

# Material Safety Data Sheet v1.2

UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS) compliant

**Product Description:** Antiviral Agent for sanitizing surfaces not containing detergents  
**Trade name(s):** MEDsan/sanitizer  
**Product manufacturer:** Lessing Research Laboratories 1986/021266/23  
**Address:** P.O.Box 40012, Cleveland, 2022

## Hazard information:

This product when used according to instructions, is safe and presents no immediate or long-term health hazard. It is safe for consumers with intended and reasonable foreseeable use. Normal usage should not create hazardous conditions. Do not use in conjunction with any other detergents or hard waters. Consumption of diluted product is not recommended as primary use is for topical sterilization.

## Recommended usage:

Recommended dilution is 1 part in 100 parts, so 100ml to 9.9l of water (total volume 10l), will then contain no less the 0.05% active ingredients, with precise measurements of both concentrate and target water the contents would then be 0.06% active ingredients.

## Hazard classification:

Health Hazards Not Classified  
Physical Hazards Not Classified  
Environmental Hazards Not Classified

**Appearance:** Light Pink Aqueous solution, dye can be dropped on customer request  
**Physical State:** Liquid  
**Odour:** No odour  
**Packaging:** 5 Litre, 25 litre and 1000 litre containers

## Storage:

Store in a dry place at room temperature away from direct sunlight, do not expose to extreme heat.

## Disposal:

Dispose of contents/container only to an approved waste disposal plant.

## Unintended exposure:

Eye contact may cause mild, transient irritation. For irritation, rinse cautiously with water for several minutes. If contact lenses present, remove immediately if it is easy to do, continue rinsing. If eye irritation persists, seek medical advice/attention.

Skin contact or hair contact, no irritation, sensitizing, photo allergenic or photo toxic when used as intended. If irritation occurs following intended use or prolonged contact it is expected to be mild and transient.

Inhalation, may cause respiratory irritation, if persists seek medical advice/attention.

## The following chemical materials are present in the product:

Chemical name	CAS number	Percentage (w/w)
Benzalkonium Chloride	68424-85-1	< 6%
Didecyl Dimethyl Ammonium Chloride	7173-51-5	< 1%
NI-90	26027-38-3	4 – 8%
Ethanol	64-17-5	< 1%

## First Aid Measures (undiluted product):

**Skin contact** None anticipated under foreseeable use conditions. Repeated or prolonged with this product may cause irritation in sensitive individuals. If irritation develops seek medical advice/assistance.

**Eye contact** Flush with copious amount of clean water immediately. If contact lenses present flush for 5 minutes before removing lenses. Rinse affected eye(s) continuously for 15 to 20 minutes, if irritation persists seek medical advice/assistance.

**Inhalation** None expected under foreseeable use conditions, if respiratory irritation is experienced, seek medical assistance/advice.

**Ingestion** DO NOT induce vomiting. Drink lot of clean water, never give anything by mouth to an unconscious person and seek medical assistance.

### **Fire fighting measures:**

Product is not considered flammable.

**Suitable extinguishing media:** Water, Foam, Carbon Dioxide CO<sub>2</sub>

**Unsuitable extinguishing media:** No information

### **Explosive data:**

**Sensitivity to mechanical impact** None

**Sensitivity to electrostatic discharge** None

### **Protective equipment and precautions:**

As with all fires, use self-contained breathing apparatus and full protective gear. Cool product containers with flooding quantities of water until well after the fire is out.

### **Accidental release measures:**

Use personal protection equipment as product contain ethanol, be mindful of confined areas.

Emergency responders should isolate the area and keep unnecessary personal away.

### **Containment methods:**

Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible Methods for cleaning up absorbent material, (e.g. sand, Di-atomaceous earth, vermiculite) and place in container for disposal according to local/national regulations.

### **Clean-up methods:**

Use inert absorbent material to soak up spilled product. Sweep up and shovel absorbent material into suitable containers for disposal. Following product recovery, flush area with water.

### **Handling and storing measures:**

Store in a cool, dry place, keep away from heat. Handle in accordance with good industrial hygiene and safety practice.

Keep Containers tightly closed in a dry, cool and well-ventilated place. Store between 5°Celsius and 30°Celsius.

Handle in accordance with good industrial hygiene and safety practice.

### **Incompatible materials:**

Keep away from strong oxidizers, soaps, strong acids, strong bases and Hypochlorite compounds.

### **Protection Information:**

Ethanol CAS 64-17-5 general accepted international exposure limits are:

ACGIH TLV TWA: 1000 ppm (1881mg/m<sup>3</sup>)

OSHA PEL: TWA 1000 ppm (1900 mg/m<sup>3</sup>)

NIOSH IDLH: 3300 ppm [10%LEL]

NIOSH REL TWA: 1000 ppm (1900 mg/m<sup>3</sup>)

Please refer to local health and safety procedures.

### **Toxicity data:**

Ethanol CAS 64-17-5 LD Oral (rat) 7060mg/kg, Inhalation LD50 (rat) 20000mg/kg 4 hour exposure.

### **General scientific Information:**

Effectiveness against COVID-19, no hard empirical data exists but looking at the structure of the virus internationally the norm is to use surface products that contains Benzalkonium Chloride as per example

<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19.html>

When this product is diluted as per instructions, 1 part in 100 parts water, the effective percentage of Benzalkonium Chloride would be no less than 0.05%, internationally 0.02% is considered sufficient to kill most envelope viruses.

### **Further references:**

Inactivation of Viruses by Benzalkonium Chloride by J.A. Armstrong and E.J. Froelich

Disinfection efficacy against parvoviruses compared with reference viruses by M. Eterpi, G. McDonnell, V. Thomas

Virucidal efficacy of the newer quaternary ammonium compounds by M.A. Kennedy, V.S. Mellon, G. Caldwell, L.N. Potgieter.

### **Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision control sheet:**

V1.1 Added dilution rates to msds.  
V1.2 Fixed spelling mistakes.

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