# SAFETY DATA SHEET Aqueous Ozone (0.1 to 2.0 PPM)

#### **SECTION 1: Identification**

**1.1.** Identification

Product form : Mixture

Trade name : ACQUA3 / AURORA AQUEOUS OZONE SOLUTION Common names / Synonyms:: Aqueous Ozone, Ozone water, Ozone enriched water

**1.2.** Relevant identified uses of the substance or mixture and uses advised

Use of the substance/mixture : Surface cleaning, water purification.

### **1.3.** Details of the supplier of the safety data sheet

Skypoint Hospitality and Technology Co., Ltd

99/380 Moo 5 Soi Boonsamphan, NongPrue, Banglamung, Chonburi 20150 Thailand info@aq-o3,com

### **1.4.** Emergency telephone number

Emergency number : +66620038353

# SECTION 2: Hazard(s) identification

# 2.1. Classification of the substance or mixture

### **GHS-US** classification

Not classified

### 2.2. Label elements

### **GHS-US labelling**

No labelling applicable

### 2.3. Other hazards

No additional information available

# 2.4. Unkown acute toxicity (GHS US)

Not applicable

### **SECTION 3: Composition/information on ingredients**

### 3.1. Substance

Name	Identifier	% present in any formulation #	Classification according to Regulation (EC) No 1278/2008 (CLP)
Water	Cas No: 7732-18-5 EC No: 231-791-2 REACH registration No: exempt	>99.9998%	Not classified
Ozone	Cas No: 10028-15-6 EC No: 233-069-2 REACH registration No: exempt, biocidal product	<0.0002%	Ox. Gas 1, H270 Acute Tox. 1, H330 Muta. 2, H341 Carc. 2, H351 STOT SE 1, H370 STOT SE 3, H335 STOT RE 1, H372

NB: The percentage of ozone generated in the aqueous mixture does not require classification. This product does not generate ozone gas.

#### 3.2. Mixture

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2019. Dissolved ozone gas in water 0.1 to 2.0ppm

### SECTION 4: First-aid measures

### **4.1.** Description of first-aid measures

**First-aid measures after inhalation:** Inhalation of aqueous ozone mist may lead to irritation of the lungs. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If exposure symptoms persist, seek medical advice.

**First-aid measures after skin contact:** Not known to cause irritation, but if skin irritation occurs, wash well with fresh water. If skin irritation persists, seek medical attention.

**First-aid measures after eye contact:** If eye irritation occurs with exposure to aqueous ozone, it is suggested to efficiently rinse eye with potable water for 5 minutes. Remove contact lenses, if present. Continue rinsing. If eye irritation persists: Get medical advice and attention.

**First-aid measures after ingestion:** No specific measures have to be taken if the product is swallowed. Liquid O3, LLC does not advise drinking its product's aqueous ozone solution, there are no known medical benefits.

### **4.2.** Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : None under normal use. Inhalation of aqueous ozone mist may lead to irritation of the lungs.

: Mild irritation may occur if a person is exposed to gaseous ozone for an extended period-of-time.

Symptoms/Injuries after skin contact: None under normal use. Symptoms/Injuries after eye contact: May cause minor eye irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None to our knowledge.

### 5.2. Special hazards arising from the substance of mixture

Fire hazard : None known. Explosion hazard : None known.

Reactivity : No dangerous reactions known under normal condition of use.

#### **5.3.** Advice for firefighters

Firefighting instructions : No special requirements.

Protective equipment for firefighters: No additional risk management measures required.

#### **SECTION 6: Accidental release measures**

# **6.1.** Personal precautions, protective equipment and emergency procedures

General measures : Spilled material may present a slipping hazard.

#### 6.1.1 For non-emergency personnel

Protective equipment : For further information refer to section 8: Exposure-controls/personal

protection.

### 6.1.2. For emergency responders

Protective equipment : For further information refer to sectionn 8: Exposure-controls/personal

protection.

#### 6.2. Environmental precautions

None known.

### **6.3.** Methods and material for containment and cleaning up

For containment : No additional risk management measures required. Methods for cleaning up : Allow

the residual product to evaporate. No special procedures required.

#### **6.4.** Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection.

For disposal of residues refer to section 13: Disposal considerations.

### SECTION 7: Handling and storage

### **7.1.** Precautions for safe handling

Precautions for safe handling : Aqueous ozone solution should not be sprayed as an aerosol to avoid the release of ozone gas out of aqueous solution.

- : The decay rate of ozone gas is related to temperature and organic material exposure.
- : Testing has proved that the rate of ozone gas released from aqueous solution is below the \*PEL established by OSHA for gaseous ozone.
- : Avoid extended periods of use in confined areas without proper ventilation.

