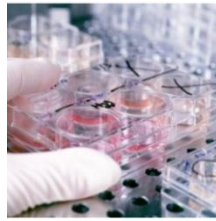




NATIONAL INSTITUTE FOR
OCCUPATIONAL HEALTH

Division of the National Health Laboratory Service



Cleaning and Decontamination

Return-To-Work Preparedness



Coughing 0-3500 droplets
Sneezing 4500-1000 000 droplets
Talking 0-200 droplets

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- **CLEANING**

Removal of dirt and impurities from objects using water with detergents or soap but **DOES NOT kill** the virus

- **DECONTAMINATION**

Use of chemicals to **KILL** the virus **after cleaning**



- Use of **CORRECT** disinfectants is important
 - **prevent** the spread of disease
- Disinfectants may **NOT** work on all surfaces
 - **Porous** – carpets, bedding, clothing
 - **Semi-porous** – wood , dry wall, hardwood floor
 - **Non-porous** – some tiles & counter tops, metal, glass
- Some disinfectants can be **toxic** and **expensive**

The World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) recommend that appropriate disinfectants with proven activity against enveloped viruses be used to minimize the risk of transmission for COVID-19

- Hypochlorite (bleach or jik)
 - Alcohol (~60%)
 - Hydrogen peroxide
 - Phenolic compounds
 - Quaternary ammonium compounds (QAC)
-

TYPES OF DISINFECTANTS

- **SURFACE - liquids, powders**
 - Disinfect frequently touched surfaces regularly
 - **Shared**: equipment, door handles, toilet seats
 - **Personal** : desks, phones, bed rails, i-pads
- **HANDS – antimicro. soaps, liquids, gels, wipes**
 - Clean hands at the **door** and **regular intervals**
 - **Sanitizers** must be allowed to **dry** (no rinse-gel)
 - Use **proper** hand wash **techniques** (e.g. WHO)



- Concentration and volume (e.g. 1:4; 99,9%, 2ml)
 - Ingredients and application
 - Storage e.g. ↑Temperature ↑germicidal activity
 - RH influence activity of gaseous disinfectants
 - pH: ↑antimicrobial activity of QAC and ↓ phenols
 - Contact time (e.g. 10min. 5min, 1min)
 - Compliance standard (e.g. EN, SANS, ISO)
-

- **Safety** considerations includes:
 - Material Data Safety Sheets (MSDSs)
 - Product label and instructions
 - Wash hands after use and moisturise hands
 - Increase air circulation (open windows and fan)
 - Users should be trained and provided with PPE
 - Employee must report potential exposure ASAP
-

