



ANTEC HYPEROX
SAFETY DATA SHEET HSD/48C

(1) **IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

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(2) **COMPOSITION/INFORMATION ON INGREDIENTS**

Composition: Stabilised blend of peracetic acid, hydrogen peroxide, acetic acid and surfactants in an aqueous base.

<u>Chemical</u>	<u>% Concentration</u>	<u>Classification</u>	<u>CAS</u>	<u>Exposure</u>
Peracetic Acid	5	O; R7 R10 X _n ; R20/21/22 C; R35 N; R50	79-21-0	None assigned.
Hydrogen Peroxide	>20	O; R8 C; R34	7722-84-1	OES 2ppm (15 min. reference period)
Acetic acid	<10	R10 C; R35	64-19-7	OES 15ppm (15 min. reference period)

For the full text of the R-phrases mentioned in this section, see section 16.

(3) **HAZARDS IDENTIFICATION**

Corrosive effect on skin and eyes (causes burns).
May cause fire.

(4) **FIRST AID MEASURES**

<u>Exposure Route</u>	<u>Symptom</u>	<u>Treatment</u>
INHALATION	Discomfort: Irritation of mucous membranes (eyes, nose, throat).	Remove affected person to fresh air. Keep upper body raised. Keep warm and in a stable position. Consult a doctor immediately.
SKIN CONTACT	Burning effect upon prolonged contact. Strong irritation and temporary whitening of skin.	Rinse immediately with plenty of water. Remove contaminated clothing and wash with water. Consult a doctor immediately.
EYE CONTACT	Corrosive effect - burning sensation.	Hold eye open and irrigate thoroughly with plenty of clean water or buffered eyewash for at least 15 minutes. If affected person is wearing contact lenses, do not remove immediately; irrigate as above for 5 minutes, remove contact lenses and continue as above. Consult a doctor immediately.
INGESTION	Burning sensation and damage to mouth, throat, stomach lining.	Do not induce vomiting. If conscious allow patient to drink plenty of water in small sips. Rinse mouth out with water. If affected person stops breathing, do not give mouth-to-mouth. Consult a doctor immediately.

NOTE TO DOCTOR: Treat as for acid burn.
 If substance has been swallowed; Aspiration hazard; Risk of serious embolisms.
 Do not administer activated charcoal, since risk of release of large amounts of gas may occur.

(5) **FIRE FIGHTING MEASURES**

Suitable extinguisher:	Water, foam, powder, Carbon dioxide (CO ₂).
Special precautions:	Product is oxidising. If involved in fire, product may decompose yielding oxygen, which will support combustion. Decomposition within enclosed spaces (e.g. pipes) may lead to pressure build-up and bursting. In case of fire, any containers at risk of overheating should be cooled using water spray.
Special protective equipment:	Fire fighting personnel are required to wear self-contained breathing apparatus and chemical protective suit in the event of a fire involving Hyperox.

(6) **ACCIDENTAL RELEASE PROCEDURES**

Personal

precautions: Wear protective equipment (see section 8).

General:

Isolate and seal off defective containers immediately if possible.
Ensure adequate ventilation – always consider the hazards presented by gases escaping from controlled areas.
Evacuate all non-essential personnel and prevent access by unauthorised/unprotected persons.

Environmental

precautions: Prevent product from entering drains and watercourses.

Methods for**cleaning up:**

Absorb spill with an inert absorbent material *eg* sand. Do not use sawdust or other combustible substances. Collect in a suitable container before disposal in accordance with the regulations.
Rinse contaminated areas thoroughly with water.
Avoid contact with incompatible substances (see section 10).

(7) **HANDLING AND STORING**

Precautions**During****Handling:**

- Avoid direct sunlight and heat. Keep away from incompatible substances (see section 10).
- Avoid impurities.
- Wear protective equipment (see section 8). Avoid contact with skin, eyes and clothing.
- Do not inhale vapour or mist.
- Ensure adequate ventilation.
- Provide facilities for installation of an emergency shower and an eye bath.
- Change clothes which have been contaminated with product and wash clothing immediately with water.

Storage:

- Store only in the original vented container in a cool, well ventilated place.
- Storage areas should be constructed of acid proof, impermeable flooring. Construction materials should be incombustible.
- Avoid all heat sources and direct sunlight.
- Check packages regularly for any signs of deformation, pressure build up, leakage or temperature rise.
- Containers must be stored upright only (do not block cap vent).
- Do not store with alkalis, reducing agents, metallic salts or combustible substances.

Other**Information:**

A water supply should be available to cool containers in the event of a fire.

(8) EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering**

Measures: Specific engineering measures are not normally required when handling small quantities of the product (e.g. 5 litre and 20 litre containers). However, adequate ventilation is essential. Do not handle the concentrate in confined areas without adequate personal protection. Always monitor OES levels (see below).

Control

Parameters: No OES given for peracetic acid.

Hydrogen Peroxide:

OES Short-term exposure limit 2ppm/2.8mg.m⁻³ (15 minute exposure period).

OES Long-term exposure limit 1ppm/1.4mg.m⁻³ (8-hour TWA reference period).

