

## **1 Identification of substance:**

### **Product details:**

**Trade name:** Lithofin BERO

**Application of the substance / the preparation** Cleaning agent / cleaner

### **Distributor:**

GranQuartz, L. P.  
P.O. Box 2206  
Tucker, GA 30085-2206/USA

### **Information Department:**

see above

### **Emergency Information:**

information department

### **24-Hour Emergency Telephone Number:**

1-800-255-3924 (USA & Canada) or 813-248-0585

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## **2 Composition/Data on components:**

### **Chemical characterization**

Mixture of the substances listed below with non hazardous additions.

### **Dangerous components:**

7664-38-2 phosphoric acid 25-50 %  
RTECS: TB 6300000

### **TSCA**

All ingredients are listed.

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## **3 Hazards identification**

**Hazard description:** Corrosive

### **Information pertaining to particular dangers for man and environment**

Acid burns have to treated immediately, as it may otherwise cause badly curing wounds.

Causes burns.

### **Classification system**

The classification is in line with internationally approved calculation standards. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

### **NFPA ratings (scale 0-4)**

Health = 2  
Fire = 0  
Reactivity = 0  
Special: Acid

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## **4 First aid measures**

### **General information**

Immediately remove any clothing soiled by the product.

### **After inhalation**

Remove victim from contaminated area. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. Call a doctor.

### **After skin contact**

Take-off and remove wetted clothing, shoes and stocking immediately.

Rinse affected parts of the body with plenty of water.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

**After eye contact**

First check the victim for contact lenses and remove if present.

Protect unharmed eye.

Rinse the eyes with open eyelids for 10 - 15 minutes with water. Then consult an eye specialist immediately.

**After swallowing**

Do not induce vomiting

Drink plenty of water, but never give anything to an unconscious person.

Seek medical treatment.

**Information for doctor**

**Treatment** Symptomatic treatment

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**5 Fire fighting measures**

**Suitable extinguishing agents**

The product is not combustible and does not support combustion.

Use fire fighting measures that suit the environment.

**Special hazards caused by the material, its products of combustion or resulting gases:**

No hazards known

**Protective equipment:**

Wear self-contained respiratory protective device.

**Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

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**6 Accidental release measures**

**Person-related safety precautions:**

Ensure adequate ventilation

Wear protective clothing.

Keep unprotected persons away.

Use respiratory protective device against the effects of fumes/dust/aerosol.

**Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

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**7 Handling and storage**

**Handling**

**Information for safe handling:**

Use only in well ventilated areas.

Avoid contact with eyes and skin.

Avoid inhalation of vapours.

**Information about protection against explosions and fires:**

No special measures required.

**Storage**

**Requirements to be met by storerooms and receptacles:**

Store receptacles tightly closed at a cool and dry place with sufficient ventilation

Provide acid-resistant floor.

**Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from feed.

Do not store together with alkalis (caustic solutions).

**Further information about storage conditions:**

Keep receptacle tightly sealed.

**Storage class** 8 Corrosive products (VCI)

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## **8 Exposure controls and personal protection**

**Additional information about design of technical systems:**

No further data; see item 7.

**Components with limit values that require monitoring at the workplace:**

7664-38-2 phosphoric acid

PEL: 1 mg/m<sup>3</sup>

REL: short-term value: 3 mg/m<sup>3</sup>  
long-term value: 1 mg/m<sup>3</sup>

TLV: short-term value: 3 mg/m<sup>3</sup>  
long-term value: 1 mg/m<sup>3</sup>

**Additional information:**

The lists that were valid during the creation were used as basis.

**Personal protective equipment**

**General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Do not eat or drink while working.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin absolutely.

The usual protective measures based on the application have to be followed.

All protective equipment used shall be according to 29 CFR.1910 Subpart I Personal Protective Equipment

**Breathing equipment:**

Not necessary if room is well-ventilated.

Use suitable respiratory protective device only when aerosol or mist is formed.

NIOSH/MSHA-approved respirator

**Protection of hands:**

Acid resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

After use of gloves apply skin-cleaning agents and skin cosmetics.

**Material of gloves**

Polychloropren rubber (CR)

Butyl rubber, BR

Nitrile rubber, NBR

Natural rubber, NR

Fluorocarbon rubber (FKM)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles.