LIST OF EPA APPROVED DISINFECTANTS

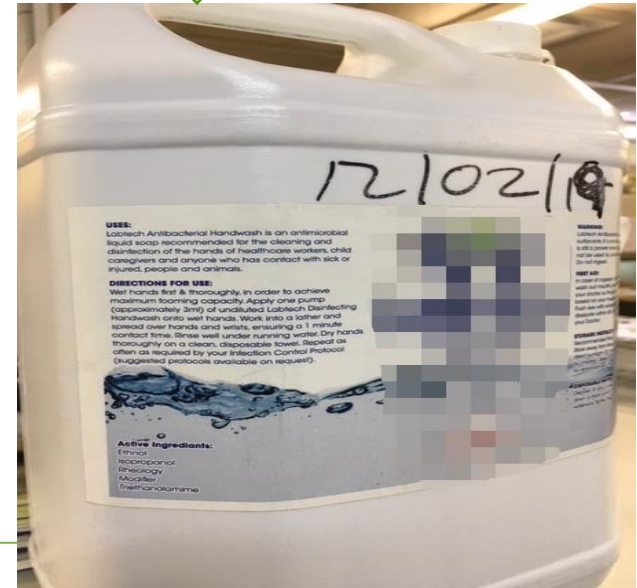
EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Types for Use	Use Site	Emerging Viral Pathogen Claim?
				coronavirus			nonporous	Institutional	
70627-2	Quaternary ammonium	Disinfectant D.C. 100	Diversey Inc	Human coronavirus	2	RTU	Hard nonporous	Healthcare; Institutional	No
70627-23	Quaternary ammonium	Virex II/ 64	Diversey Inc	Human coronavirus	10	Dilutable	Hard nonporous	Healthcare; Institutional	No
70627-6	Phenolic	Phenolic Disinfectant HG	Diversey Inc	Human coronavirus	10	Dilutable	Hard nonporous	Healthcare; Institutional	No
70627-62	Hydrogen peroxide	Phato 1:64 Disinfectant Cleaner	Diversey Inc	Human coronavirus	5	Dilutable	Hard nonporous	Healthcare; Institutional	No
70627-63	Quaternary ammonium	512 Sanitizer	Diversey Inc	Human coronavirus	10	Dilutable	Hard nonporous	Healthcare; Institutional	No
70627-75	Sodium hypochlorite	Avert Sporidical Disinfectant Cleaner Wipes	Diversey Inc	Human coronavirus	1	Wipe	Hard nonporous	Healthcare; Institutional	No
70627-78	Hydrogen peroxide	Suretouch	Diversey Inc	Human coronavirus	5	RTU	Hard nonporous	Healthcare; Institutional	No
72977-3	Silver ion; Citric acid	Axen(R) 30	ETI H2O Inc	Human coronavirus	3	RTU	Hard nonporous	Healthcare; Institutional; Residential	No
72977-5	Silver ion; Citric acid	Sdc3a	ETI H2O Inc	Human coronavirus	1	RTU	Hard nonporous	Healthcare; Institutional; Residential	No
74559-6	Hydrogen peroxide	Oxy-res (Concentrate)	Virox Technologies Inc	Human coronavirus	5	Dilutable	Hard nonporous	Healthcare; Institutional; Residential	No
74559-8	Hydrogen peroxide	Accel 5 RTU	Virox Technologies Inc	Human coronavirus	5	RTU	Hard nonporous	Healthcare; Institutional; Residential	No
74986-4	Sodium chlorite	Selectocide	Selective	Human	10	Dilutable	Hard	Healthcare;	No

Examples of Products

- Expiry date (2 yrs)
- >70% Alcohol
- Kills 99.999% bacteria



- **Antiviral?** Not interchangeable
- Undiluted
- One pump=~3ml
- 1 min contact time
- No Expiry date
- **NO % Alcohol**



Recommended Use : Hand Sanitiser

Restrictions on Use : This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use.

Section 2 - COMPOSITION/INFORMATION ON COMPONENTS

Substance / Preparation : Preparation

Chemical Nature : Alcohol denatured (70%)

Hazardous Components : Flammable

Ingredient Listing : Ethyl Alcohol 70%, Carbomer, Aqua (Water), Triethanolamine, Glycerine, Perfume (Fragrance)

