



Identification of Substance and Company

**Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>)**

The low level gas phase hydrogen peroxide byproduct of the disinfection process that takes place within an AIRPHX unit is not hazardous according to the OSHA Hazard Communication Standard 29 CFR 1910.1200.

The AIRPHX technology is comprised of electromechanical air disinfection equipment that relies on electricity and the oxygen present in ambient air to produce marginal levels of oxidizing molecules where H<sub>2</sub>O<sub>2</sub> is stabilized (average less than 0.02 ppm) within a treated area or space sized as recommended in the applicable User Guide. Such treated area(s) should have consistent/constant airflow to provide a uniform distribution of the oxidizing air. AIRPHX units have been verified to comply with the USDA National Organic Standards (7 CFR Part 205).

**PhoenixAIRE, LLC d/b/a AIRPHX**

Product Name	Description	Use
AIRPHX units	Air and surface disinfection units	Antimicrobial intervention
<i>Equipment produces oxidizing molecules by drawing ambient air through a controlled sealed plasma chamber that is powered by standard 120V electricity without the addition of any chemicals or additives. The production of oxidizing molecules is marginal measured in very low concentrations (parts per million/ppm) and when not reacting with carbon based compounds, the oxidizing molecules revert back to oxygen.</i>		

The following is an excerpt from the OSHA Permissible Exposure Levels for Hydrogen Peroxide

<p><b>General Description</b>  Synonyms: High-strength hydrogen peroxide; Peroxide; Hydrogen dioxide; H<sub>2</sub>O<sub>2</sub>  OSHA IMIS Code Number: 1470  Chemical Abstracts Service (CAS) Registry Number: 7722-84-1</p>
<p><b>Exposure Limits</b>  OSHA Permissible Exposure Limit (PEL) Total Weighted Average (TWA) over an 8 hour period:  <b>General Industry: 29 CFR 1910.1000 Table Z-1 – 1 ppm, 1.4 mg/m<sup>3</sup> TWA</b>  Construction Industry: 29 CFR 1926.55 Appendix A – 1 ppm, 1.4 mg/m<sup>3</sup> TWA  Maritime: 29 CFR 1915.1000 Table Z-Shipyards – 1 ppm, 1.4 mg/m<sup>3</sup> TWA  American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV): 1 ppm, 1.4 mg/m<sup>3</sup> TWA  National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit (REL) over a 10 hour period:  1 ppm, 1.4 mg/m<sup>3</sup> TWA</p>

Disclaimer: The information on this reference sheet is intended to provide general knowledge as to safe handling/operation of the systems based upon our product use knowledge. This reference is limited to oxidizing molecules produced in gaseous form on site by an AIRPHX system, in air based applications and controlled conditions as designed by an expert team, for the purposes of control of carbon-based compounds, antimicrobial use or odor abatement in a variety of applications. No handling or storage is required. It is not intended to be a specification nor guarantee of specific properties nor is it applicable to unusual or non-standard uses of the product or where instructions or recommendations are not followed. AIRPHX makes no representations or warranties, express or implied, of the merchantability or suitability of the product for any purpose, and will not be responsible for any damages resulting from the use of, or reliance upon, this information.

## Identification of Substance and Company

### **Ozone (O<sub>3</sub>)**

The low level ozone byproduct of the disinfection process that takes place within an AIRPHX unit is not hazardous according to the OSHA Hazard Communication Standard 29 CFR 1910.1200.

The AIRPHX technology is comprised of electromechanical air disinfection equipment that relies on electricity and the oxygen present in ambient air to produce marginal levels of oxidizing molecules where O<sub>3</sub> is stabilized (average less than 0.002 ppm) within a treated area or space sized as recommended in the applicable User Guide. Such treated area(s) should have consistent/constant airflow to provide a uniform distribution of the oxidizing air. AIRPHX units have been verified to comply with the USDA National Organic Standards (7 CFR Part 205).

### **PhoenixAIRE, LLC d/b/a AIRPHX**

Product Name	Description	Use
AIRPHX Units	Air and surface disinfection units	Antimicrobial intervention
<i>Equipment produces oxidizing molecules by drawing ambient air through a controlled sealed plasma chamber that is powered by standard 120V electricity without the addition of any chemicals or additives. The production of oxidizing molecules is marginal, measured in very low concentrations (parts per million/ppm) and when not reacting with carbon based compounds, the oxidizing molecules revert back to oxygen.</i>		

The following is an excerpt from the OSHA Permissible Exposure Levels for Ozone

<p><b>General Description</b> Synonyms: Ozone, Triatomic oxygen, O<sub>3</sub> OSHA IMIS Code Number: 1980 Chemical Abstracts Service (CAS) Registry Number: 10028-15-6</p>
<p><b>Exposure Limits</b> OSHA Permissible Exposure Limit (PEL): 0.1 ppm, 0.2 mg/m<sup>3</sup> eight (8) hour TWA General Industry: 29 CFR 1910.1000 Table Z-1 – 0.1 ppm, 0.2 mg/m<sup>3</sup> eight (8) hour TWA Construction Industry: 29 CFR 1926.55 Appendix A – 0.1 ppm, 0.2 mg/m<sup>3</sup> eight (8) hour TWA Maritime: 29 CFR 1915.1000 Table Z-Shipyards – 0.1 ppm, 0.2 mg/m<sup>3</sup> eight (8) TWA American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV): 0.1 ppm, 0.2 mg/m<sup>3</sup> eight (8) hour TWA National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit (REL): 0.1 ppm, 0.2 mg/m<sup>3</sup> eight (8) hour TWA</p>

### Additional NIOSH information

<b>Physical Description</b> Colorless gas with pungent characteristic odor (often associated with electrical sparks).
<b>Incompatibilities &amp; Reactivity</b> All oxidizable materials (both organic and inorganic).
<b>Exposure Routes</b> inhalation, skin and/or eye contact - <b>Symptoms</b> Irritation with levels above PEL
<p><b>Generic First Aid</b> Eye: Irrigate immediately Skin: Water flush immediately</p>

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