

# MATERIAL SAFETY DATA SHEET

## SECTION 1 IDENTIFICATION

**Manufacturers Name & Address:** New Decade Investments (Pty) Ltd t/a Durotec,  
P.O. Box 12540, Centrahil 6006 , Port Elizabeth, South Africa

**Phone:** +27 (0) 41 585 5578

**Product Name:** **Permasan-10**

**Product Code:** Drum 5L: 12600 - Drum 25L: 12605

**Product Type/General Information:** Chemical Sterilant/Disinfectant for surfaces

**Registration Number:** ACT29GNR529/243897/110/346

**Registration Holder:** CHEM2010 CC

**Chemical Name:** (active ingredient) 10% stabilised glutaraldehyde,

**Hazardous Chemicals:** *Glutaraldehyde*

**Routes of Entry:** *Inhalation, Skin/Eyes, and Ingestion*

## SECTION 2 Hazardous Ingredients/Identity Information

PERMASAN-10 contains the following hazardous ingredients at concentrations greater than 1.0%

**CHEMICAL COMPONENTS:** Glutaraldehyde (active ingredient)

**CAS#:** 111-30-8

**%w/v:** 2%

**OSHA PEL:** 0.2 ppm<sup>1</sup>

**ACGIH TLV:** 0.05 ppm

PERMASAN-2 contains **no** hazardous ingredients listed as carcinogens or potential carcinogens by the National Toxicology Program (NTP), International Agency on Cancer (IARC) or OSHA

## SECTION 3 Physical/Chemical Characteristics

<b>Boiling Point:</b>	100°C	<b>Evaporation Rate:</b>	n/a
<b>Specific Gravity:</b>	1.020	<b>Solubility (H<sub>2</sub>O):</b>	Complete
<b>Vapour Pressure:</b>	16.9 mmHg	<b>Appearance &amp; Colour:</b>	A clear liquid with mild typical aldehyde odour
<b>Melting Point:</b>	n/a	<b>pH:</b>	Between 5.5 and 7.8
<b>Vapour Density:</b>	1.1 (air =1)	<b>Molecular Weight:</b>	Proprietary
<b>Freezing Point:</b>	0°C/32°F (Same as Water)		
<b>Percent Volatile by Vol.:</b>	Not detectable at normal usage dilution		

## SECTION 4 Fire and Explosion Hazard Data

**Flash Point (Test Method):** None (Tag Closed Cup ASTM D 56)

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<b>Special Fire Fighting Procedures:</b>	Self-Contained Breathing Apparatus (SCBA) and protective clothing should be worn when fighting chemical fires.
<b>Unusual Fire and Explosion Hazards:</b>	None known
<b>Extinguishing Media:</b>	Carbon dioxide, foam, dry chemical.

## SECTION 5 Reactivity Data

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

## SECTION 6 Health Hazard Data

**Route of Entry:** Inhalation, Skin/Eyes, Ingestion

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

- a) **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.
- b) **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.
- c) **Skin:** Not skin-irritant. Avoid contact on existing dermatitis. May also cause skin to turn a harmless yellow or brown colour.
- 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.

## 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). A full-face respirator, or half-face respirator with gas proof goggles, both worn with organic vapour cartridges, is recommended for small spills. A respirator is essential for large spills, or if you experience discomfort, watery eyes, nasal or respiratory irritation due to inadequate ventilation. For small spills of 5litres or less, gather up a bucket, household ammonia, and a sponge or mop. Don protective equipment and mix approximately 1 cup of ammonia with 1 cup of water in the bucket. Mop or sponge the ammonia mixture into the spill until thoroughly combined (about 2 minutes). 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 5litres, remove people from immediate spill area, and isolate until cleaned up. Don protective equipment including a respirator with organic vapour cartridges. Contain spill with absorbent material, i.e. towels. Add approximately 228 grams of sodium bisulphite powder per litre of Permasan-2 spilled (aqueous sodium hydroxide and ammonium will also neutralize glutaraldehyde). With a sponge, mix neutralizing chemical into spill, and allow 5 minutes for deactivation to occur. Discard resulting mixture according to your facility's waste disposal guidelines. 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 order is below allowable levels (TLV), the area may be release from isolation.
- **Waste Disposal Method:** Dispose 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:** Permasan-2 should be stored in its original sealed container at room temperature (15°C to 30°C).
- **Precautionary labelling:** Avoid contact with eyes, prolonged and repeated contact with skin, and contamination with food.

## SECTION 8 Transportation Data & Additional Information

<b>Proper Shipping Name:</b>	10% Glutaraldehyde Solution	<b>DOT (ground):</b>	Not regulated
<b>IATA (air):</b>	Not regulated	<b>IMO (ocean):</b>	Not regulated
<b>Hazard Class:</b>	None	<b>Labels:</b>	None needed
<b>ID#:</b>	None	<b>Special Instructions:</b>	None
<b>Reportable Quantity:</b>	None		

## SECTION 9 Control Measures

- **Eye Protection:** Safety glasses, goggles or face shield recommended when working with PERMASAN-2. An eyewash, and full face respirator with organic vapour cartridges or half face respirator with gas proof goggles and organic vapour cartridges should be available for emergency situations.
- **Ventilation:** PERMASAN-2 should be used 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, the TLV is probably being exceeded, and additional ventilation may be necessary. A fume hood or self-contained fume absorber may be appropriate for the purpose. 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 PERMASAN-10. Rubber boots may be needed to contain large spills.

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- **Respiratory Protection:** None required if glutaraldehyde vapour levels are below the TLV. A full-face respirator with organic vapour cartridges or SCBA should be available for emergencies.

## **SECTION 10 Special Requirements**

NONE

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