Printing date 05/06/2019 Reviewed on 05/06/2019

1 Identification

· Product identifier

· Trade name: Sand, White 20-30 Mesh ASTM C-778

· Article number: S0865

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA

800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson sherman@aquasolutions.org

· Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666



2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Crystalline Silica, Quartz

· Hazard statements

May cause cancer.

Causes damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

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

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Safety Data Sheet acc. to OSHA HCS

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· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 0 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 14808-60-7	Crystalline Silica, Quartz	98.7%
CAS: 1344-28-1	Aluminum Oxide, Technical Grade, Powder	<1.1%
· Table of Nonhazardous Ingredients		
CAS: 1309-37-1	Ferric Oxide Red	<0.1%
CAS: 13463-67-7	Titanium Dioxide	<0.1%

4 First-aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

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- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

	· ·	
· PAC-1:		
CAS: 14808-60-7	Crystalline Silica, Quartz	$0.075 \ mg/m^3$
CAS: 1344-28-1	Aluminum Oxide, Technical Grade, Powder	15 mg/m^3
CAS: 1309-37-1	Ferric Oxide Red	15 mg/m^3
CAS: 13463-67-7	Titanium Dioxide	30 mg/m³
· PAC-2:		
CAS: 14808-60-7	Crystalline Silica, Quartz	33 mg/m³
CAS: 1344-28-1	Aluminum Oxide, Technical Grade, Powder	170 mg/m³
CAS: 1309-37-1	Ferric Oxide Red	360 mg/m³
CAS: 13463-67-7	Titanium Dioxide	330 mg/m³
· PAC-3:		
CAS: 14808-60-7	Crystalline Silica, Quartz	$200 \ mg/m^3$
CAS: 1344-28-1	Aluminum Oxide, Technical Grade, Powder	990 mg/m³
CAS: 1309-37-1	Ferric Oxide Red	$2,200 \text{ mg/m}^3$
CAS: 13463-67-7	Titanium Dioxide	2,000 mg/m ³

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

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8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

CAS: 14808-60-7 Crystalline Silica, Quartz

PEL Long-term value: 0.05* mg/m³

*resp. dust; 30mg/m3/%SiO2+2

REL Long-term value: 0.05* mg/m³

*respirable dust; See Pocket Guide App. A

TLV Long-term value: 0.025* mg/m³ *as respirable fraction

CAS: 1344-28-1 Aluminum Oxide, Technical Grade, Powder

PEL Long-term value: 15*; 5** mg/m³

*Total dust; ** Respirable fraction

REL Long-term value: 10* 5** mg/m³

as Al*Total dust**Respirable/pyro powd./welding f.

TLV Long-term value: 1* mg/m³ as Al; *as respirable fraction

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

· Material of gloves

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· 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.

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· Eye protection:

(Contd. of page 4)



Tightly sealed goggles

· Body protection: Protective work clothing

Physical and chemical properties	
Information on basic physical and chem	nical properties
· General Information	
· Appearance:	
Form:	Granulate
Color:	White or tan
· Odor: · Odor threshold:	Odorless Not determined.
	Not applicable.
pH-value:	ної аррисавів.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	2,230 °C (4,046 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 1732 °C (3,149.6 °F).	: 13.5 hPa (10.1 mm Hg)
Density at 20 °C (68 °F):	>2.22444-2.61924 g/cm³ (>18.56295-21.85756 lbs/gal)
Bulk density:	$1,400 \text{ kg/m}^3$
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Insoluble.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Solvent content:	
VOC content:	0.00 %
Solids content:	<100.0 %

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· Other information

No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)				
CAS: 14808-60-7	Crystalline Silica, Quartz	1		
CAS: 1309-37-1	Ferric Oxide Red	3		
CAS: 13463-67-7	Titanium Dioxide	2B		
		· NTP (National Toxicology Program)		
'				
'	oxicology Program) Crystalline Silica, Quartz	K		
CAS: 14808-60-7		K		

12 Ecological information

- · Toxicity
- $\cdot \textbf{\textit{Aquatic toxicity:}} \ \textit{No further relevant information available}.$
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not hazardous for water.
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

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· Other adverse effects No further relevant information available.

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13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

UN-Number DOT, IMDG, IATA	Not regulated
UN proper shipping name DOT, IMDG, IATA	Not regulated
Transport hazard class(es)	
DOT, ADN, IMDG, IATA Class	Not regulated
Packing group DOT, IMDG, IATA	Not regulated
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· UN "Model Regulation":	Not regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara

· Section 355 (extremely hazardous substance	es).	:	
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None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

CAS: 1344-28-1 Aluminum Oxide, Technical Grade, Powder

TSCA	(Toxic	Substances	Control	Act).

- 20 0		
Crysta	line Silica, Quartz	ACTIVE
Alumin	um Oxide, Technical Grade, Powder	ACTIVE
Ferric	Oxide Red	ACTIVE
Titaniu	m Dioxide	ACTIVE

· Hazardous Air Pollutants

None of the ingredients is listed.

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· Proposition 65

· Chemicals known	to cause cancer:
CAS: 14808-60-7	Crystalline Silica, Quartz
CAS: 13463-67-7	Titanium Dioxide

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental	Protection Agency)
None of the ingredien	ts is listed.

· TLV (Threshold L	Limit Value established by ACGIH)	
CAS: 14808-60-7	Crystalline Silica, Quartz	A2
CAS: 1344-28-1	Aluminum Oxide, Technical Grade, Powder	A4
CAS: 1309-37-1	Ferric Oxide Red	A4
CAS: 13463-67-7	Titanium Dioxide	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)	
CAS: 14808-60-7 Crystalline Silica, Quartz	
CAS: 13463-67-7 Titanium Dioxide	

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Crystalline Silica, Quartz

· Hazard statements

May cause cancer.

Causes damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

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

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- · National regulations:
- · Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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 SDS: Environment protection department.
- · Contact:
- · Date of preparation / last revision

Revsion 0.0, 05-03-2019: Creation date for SDS. STN 05/06/2019 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Carc. 1A: Carcinogenicity - Category 1A

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

US