



**Clinically tested to kill
99.9% of bacteria & germs**

Jo Cleaning Products

“Australian Made”

WHY BUY ALCOHOL FREE ANTIBACTERIAL HAND SANITIZER?

Our Alcohol-free antibacterial hand sanitizer is available in a liquid and gel. It’s used to remove or decrease infectious agents; being germs or bacteria on your hands. Lasts for 3 years and stays functional the full time.

The active ingredients we use are safe, gentle, functional and effective on the skin:

Active ingredients	Cas no	Benefits
Aloe barbadensis (aloe vera) leaf juice	85507-69-3	Antibacterial and antifungal, relieves itching, swelling and pain. Increases blood flow to wounded areas and stimulates fibroblasts (the skin cells responsible for wound healing). Cleanser and revitaliser for a wide range of ailments. Detoxifies the body as well as stimulating and supporting the immune system. Also once dried on the skin surface provides a protective barrier that helps keep moisture locked in. Its cooling effects reduce acne, inflammation and assist in healing, removing redness and soothing dry skin.
Glycerin	56-81-5	Used as a solvent, humectant and lubricant. Made from palm oil. Treats oily skin conditions, like acne, skin infections, wrinkles and fine lines. Attracts moisture to skin. Acts an emollient, making skin moist, soft and supple.
PEG-12 dimethicone	68937-54-2	Smooth feel, promotes spreadability,
Acrylates/C10-30 alkyl acrylate crosspolymer	110-82-7	Classified as a Quaternary Ammonium Compound. Please refer to the safety data sheet. Serves as a cationic surfactant which is an antimicrobial agent. It’s a disinfectant and antiseptic base used to kills the germs and bacteria on your skin.
Triethanolamine	102-71-6	Balances the pH of the sanitizer. Also works as an emulsifier to spread the gel over your skin.
Benzyl alcohol	100-51-6	A topical antiseptic derived as a pure alcohol and is a constituent of jasmine. Also acts as a preservative in the product.
Benzalkonium chloride	63449-41-2	Acts as a preservative, antimicrobial agent and surfactant. It works by killing microorganisms and inhibiting their future growth.
Backhousia citriodora (lemon myrtle) leaf oil	84775-80-4	High in antibacterial, antifungal and antiviral properties. Also assists skin infections, wounds and acne.
Dehydroacetic acid	520-45-6	Kills and prevents the growth of microorganisms.

Reasons why we do not use Alcohol in our hand sanitizer

For alcohol sanitizer to work effectively you need minimum 60 -90 % alcohol (on average 75%). At 75% it is highly flammable and can catch fire, producing a translucent blue flame, possibly causing a catastrophe for staff.

Hand sanitizer will expire. Its alcohol content will evaporate over time. Once it drops below 60% alcohol, it will not be as effective at killing germs. Heat – e.g. leaving it in your vehicle; will expediate this process, reducing effectiveness.

Facts

Some manufacturers utilise high concentrations of water or moisturizing agents in the formula. Misleading brands will be as low as 5 - 10% alcohol and state they kill 99% of germs and bacteria. They are generally not clinically tested and false.

It's a chemical hazard during manufacturing and to your body



**Clinically tested to kill
99.9% of bacteria & germs**

Jo Cleaning Products

“Australian Made”

Your Body

Below are some of the health issues alcohol causes on the body.

<https://www.osha.gov/Publications/OSHA3844.pdf>

Table II.1. Health Hazard Classes and Categories

Hazard Class	Hazard Category			
Acute Toxicity	1	2	3	4
Skin Corrosion/Irritation	1A	1B	1C	2
Serious Eye Damage/Eye Irritation	1	2A	2B	
Respiratory or Skin Sensitization	1A	1B		
Germ Cell Mutagenicity	1A	1B	2	
Carcinogenicity	1A	1B	2	
Reproductive Toxicity	1A	1B	2	Lactation
STOT – Single Exposure	1	2	3	
STOT – Repeated Exposure	1	2		
Aspiration	1			
Simple Asphyxiants	Single Category			

Studies

<https://aornjournal.onlinelibrary.wiley.com/doi/abs/10.1016/S0001-2092%2806%2962517-9>

<https://www.ncbi.nlm.nih.gov/pubmed/9706236>

Abstract from 1998:

“Universal precautions require that perioperative health care personnel wash their hands before and after all patient contact. Time constraints, however, can make adhering to universal precautions, including proper hand washing, difficult. Some perioperative health care workers, therefore, routinely use rinse-free hand sanitizers to supplement normal hand washing. This study evaluated immediate and persistent antimicrobial effectiveness of two alcohol-containing hand sanitizers and a novel surfactant, allantoin, benzalkonium chloride (SAB) hand sanitizer using a federally approved effectiveness protocol. Results indicate that all three products were equally effective after a single application. After repeated use, the alcohol-containing sanitizers did not meet federal performance standards, and the alcohol-free sanitizer did. These properties and others illustrated in this article indicate that the non-flammable, alcohol-free SAB hand sanitizer is the most favourable of the rinse-free hand sanitizer formulas for normal hand washing.”

- **Woodward Laboratories, Inc. Los Alamitos, Calif, USA.**

The US National Institutes of health heavily tested sanitizer with and without alcohol. In summary:

“The alcohol-containing sanitizers did not meet federal performance standards, and the alcohol-free sanitizer did”