\*PEL: Permissible Exposure Limits.

# **7.2.** Conditions for safe storage, including any incompatibilities

Storage conditions : No special measures required.

Incompatible materials : Natural rubber components may degrade or dry-out over time.

: Examples include: Buna, Nitrile and Vinyl

### SECTION 8: Exposure control/personal protection

### 8.1. Control parameters

Ozone gas

DNELs	Workers				Consumers				
Route of	Acute	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic	
exposure	effect	effect	effects local	effects	effect	effect	effects	effects	
	local	systemic		systemic	local	systemic	local	systemic	
inhalation	No hazard identified 0.024 mg		0.024 mg/m <sup>3</sup>	No hazard	No hazard identified				
	identified			identified					
dermal	irritation	irritation No hazard identified			No hazard identified				
eyes	medium hazard, no threshold identified				No hazard identified				

The PNEC for freshwater and marine water is 0.008 µg/L

**8.2.** Exposure controlsControl parameters

Appropriate engineering controls

Hand protection

: Handle in accordance with good industrial hygiene and safety procedures.

: No special hand protection is recommended under normal conditions of use.

: No special eye protection equipment recommended under normal conditions of use.

Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use with

adequate ventilation.

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

### **9.1.** Information on basic physical and chemical properties

Physical State : Liquid

Color : Light blue , Colorless
Odor : Fresh - No fragrance added

Odor threshold : No data available

pH : Same as source water - typically 6.0 - 9.0 pH

Melting point : No data available
Freezing point : No data available
Boiling point : 100 C (212 F)

Flash point : No data available

Relative evaporation rate : ≈ 1

Flammability (solid, gas) : No data available Explosive limits : No data available

Oxidizing properties : Strong oxidizing properties towards certain materials. Vapor pressure : 2.3 kPa

: No data available Viscosity

(20C)

Relative density : No data available

Relative vapor density : 0.62 Density : 1

Solubility : Water, completely soluble

Log Pow : No data available

Auto-ignition temperature : No data available Decomposition temperature

: No data available

Viscosity, kinematic : No data available Viscosity, dynamic : No data available

# 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

### **10.1.** Reactivity

No dangerous reactions known under normal conditions of use.

# 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known

### **10.4.** Conditions to avoid

None under normal conditions.

### **10.5.** Incompatible materials

Natural rubber components may degrade or dry out over time with extended use.

### 10.6. Hazardous decomposition products

None known.

### SECTION 11: Toxicological information

# 11.1. Information on toxicological effects

Likely routes of exposure : Ingestion; Inhalation; Skin and eyes contact

Acute toxicity : Not classified
Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated exp.) : Not classified Aspiration hazard : Not classified

Symptoms/injuries after inhalation : None under normal use. Inhalation of aqueous ozone mist may lead to irritation of the

lungs.

: Mild irritation may occur if a person is exposured to gaseous ozone for an extended

period of time.

Symptoms/injuries after skin contact : None under normal use.
Symptoms/injuries after eye contact : May cause minor eye irritation.

Symptoms/injuries after ingestion : Not known or expected to be harmful to health in normal use.

### **SECTION 12: Ecological information**

### **12.1.** Toxicity

No additional information available.

### **12.2.** Persistence and degradability

No additional information available.

### 12.3. Bio accumulative potential

No additional information available.

# 12.4. Mobility in soil

No additional information available.

### **12.5.** Other adverse effects

Effect on ozone layer : No additional information available Effect on the global warming : No additional information available

### **SECTION 13: Disposal considerations**

### **13.1.** Waste treatment methods

Waste disposal recommendations: May be disposed of in household waste landfill.

# **SECTION 14: Transport information**

# **Department of Transportation (DOT)**

In accordance with DOT Not regulated for transport

### TDG

Not regulated for transport

### Transport by sea

Not regulated for transport

# Air transport

Not regulated for transport

# **SECTION 15: Regulatory information**

### **15.1.** US Federal regulations

No additional information available

### **15.2.** International regulations

# CANADA

No additional information available

### **EU-Regulations**

No additional information available

### National regulations

No additional information available

### **15.3.** US State regulations

No additional information available

#### SECTION 16: Other information

Date of latest revision : February 4th 2022

Sources of key data : Data arise from reference works and literature.

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard

beyond that of ordinary combustible materials.

NFPA fire hazard : 0 - Materials that will not burn.

**NFPA reactivity** and are not reactive with water.

: 0 - Normally stable, even under fire exposure conditions,



SDS US (GHS HazCom 2019)

This information is based on our current knowledge and is intended to described the product for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.