

## 1. Identification

**GHS product identifier**                      **NutriQuest Optimize**

**Other means of identification**        None.

**Recommended use of the chemical and restrictions on use**

**Recommended use**                      Animal feed additive

**Recommended restrictions**        Not to be used as an absorbent with turpentine, hydrofluoric acid, vegetable oil, and other unsaturated organic compounds (such as fish oil), as this may generate heat and/or fire. Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

**Manufacturer/Importer/Supplier/Distributor information**

**Company name**                              NutriQuest  
**Address**                                        3782 9th Street SW  
     Mason City, IA 50401  
**Telephone**                                    641.424.4798  
**E-mail**    quest@nutriquest.com  
**Emergency Phone Number**            1.866.519.4752 - Contract Number: 334387

## 2. Hazard(s) identification

**Physical hazards**                            Not classified.

**Health hazards**                              Carcinogenicity    Category 1A  
     Specific target organ toxicity, repeated exposure    Category 2 (Lungs)

**Environmental hazards**                    Not classified.

**Label elements**



**Signal word**                                    Danger

**Hazard statement**                            H350 - May cause cancer.  
     H373 - May cause damage to organs (Lungs) through prolonged or repeated exposure.

**Precautionary statement**

**Prevention**

P201    Obtain special instructions before use.  
 P202    Do not handle until all safety precautions have been read and understood.  
 P260    Do not breathe dust.  
 P280    Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P308 + P313                                    IF exposed or concerned: Get medical advice/attention.

**Storage**

P405    Store away from incompatible materials.

**Disposal**

P501    Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards which do not result in classification**                    None known.

**Supplemental information**                    This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica.

**National/local information**                    The Safety Information Sheet Chemicals of hazardous chemical can be obtained through phone, email or on the company website.

## 3. Composition/information on ingredients

**Mixtures**

Chemical name	CAS number	Content in percent (%)
Bentonite	1302-78-9	50 - 60
Quartz	14808-60-7	20 - 40

**Composition comments** Bentonite contains naturally occurring respirable crystalline silica in quantities of less than 4%. All concentrations are in percent by weight.

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. 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.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus. Material can be slippery when wet.
<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. Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

##### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**Methods and materials for containment and cleaning up** Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

**Precautions for safe handling** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Do not breathe dust. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store in a dry area. Keep away from turpentine, hydrofluoric acid, vegetable oil, and other unsaturated organic compounds (such as fish oil), as this may generate heat and/or fire.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### Philippines. OELs Threshold Limit Values for Airborne Contaminants

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.3 mg/m <sup>3</sup>	Total dust.
		0.1 mg/m <sup>3</sup>	Respirable.
		2.4 mppcf	Respirable.

### Biological limit values

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

### Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

### Appropriate engineering controls

Good general ventilation 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 engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn.

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

#### Eye/face protection

Unvented, tight fitting goggles should be worn in dusty areas.

#### 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. In case of inadequate ventilation or risk of inhalation of dust or fumes, use suitable respiratory equipment. Wear respirator with dust filter. Check with respiratory protective equipment suppliers.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Observe any medical surveillance requirements. 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

#### Physical state

Solid.

#### Form

Dry.

#### Color

Gray (to tan) or red.

### Odor

Not applicable.

### Odor threshold

Not applicable.

### pH

Not applicable.

### Melting point/freezing point

Not available.

### Initial boiling point and boiling range

Not available.

### Flash point

Not applicable.

### Evaporation rate

Not applicable.

### Flammability (solid, gas)

Not flammable.

### Upper/lower flammability or explosive limits

#### Flammability limit - lower (%)

Not applicable.

#### Flammability limit - upper (%)

Not applicable.

### Vapor pressure

Not applicable.

### Vapor density

Not applicable.

### Relative density

Not applicable.

### Solubility(ies)

#### Solubility (water)

<0.1% Insoluble (in water).

### Partition coefficient (n-octanol/water)

Not applicable.

Not applicable.

<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials. Minimize dust generation and accumulation.
<b>Incompatible materials</b>	Turpentine. Hydrofluoric acid. Unsaturated oils. Unsaturated organic compounds.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.
<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Dust may irritate respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Dust or powder may irritate the skin.
<b>Eye contact</b>	Dust may irritate the eyes.
<b>Ingestion</b>	None expected as this is a food product.

**Symptoms related to the physical, chemical and toxicological characteristics**      Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath. Prolonged exposure may cause chronic effects.

### Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be acutely toxic.
<b>Skin corrosion/irritation</b>	May cause irritation through mechanical abrasion.
<b>Serious eye damage/eye irritation</b>	May cause irritation through mechanical abrasion.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	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

May cause cancer by inhalation.  
 In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (CAS 14808-60-7)      1 Carcinogenic to humans.

#### Philippines OELs: Carcinogen category

Not listed.

#### US NTP Report on Carcinogens: Known carcinogen

Quartz (CAS 14808-60-7)      Known To Be Human Carcinogen.

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

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

<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs (Lungs) through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

<b>Ecotoxicity</b>	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.
<b>Persistence and degradability</b>	Not applicable to inorganic substances.
<b>Bioaccumulative potential</b>	No data available for this product.
<b>Mobility in soil</b>	The product is insoluble in water.
<b>Other adverse effects</b>	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

<b>Disposal instructions</b>	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.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	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

### ADR

Not regulated as dangerous goods.

### RID

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 applicable.

## 15. Regulatory information

### Safety, health and environmental regulations specific for the product in question

#### CCO Chemical List

Not regulated.

#### Controlled Precursors & Essential Chemicals (Comprehensive Dangerous Drugs Act of 2002 (Republic Act 9165), as amended thru Dangerous Drugs Board Regulations)

Not listed.

#### Ozone Depleting Substances (ODS) (Chemical Control Order, DENR Admin. Order No. 2013-25)

Not regulated.

#### Priority Chemical List (PCL) (DENR Administrative Order No. 98-58)

Not regulated.

### International regulations

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Montreal Protocol

Not applicable.

#### Kyoto protocol

Not applicable.

#### Basel Convention

Not applicable.

## International Inventories

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

\*A "Yes" indicates this product complies 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

<b>Issue date</b>	04-July-2018
<b>Revision date</b>	04-September-2018
<b>Version #</b>	02
<b>List of abbreviations</b>	TWA: Time Weighted Average Value. ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road. RID: Regulations concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. IMDG Code: International Maritime Dangerous Goods Code. TDG: Transportation of Dangerous Goods.
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