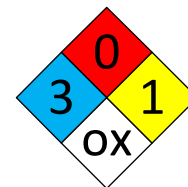




Fleic OZONE MATERIAL SAFETY DATA SHEET

NFPA 704: Flammability = 0; Health = 3; Reactivity = 1; Special = oxidizer



Section I: Product Information	
Product Name	Ozone (gaseous)
Synonyms	Triatomic Oxygen, O ₃
Chemical Formula	O ₃
Description	Occurs in atmosphere from UV light acting on oxygen at high altitude. Commercially derived by air flowing through two electrodes carrying high voltage AC. Also appears as a by-product of welding, high-voltage equipment, or UV radiation.
Caution	O ₃ is a powerful oxidizer, and is very chemically reactive. Inhalation can create respiratory irritation, pulmonary edema, and affect the eyes, blood, and nervous system.
Intended Use	On-site synthesis for water decontamination.
Section II: Hazards	
Ozone, CAS No. 10028-15-6: NIOSH RTECHS No. RS8225000	
2016 NIOSH REL: C 0.1 ppm (0.2 mg/m ³) OSHA PEL: 0.1 ppm (0.2 mg/m ³) TWA NIOSH IDLH: 5 ppm. ACGIH TLV: Ceiling = 0.1 ppm (0.2 mg/m ³)	
Section III: Physical Data	
Boiling Point	-169°F
Vapor Pressure	>1 ATM
Vapor Density (AIR=1)	1.6
Solubility in Water	0.49 ml @ 32°F (0°C), 3ppm @ 20°C
Melting Point	-315°F (-193°C)
% Volatile by Volume	100%

Molecular Weight	48 g/mol
pH	Unlisted
Critical Temperature	10.22°F (-12.1°C)
Appearance and odor	Colorless to blue gas (> -169°F); characteristic odor often associated with electrical sparks or lightning when < 2ppm, and disagreeable > 1-2 ppm. Olfactory fatigue is rapid, so do not use as a preventative warning device.
Section IV: Fire and Explosion Data	
Flash Point	Nonflammable
Extinguishing Media	Use large amounts of water spray or fog to put out fires involving ozone. Use appropriate fire-fighting techniques to address surrounding material.
Section V: Reactivity Data	
Stability	Ozone is not stable and tends to spontaneously break down into O ₂ . Cannot form polymer chains or three-dimensional networks.
Chemical Compatibility	Ozone is chemically incompatible with all oxidizable materials.
Conditions to Avoid	Ozone will spontaneously decompose to O ₂ gas, which is an oxidant. Flammable materials in the presence of an oxidant source and ignition will burn readily, with increased fire strength. Avoid presentation of ignition sources such as heat, sparks, or open flame. Avoid strong reducing agents.
Section VI: Health Hazard Data	
Carcinogenicity	Ozone is not listed as a carcinogen.
Primary Entry	Inhalation
Target Organs	Respiratory system, eyes, blood
Summary of Risks	May irritate respiratory tract (experienced as nasal and throat irritation, dryness, chest pain and congestion, breathing problems and coughing. Eye irritation, headache, nausea and drowsiness may occur. Concentrations > 9ppm may result in pneumonia with delayed onset, and high concentrations may be fatal.
Acute Effects	Acute damage from ozone appears to result from oxidation of tissues.
Chronic Effects	Respiratory disease, lung damage
Conditions Aggravated by Long-Term Exposure	Respiratory and heart disorders

First Aid	Remove affected individual from ozone source to fresh air, seek medical assistance immediately. If eyes were exposed, gently flush eyes with water for 15 minutes or until transported to a medical facility; if inhaled, remove person to fresh air, support breathing, get medical help.
Section VII: Precautions for Safe Handling and Use	
Actions to Take in Case of Leak	Discontinue production; isolate and ventilate area; notify personnel; deny entry to area; follow applicable OSHA regulations.
Disposal	Use ventilation to disperse ozone to outer atmosphere. Follow federal, state, and local regulations.
Section VIII: Control Measures	
Respiratory Protection	If > 10ppm (high level) use MISH/NIOSH approved self-contained breathing apparatus. For low level (0.3-10ppm), canister-type (carbon) respirator may be used.
Eye Protection	Wear chemical safety goggles if working with high ozone
Skin Protection	Minimal or no effects on skin
Ventilation	Provide general and local exhaust ventilation to disperse small amounts of ozone into atmosphere
Section IX: Special Precautions	
Storage Considerations	Prevent ozone from coming into contact with strong acids, bases, or strong oxidizing/reducing agents.
Ventilation	Ventilation should be installed to keep concentrations below ACGIH/OSHA exposure limits; ambient monitors should be present to sense ozone leaks and shut down ozone production in the event of a leak.



Thank You

Thank you for choosing Fleic

. We look forward to helping with your odor & mold removal project

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