Acetic acid:

OES Short-term exposure limit 15ppm/37mg.m⁻³ (15 minute exposure period).

OES Long-term exposure limit 10ppm/25mg.m⁻³ (8-hr TWA reference period).

Personal protection

Respiratory: Respiratory protection is normally necessary when handling the concentrated product and when working in spray mists of the diluted product, particularly in poorly ventilated areas. Where required, use a full face mask fitted with an ABEKP₂ combination filter.

Hand: Gloves (rubber, neoprene or PVC).

Eye: Goggles or face shield to BS EN166 standard.

Skin: Overalls, chemical resistant (PVC, neoprene, nitrile rubber or rubber). Rubber or plastic boots.

(9) PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid.

Odour: Pungent; sweet chlorine, acetic acid.

Colour: Colourless.

Flash Point: >96°C.

Explosion Limits: None.

Density: ca. 1.12g/cm³ (20°C).

pH: ca. 1 (20°C).

Oxidising Properties: Oxidising according to Directive EEC 67/548.

(10) **STABILITY AND REACTIVITY**

Stability: Product is an oxidising agent and is reactive.
Stable at room temperature.

Risk of decomposition when exposed to heat.

When in contact with product, impurities and incompatible substances may lead to self-accelerated exothermic decomposition and formation of oxygen.

Conditions to Avoid: Sun rays, heat sources.

Materials to Avoid: Impurities
Metal ions
Metallic salts
Metals
Alkalis
Reducing Agents
Combustible substances

Decomposition

Products: Oxygen
Water
Acetic acid

Decomposition in confined spaces and pipes may lead to risk of over pressure and bursting.
Release of oxygen may support combustion.

(11) **TOXICOLOGICAL INFORMATION**

Acute Oral

Toxicity: No data.

Skin Irritation: Corrosive. Primary irritant effect on skin.

Eye Irritation: No data. Primary irritant effect on the eyes. Risk of serious eye injury is assumed based upon skin irritation effects; corrosive effect has to be anticipated.

Human

Experience: Severe irritation or corrosive effect in contact with skin and especially in contact with eyes.
Inhalation of vapours may cause strong irritation or corrosion (respiratory tract).

(12) **ECOLOGICAL INFORMATION**

Persistence & Degradability:

Rapid biotic degradation in soil/water due to hydrolysis, decomposition and reduction.

Acetic acid formed by decomposition is readily biodegradable.

Bioaccumulation is not expected.

Rapid biotic degradation is expected in waste water treatment plants.

Based on evaluation of its components in accordance with 1999/45/EC, this product is not expected to display long term adverse effects in the aquatic environment.

Aquatic Toxicity: EC₅₀ 5.9 mg/litre (Daphnia magna, OECD method 202 part 1).

(13) **DISPOSAL CONSIDERATIONS**

Disposal of Product: Dispose of as Special Waste in compliance with the Special Waste Regulations of 1996. Observe local restrictions.

Disposal of Packaging: Dispose of in accordance with the Environmental Protection (Duty of Care) Regulations 1991. Observe local restrictions.

(14) **TRANSPORT INFORMATION**

UK Road (CDG): Oxidising, subsidiary corrosive; 5.1 (8).

Road (ADR): Oxidising, subsidiary corrosive; 5.1 (8).

Sea (IMDG): Oxidising, subsidiary corrosive; 5.1 (8).

Packing group: II.

UN Number: 3149

Proper shipping Name: Mixture of hydrogen peroxide and peracetic acid, stabilised.

Marine Pollutant: No.

(15) **REGULATORY INFORMATION**

Legislation: The product is labelled in accordance with the Chemicals (Hazard Information and Packaging) Regulations 2002 (CHIP3). The product must be handled in accordance with the COSHH (Control of Substances Hazardous to Health) Regulations 2002.

Symbol:

Oxidising (O).



Oxidizing

Corrosive (C).



Corrosive

R-Phrases: R7 May cause fire



	R34	Causes burns
S-Phrases:	S3/7	Keep container tightly closed in a cool, ventilated place.
	S14	Keep away from metal ions, alkalis, reducing agents and combustible substances.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

(16) **OTHER INFORMATION**

Uses: Disinfectant.

Further Product

Information: Consult the Hyperox technical leaflet for guidance on the use of the product. The customer should satisfy themselves that the product is suitable for the intended purpose, and that a suitable and sufficient assessment of any risks created by any activity using this product is undertaken before use.

Explanation of Risk-phrases (R-phrases) mentioned in section 2:

R7	May cause fire.
R8	Contact with combustible material may cause fire.
R10	Flammable.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R35	Causes severe burns.
R50	Very toxic to aquatic organisms.

Changes made since the last edition are indicated by a line in the margin.

The above information is based upon our current state of knowledge of the product at the time of publication. The data is given in good faith and is designed only as a guidance to users of possible risks, and therefore, does not constitute a guarantee of product quality performance.

Revision: C

Date: 16th July 2004

Replaces: B Dated 4th January 2001.

EMERGENCY TELEPHONE NUMBER (UK): 01787 377305