

SAFETY DATA SHEET

OZONE FROM AIR UNITS WITH OUTPUTS<= 100mg/h

ISSUE 8c, June 2005

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name/synonyms: Ozone (triatomic oxygen, activated oxygen)
Chemical Formula: O₃

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CONCENTRATION	RISK PHRASES	CAS NO
ozone	<5 ppm @ generator outlet	irritant	10028-15-6
air	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

No risk.

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

Description:	colourless gas
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.
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).

SECTION 16: OTHER INFORMATION

Ozone is unstable and cannot be stored.
Ozone is made at the point of use.
It is used as a de-odouriser, fungicide, bactericide and algacide.
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.