/312 Hazards

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Quinhydrone	CAS-No. 106-34-3
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### New Jersey Right To Know Components

Quinhydrone	CAS-No. 106-34-3
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### California Prop. 65 Components

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

**WHMIS Hazard Class**D1B Toxic materials  
D2B Toxic materials**17. Disclaimer**

It is the responsibility of the Distributor, Dealer, or Agent to provide a current copy of the SDS to the Consumers of Georg Fischer Piping Systems products. The information contained herein is presented in good faith and has been compiled from sources believed to be reliable. It represents the best information currently available to us. No warranty express or implied, or merchantability, fitness or otherwise is made and we assume no liability resulting from its use. This information is offered for your consideration and users should make their own investigation and verification to determine the suitability of the information for their particular purposes. In no event shall Georg Fischer Piping Systems, the parent company or its subsidiaries be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Georg Fischer Piping Systems has been advised of the possibility of such damages. This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.

**Revision**

Date of latest revision: 05-07-15  
Responsibility for SDS: S.K. Wells

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