

## SECTION 1

## IDENTIFICATION

**Manufacturers Name & Address:** Durotec  
P.O. BOX 12540  
6006 Centrahil  
South Africa  
**Phone:** +27-41-5855578  
**Fax:** +27-41-5855597  
**Email:** jvds@durotec.com

**Product Name:** DAIRYSAN Machine Cleaner  
**Product Code:** 17005 (drums of 5 Liters)  
**Product Type/General Information:** Milking Machine cleaner – Stainless Steel cleaner  
(chemical name) Hydroxyacetic acid – Pentanedial – Proprietary  
**Chemical Name:** Surfactant  
**Hazardous Chemicals:** Hydroxyacetic acid - Glutaraldehyde  
**Routes of Entry:** Inhalation X Skin/Eye X Ingestion X

## SECTION 2 Hazardous Ingredients/Identity Information

DAIRYSAN contains the following hazardous ingredients at concentrations greater than 1.0%

CHEMICAL COMPONENTS	CAS No.	%w/v	OSHA PEL	ACGIH TLV
Hydroxyacetic acid 70%	79-14-1	87%	None established	
Glutaraldehyde	111-30-8	7%	0.2 ppm <sup>1</sup>	0.05 ppm

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

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CHEMICAL COMPONENTS	CAS No.	%v/w
None	N/A	N/A

<sup>1</sup> The 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.

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### SECTION 3 Physical/Chemical Characteristics

<b>Boiling Point:</b>	110°C	<b>Evaporation Rate:</b>	Not available
<b>Specific Gravity:</b>	1.125 - 1.1135	<b>Solubility (H<sub>2</sub>O):</b>	Complete
<b>Vapor Pressure:</b>	Not available	<b>Appearance &amp; Color:</b>	Liquid amber
<b>Melting Point:</b>	10°C	<b>pH:</b>	Between 0.2 and 1
<b>Vapor Density:</b>	1.1 (air =1)	<b>Molecular Weight:</b>	PTY
<b>Freezing Point:</b>		<b>Percent Volatile by Vol.:</b>	Not available

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### SECTION 4 Fire and Explosion Hazard Data

**Flash Point (Test Method):** Does not ignite

**Special Fire Fighting Procedures:** The product itself does not burn. Use extinguishing measures appropriate to circumstances and the surrounding environment.

**Unusual Fire and Explosion Hazards:** None known

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**Extinguishing Media:** None in particular.

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## SECTION 5

## Reactivity Data

**Stability:** \_\_ Stable **X** No decomposition if used as directed.

**Hazardous Polymerization:** \_\_ Will Not Occur **X** at Temperature between  $-4^{\circ}\text{C}$  -  $40^{\circ}\text{C}$

**Hazardous Decomposition Products:** Thermal decomposition may produce toxic oxides of carbon eg.  $\text{CO}_2$ , hydrogen cyanides (hydrocyanic acid), nitrogen oxides ( $\text{NO}_x$ ), sulphides.

**Conditions and Materials to Avoid:** Enzyme cleaners, Ammonia, Amine containing products, strong oxidisers, alkali metals, cyanides, sulphides.

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## SECTION 6

## Health Hazard Data

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

### Exposure Controls/Personal Protection

#### Airborne Exposure Limits:

None established

#### Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

#### Personal Respirators (NOSA Approved) :

For conditions of use where exposure to the mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

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**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Use chemical safety goggles and/or full face shield where splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

**Emergency and First Aid Procedure:****Inhalation:**

**Symptoms:** Cough, difficulty in breathing, upper respiratory tract irritation.

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Ingestion:**

**Symptoms:** Abdominal pain, nausea, diarrhea, vomiting

Gastrointestinal tract: irritation, burn

Kidney: abnormal function.

**DO NOT INDUCE VOMITING.** Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Call a physician.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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

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## SECTION 7                      Precautions For Safe Handling and Use

- **Steps to be Taken if Material is Released or Spilled:** Wear suitable protective equipment, including rubber gloves, chemically resistant gown or apron, and protective eyewear (safety glasses or shield). A full face visor, or half-face visor or goggles, 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

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of 1 gallon or less, half filled with water and a sponge or mop. Don protective equipment, mop or sponge the water onto the spill thoroughly. Wipe or mop up resulting mixture and discard down the drain with a copious amount of water. Rinse bucket, mop or sponge with water, and give 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 including a respirator with organic vapor cartridges. Contain spill with absorbent material, i.e. 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.

- **Waste Disposal Method:** Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
- **Precautions to be Taken in Handling and Storing :** Keep in a tightly closed polyethylene container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty; observe all warnings and precautions listed for the product.
- **Precautionary Labeling:** Avoid contact with eyes, prolonged and repeated contact with skin, and contamination with food.
- **Risk phrases:** R22-R34.
- **Safety phrases:** S26 –S36/37/39 – S45 – S60

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## SECTION 8 Transportation Data & Additional Information

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC,  
ORGANIC N.O.S. (GLYCOLIC)      **DOT (ground):** UN3265

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	ACID)		
<b>IATA (air):</b>	UN3265	<b>IMO (ocean):</b>	UN3265
			DANGER! HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE IRRITATION AND BURNS TO EVERY AREA OF CONTACT.
<b>Hazard Class:</b>	8	<b>Labels:</b>	
		<b>Special Instructions:</b>	None
<b>PACKING GROUP</b>	II		
<b>Reportable Quantity:</b>	100 G		

## SECTION 9

### Control Measures

- **Eye Protection:** Safety glasses, goggles or face shield recommended when working with DAIRYSAN. An eye wash, and full face visor must be available at all times.
- **Ventilation:** DAIRYSAN 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 vapors are irritating to eyes and nose, 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:** Rubber gloves and a chemical resistant gown or apron should be worn when working with undiluted DAIRYSAN. Rubber boots may be needed to contain large spills.
- **Respiratory Protection:** None required if glutaraldehyde vapor levels are below the TLV.

## SECTION 10

### Special Requirements

NONE

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