

MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTIFICATION

Product Name: PENTAGIGA ANTIBACTERIAL HEAVY DUTY CLEANER

Manufacturers Name & Address: New Decade Investments (Pty) Ltd trading as Durotec.
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Product Code: 11850 (5L) 11855 (25L) 11860 (1L)

Product Type/General Information: Chemical Disinfectant / cleaner

Registration Number: Act 29: pending

Chemical Name: (active) 2.5 % stabilised glutaraldehyde –Secondary Alcohol Ethoxylate
Sodium Lauryl Ether Sulfate - Dipropylene glycol Ether

Hazardous Chemicals: Glutaraldehyde

Routes of Entry: Inhalation X Skin/Eye X Ingestion X

SECTION 2 Hazardous Ingredients/Identity Information

The product contains the following hazardous ingredients at concentrations greater than 1.0%

CHEMICAL COMPONENTS: Glutaraldehyde (active ingredient)

CAS#: 111-30-8

%w/v: 10%

OSHA PEL: 0.2 ppm¹

ACGIH TLV: 0.05 ppm

The product contains the following hazardous ingredients listed as carcinogens or potential carcinogens by the National Toxicology Program (NTP), International Agency on Cancer (IARC) or OSHA, and present at a concentration greater than 0.1%:

CHEMICAL COMPONENTS: None

CAS#: n/a

%v/w: n/a

¹The OSHA Permissible Exposure Level (PEL) for glutaraldehyde was invalidated in 1992 by court order. However, the PEL may remain valid in some OSHA approved state plans, and also can be enforced by federal OSHA under the General Duty Clause.

SECTION 3 Physical/Chemical Characteristics

Boiling Point: 100°C

Evaporation Rate: n/a

Specific Gravity: 1.008 - 1.009

Solubility (H₂O): Complete

Vapour Pressure:	NOT KNOWN	Appearance & Colour:	A green liquid with typical Pine essence odour
Melting Point:	n/a	pH:	Between 8 and 8.5.
Vapour Density:	1.1 (air =1)	Molecular Weight:	Proprietary
Freezing Point:	0°C/32°F (Same as Water)		
Percent Volatile by Vol.:	Not detectable at normal usage dilution		

SECTION 4 Fire and Explosion Hazard Data

Flash Point (Test Method):	None (Tag Closed Cup ASTM D 56)
Special Fire Fighting Procedures:	Self-Contained Breathing Apparatus (SCBA) and protective clothing should be worn when fighting chemical fires.
Unusual Fire and Explosion Hazards:	None known
Extinguishing Media:	Carbon dioxide, foam, dry chemical.

SECTION 5 Reactivity Data

Stability:	Stable X
Hazardous Polymerisation:	Will Not Occur X at temperature between -4°C and +40°C
Hazardous Decomposition Products:	Thermal decomposition may produce toxic oxides of carbon.
Conditions and Materials to Avoid:	Enzyme cleaners, Ammonia, Amine containing products.

SECTION 6 Health Hazard Data

Route of Entry: Inhalation: **X** Skin/Eye: **X** Ingestion: **X**

Signs and Symptoms Associated with Overexposure (one-time or repeated):

- Ingestion for solution containing 2% glutaraldehyde or higher:** May cause irritation and possibly chemical burns of the mouth, throat, stomach and oesophagus. May produce discomfort in the mouth, throat, chest and abdomen, nausea, vomiting, diarrhoea, dizziness, faintness drowsiness, thirst and weakness.
- Eyes:** Solution contact may cause damage, including severe corneal injury, which could permanently impair vision if prompt first-aid and medical treatment are not obtained. Vapours may cause stinging sensation in the eye with excess tear production, blinking, and redness of the conjunctiva.
- Skin:** Not skin irritant. Avoid contact on existing dermatitis. May also cause skin to turn a harmless yellow or brown colour at concentrations of 3 % and greater.