If splashing of the product is possible wear full face protection. as described by OSHA's eye and face protection regulations in 29 CFR 1910.133

**Body protection:** Acid resistant protective clothing

## **9 Physical and chemical properties:**

### **General Information**

**Form:** Fluid  
**Color:** Colorless, clear  
**Odor:** Odorless

	<b><u>Value/Range</u></b>	<b><u>Unit</u></b>	<b><u>Method</u></b>
<b>Change in condition</b>			
<b>Melting point/Melting range:</b>	undetermined		
<b>Boiling point/Boiling range:</b>	> 90 ° C		
<b>Flash point:</b>	Not applicable		
<b>Auto igniting:</b>	Product is not self igniting.		
<b>Danger of explosion:</b>	Product does not present an explosion hazard.		
<b>Density:</b>	at 20 ° C ~ 1.2 g/cm <sup>3</sup>		
<b>Solubility in / Miscibility with Water:</b>	Miscible		
<b>pH-value:</b>	at 20 ° C < 2 in delivery state		

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## **10 Stability and reactivity**

### **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**Dangerous reactions** Reacts with metals forming hydrogen

### **Dangerous products of decomposition:**

No dangerous decomposition products known

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## **11 Toxicological information**

### **Acute toxicity:**

#### **LD/LC50 values that are relevant for classification:**

No toxicity data are available for the product itself.

### **Primary irritant effect:**

**on the skin:** Caustic effect on skin and mucous membranes.

**on the eye:** Caustic effect

**Sensitization:** No sensitizing effects known.

### **Additional toxicological information:**

The product shows the following dangers according to internationally approved calculation methods for preparations: Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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## **12 Ecological information:**

### **Ecotoxicological effects:**

#### **Aquatic toxicity:**

Presently there are no ecotoxicological values available.

**Remark:** Harmful effects possible due to shift of pH value.

### **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Danger to drinking water is possible if large quantities leak into the ground or into water course.

### **13 Disposal considerations**

**Product:**

**Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal according to instructions of local authorities.

**Uncleaned packagings:**

**Recommendation:**

Disposal must be made according to official regulations.

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### **14 Transport information**

**DOT regulations:**

**Hazard class:** 8  
**Identification number:** UN1805  
**Packing group:** III  
**Proper shipping name (technical name):**  
PHOSPHORIC ACID, LIQUID, solution  
**Label** 8

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** 8 (C1) Corrosive substances  
**Danger code (Kemler):** 80  
**UN-Number:** 1805  
**Packaging group:** III  
**Label** 8  
**Description of goods:** 1760 CORROSIVE LIQUID, N.O.S., solution

**Maritime transport IMDG:**

**IMDG Class:** 8  
**UN Number:** 1805  
**Label** 8  
**Packaging group:** III  
**EMS Number:** F-A,S-B  
**Marine pollutant:** No  
**Proper shipping name:** PHOSPHORIC ACID, LIQUID, solution

**Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** 8  
**UN/ID Number:** 1805  
**Label** 8  
**Packaging group:** III  
**Proper shipping name:** PHOSPHORIC ACID, LIQUID, solution

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### **15 Regulations**

**Carcinogenity categories**

**EPA (Environmental Protection Agency)**

void

**IARC (International Agency for Research on Cancer)**

void

**NTP (National Toxicology Program)**

void

**TLV (Threshold Limit Value established by ACGIH)**

void

**MAK (German Maximum Workplace Concentration)**

void

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

void

**OSHA-Ca (Occupational Safety & Health Administration)**

void

**Markings according to EU guidelines:**

**Code letter and hazard designation of product:** Corrosive

**Hazard-determining components of labelling:** phosphoric acid

**Risk phrases:** Causes burns.

**Safety phrases:**

Keep locked up and out of the reach of children.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After contact with skin, wash immediately with plenty of water

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately.

If swallowed, rinse mouth with water (only if the person is conscious)

**Regulation or reporting requirements USA**

**Sara section 355**

not listed

**Sara section 313**

7664-38-2 phosphoric acid

**Prop. 65 - Cancer**

not listed

**Prop. 65 - Repr. tox.**

not listed

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**16 Other information:**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing MSDS:**

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