

SAFETY DATA SHEET**OZONE IN AIR FOR UNITS WITH OUTPUTS \geq 101 mg/h****SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

Product Name: Ozone
 Chemical Formula: O₃
 Company Identification: Ozone Industries Ltd. Unit B2, Armstrong Mall,
 Southwood Summit Centre, Farnborough, Hants,
 GU14 0NR, England
 Tel: 01252 407507, Fax: 01252 407501

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CONCENTRATION	RISK PHRASES	CAS NO
ozone	\leq 5% wt @ outlet	Toxic/Irritant	10028-15-6
Feed Gas air or oxygen	balance	-	-

SECTION 3: HAZARDS IDENTIFICATION

Irritating to eyes and respiratory tract.

SECTION 4: FIRST AID MEASURES

Inhalation: Remove the person to an uncontaminated area.

SECTION 5: FIRE – FIGHTING METHODS

Ozone is most often generated from air at concentrations of 1 – 10% by weight. At these concentrations ozone is non-explosive. Ozone at these concentrations will support combustion only slightly better than air itself.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Evacuate area.
 Wear appropriate respiratory protection.
 Environmental Precautions: None, allow to decay naturally to oxygen.

SECTION 7: HANDLING AND STORAGE

Handling: Ensure generating equipment is correctly set up.
 Keep away from materials that degrade or oxidise in the presence of Ozone.
 Refer to operating instructions for generator.
 Storage: Cannot be stored, as it will revert back to oxygen in a few hours.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit value: 0.2ppm (v/v) 15 mins TWA according to EH 40 (UK).
 Ensure adequate ventilation.
 Wear respiratory protection if continually exposed to levels above 0.2ppm.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Molecular Weight: 48.
 Melting Point: -196°C.
 Boiling Point: -110°C.
 Density gas (NTP): 2.144g/litre.
 Odour: 'Bleach' smell at concentrations above 0.03ppm (v/v).
 Other Data: Gas is heavier than air.

SECTION 10: STABILITY AND REACTIVITY

Thermal decomposition occurs rapidly above 200 °C, (in a few hours at room temperature.)
The half-life time in the gas phase at room temperature is 10 minutes to 2 hours.
When dissolved in pure water at room temperature the half-life is between 10 minutes and 30 minutes.
Avoid certain textiles, fabrics, organic dyes, rubbers and plants.

SECTION 11: TOXICOLOGICAL INFORMATION

May induce nausea and headaches.
Possible lung damage on prolonged exposure at high concentration.

SECTION 12: ECOLOGICAL INFORMATION

Does not form a permanent ecological hazard.

SECTION 13: DISPOSAL CONSIDERATIONS

Discharge to atmosphere in a well ventilated place.

SECTION 14: TRANSPORT INFORMATION

Not applicable. See section 7 – Storage.

SECTION 15: REGULATORY INFORMATION

Guidance Note EH38 (UK):-	Ozone: Health Hazards and Precautionary Methods.
Labelling Phrases:	Irritant (Label at the Generator Output).
Biocidal Products Directive 98/8/EC:-	Not applicable

SECTION 16: OTHER INFORMATION

Ozone is unstable and cannot be stored.
Ozone is made at, or close to, the point of use.
It is used as a de-odouriser, fungicide, bactericide and algaecide.
It is frequently made as a side effect in machinery, for example, photocopiers.

SECTION 17: SECTION REVISION AND DATES

Notes: NTP: Normal Temperature and Pressure (0°C and 1 atmosphere).
TWA: Time Weighted Average.