Issue Nr: 1 Issued on 5/02/2004

Replaces Issue Nr:

Reasons for replacement:

- d) **Inhalation:** Vapour is irritating to the respiratory tract. May cause stinging sensations in the nose and throat chest discomfort and tightening, difficulty with breathing and headache. May also aggravate pre-existing asthma and pulmonary disease. This will not occur at the end use dilutions of less than 0.5%

Emergency and First Aid Procedure:

Ingestion: DO NOT INDUCE VOMITING. Drink large quantities of water and call a physician immediately.

NOTE TO PHYSICIAN: Probable mucosal damage from oral exposure may contraindicate the use of gastric pump.

Eyes: Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention immediately, and follow up with an ophthalmologist.

Skin: Remove contaminated clothing and flush skin with soap and water for a minimum of 15 minutes. If irritation persists, seek medical attention. Wash or discard contaminated clothing.

Inhalation: Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, qualified personnel may give oxygen. If irritation persists, seek medical help.

Medical Conditions Generally Aggravated by Overexposure: See above.

SECTION 7 Precautions For Safe Handling and Use

- **Steps to be Taken if Material is Released or Spilled:** Wear suitable protective equipment, including nitrile gloves, chemically resistant gown or apron, and protective eyewear (safety glasses or shield). If you experience discomfort, watery eyes, nasal or respiratory irritation due to inadequate ventilation move to obtain fresh air. For small spills of 1 gallon or less, gather up a bucket and a sponge or mop. Don on gloves. Wipe or mop up resulting spill area a final wipe or mop with fresh water. Re-rinse all equipment, and allow spill area to dry. For large spills of more than 1 gallon, remove people from immediate spill area, and isolate until cleaned up. Don protective equipment. Contain spill with absorbent material, i.e. paper towels. Mop spill area with fresh water. Rinse out all equipment (bucket, mop, towel) with large amount of water. If paper towels were used, dispose of in a tightly closed trash bag. Let spill area dry, and if possible increase ventilation. Once glutaraldehyde odour is below allowable levels (TLV), the area may be release from isolation.
- **Waste Disposal Method:** Disposal of the product (undiluted), may be accomplished by pouring solution down the drain in accordance with state and local regulations. Flush with a large quantity of water. Do not reuse empty containers. Rinse thoroughly with water and dispose of in trash.
- **Precautions to be Taken in Handling and Storing:** The product should be stored in it's original sealed container at room temperature (15°C to 30°C).
- **Precautionary Labelling: For undiluted product;** Avoid contact with eyes, prolonged and repeated contact with skin, and contamination with food.

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Reasons for replacement:

SECTION 8 Transportation Data & Additional Information

Proper Shipping Name: 2.5% Glutaraldehyde Solution	DOT (ground):	Not regulated
IATA (air):	Not regulated	IMO (ocean): Not regulated
Hazard Class:	None	Labels: None needed
ID#:	None	Special Instructions: None
Reportable Quantity:	None	

SECTION 9 Control Measures

- **Eye Protection:** Safety glasses, recommended when working with undiluted product. An eyewash should be available for emergency situations.
- **Ventilation:** The product should be stored in closed containers with tight fitting lids. The working area should be large enough with ventilation necessary to keep the level of atmospheric glutaraldehyde below the Threshold Limit Value (TLV). If the solution vapours are irritating to eyes and nose, then the TLV is probably being exceeded, and additional ventilation may be necessary. Any ventilation should pull fumes away from worker and towards the floor.
- **Skin Protection:** Nitrile gloves and a chemical resistant gown or apron should be worn when working with diluted/undiluted The product. Rubber boots may be needed to contain large spills of undiluted product.
- **Respiratory Protection:** None required if glutaraldehyde vapour levels are below the TLV.

SECTION 10 Special Requirements

NONE

NOTE: While Durotec believes that the data contained herein are factual, and the opinions expressed are those of qualified experts, the data are not to be taken as a warranty or representation for which Durotec assumes legal responsibility. Since the use of this information and these opinions and the conditions of use of the product are not within the control of Durotec, it is the user's obligation to assure safe use of the product.

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