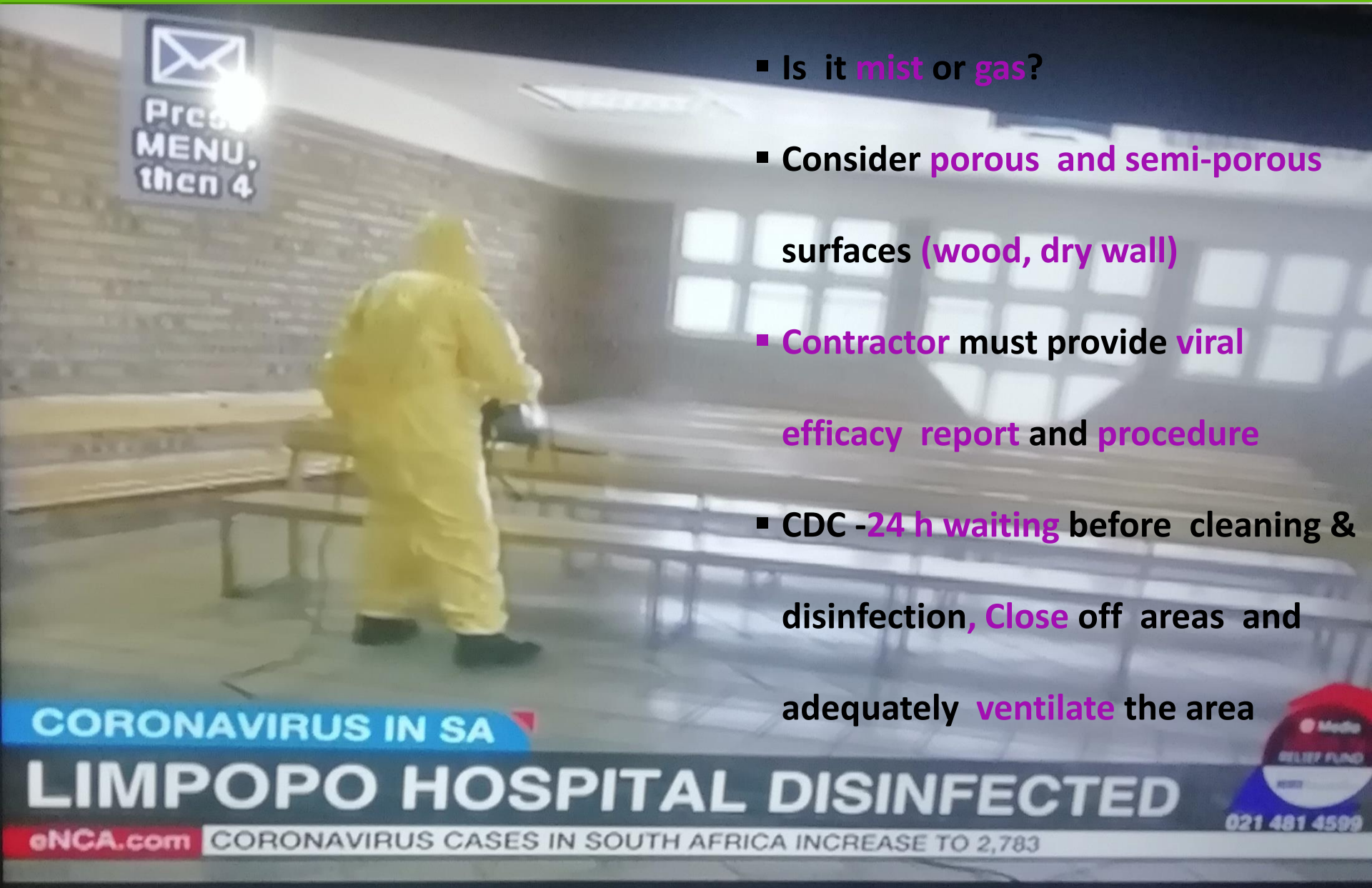
Active Ingredients : Alcohol denatured

Section 3 - HAZARDS IDENTIFICATION

GHS Classification

Flammable Liquids : Category 3

Eye Irritation : Category 2A



- Is it **mist** or **gas**?
- Consider **porous** and **semi-porous** surfaces (**wood**, **dry wall**)
- **Contractor** must provide **viral efficacy report** and **procedure**
- **CDC -24 h waiting** before cleaning & disinfection, **Close** off areas and adequately **ventilate** the area

CORONAVIRUS IN SA

LIMPOPO HOSPITAL DISINFECTED

eNCA.com

CORONAVIRUS CASES IN SOUTH AFRICA INCREASE TO 2,783

021 481 4599

- **Review company risk assessment for COVID-19**
 - existing versus additional controls
 - ensure **adequate supply** of wash basins, cleaning materials and disinfectants for healthy hygiene practices
 - Hand sanitizers: **accessible** at critical areas (**no water**)
 - **Dedicated PPE** :manufacturer guide (**extra pairs** reusable gloves)
- **Update your policies, SOPs and work instructions**
 - Procurement (contractors and samples), controls, application, PPE, spills, safe disposal, training, risks
- **Staff training and health promotion campaigns**
- **Identify the hotspots & prioritize high risk areas**

- WHO
- CDC
- EPA
- NIOH
- NICD/NHLS
- NPIC
- FDA
- WWW.GOV.UK

Thank You
