

Hand sanitiser



Lab Management Assignment Hand Sanitizer 2012 xxx [Pick the date] HAND SANITISER ** A hand sanitizer or hand antiseptic is a supplement or alternative to hand washing with soap and water. * Various preparations are available, including gel, foam, and liquid solutions. * The active ingredient in hand sanitizers may be isopropanol, ethanol, n-propanol, povidone-iodine. * Inactive ingredients in alcohol rubs typically include a thickening agent such as polyacrylic acid for alcohol gels, humectants such as glycerin for liquid rubs, propylene glycol, and essential oils of plants. Alcohol based hand sanitizers are more effective at killing germs than soaps and do not dry out hands as much. * Common non-alcohol, rinse-free hand sanitizer brands use either small concentrations of the nitrogenous cationic surface-acting agent benzalkonium chloride or the chlorinated aromatic compound triclosan or povidone-iodine * All hand sanitizer products require NDC designation in United States and NPN designation in Canada. Hand sanitizer is controlled as a biocide in Europe. Alcohol Based Hand Sanitizers: Dr.

Bronner's Organic Hand Sanitizing Spray, Purell, Germ-X, GermFree, Hygel, Deb, Aqium, Dettol, Avant, Germ Out, Aquawet, Method Products. Non-Alcohol Based Hand Sanitizers: Gold Bond Ultimate, MicroAromor, Hy5, Soapopular, Handclens. HAND SANITIZERS WITH THEIR USAGE ; INGREDIENTS Hand Sanitizer Brands| Places of Use| Active Ingredients| Inactive Ingredients| Efficacy| Application| Dr. Bronner's Organic Hand Sanitizing Spray| Home & Hospitals| 62% Organic Ethanol| Water, Organic Glycerine, Organic Lavender Oil. Gram positive, and Gram negative bacteria, yeast and molds. | Direct Rub| Purell| Widely in Hospitals| 63% ethyl alcohol| Water, Isopropyl Alcohol, Carbomer, Tocopheryl Acetate, Glycerine,

Propylene Glycol, Isopropyl Myrisate, Fragrance| E. coli, Staphylococcus sp. , Streptococcus sp. , Salmonella sp. at > 99. 99| Direct Rub| Germ- X| Desk, Car, Restroom, School, Garage, Retail Counter. | 63% Ethyl Alcohol| Acrylates/C10-30 Alkyl Acrylate Cross polymer, Benzophenone-4, Fragrance with Vitamin E, Glycerine, Tocopherol, Water | 9. 9% of many common harmful germs and bacterial | Direct Rub| GermFree| Travel, Hotels & Hospitals| 62% Ethyl Alcohol| | Bacteria, Virus & Fungi| Without water| Hygel| Home & Hospitals | Ethyl Alcohol| Water, isopropyl alcohol, vit A & E, carbomer, glycerine, propylene glycol, fruit fragrance| Germs & Bacteria's| Without Water| Deb Instant FOAM| * * Outdoor * Office/Commercial/Leisure * Medical Rooms ; Laboratories * Food Service ; Catering| 70% Ethyl Alcohol| Water, Bis-PEG-12 Dimethicone, Behentrimon-ium Chloride, PEG-200 Hydrogenat-ed Glyceryl Palmate, PEG-7 Glyceryl Cocoate, Coco-Clucoside, Glyceryl Oleate, Dihydroxyp-ropyl PEG-5 Linoleamm-onim | 99. 99% effective against common germs and bacteria's| Foam basedUsed without water| Aqium| Home & aloe vera aqium is hospital formulation| 66% Ethanol| Thickener, Dexpanthen-ol, DL-alpha-tocopheryl acetate, Fragrance, pH neutraliser, Water - purified| Bacteria and Viruses| Apply on dry hands| Avant| Hospitals, Restaurants, fitness centres| 70% Ethyl Alcohol| Isopropanol| Clostridium difficile, Enterococcus faecium; Enterococcus faecalis; and Staphylococcus aureus MMRSA. | Foaming hand sanitizer; apply without water| Germ Out| Schools, Work place, Pub-lic restroom| 70%Isopropanol and 0. 02%Benzalkonium chloride| No inactive ingredients| Bacteria's, Viruses ; Fungi| Gel based used with water| Aquawet| Schools, Hospitals, Public Toilets. | 60% Ethyl Alcohol| Aloe Barbadensis Gel, Carbomer, Fragrance, Tocopheryl Acetate (Vitamin E), Triethanolamine, <https://assignbuster.com/hand-sanitiser/>

Water | 99. % of offending germs| Used without water| Hand Sanitizer Their Ingredients ; Long Term Side Effects: * The research for various commercially available hand sanitizer's shows that most effective sanitizers are those which are alcohol based; and the active ingredient in them is Ethyl Alcohol which ranges from 60 to 80 % depending on their efficacy and level of disinfection. * Contradictory evidence about the safety of such topical applications of the alcohol can be found in the scientific literature. * The first and foremost concerns of topical ethanol applications for public health are its carcinogenic effects, as there is unambiguous evidence for the carcinogenicity of ethanol. Topically applied ethanol acts as a skin penetration enhancer and may facilitate the transdermal absorption of xenobiotics (e. g. carcinogenic contaminants in cosmetic formulations). * Alcohol is associated with an increased risk of cancers of the oral cavity, pharynx, larynx, and oesophagus. * Ethanol use is associated with skin irritation or contact dermatitis, especially in humans with an aldehyde dehydrogenase (ALDH) deficiency. * After regular application of ethanol on the skin (e. g. in the form of hand disinfectants) relatively low but measurable blood concentrations of ethanol and its metabolite acetaldehyde may occur, which are, however, below acute toxic levels. Besides skin cancer, alcohol abuse has been associated with the development of several skin disorders including psoriasis, discoid eczema and superficial infections. * Using antibacterial hand sanitizer can increase your skin sensitivity to the ultra violet rays that may cause sunburn in sunlight. * Antibacterial hand sanitizer use may cause skin sensitivity in the form of itching, burning sensation or dry skin. Most forms of the sanitizer contain alcohol, which can easily cause redness, dryness and even peeling of skin, especially if used too

often. CONCLUSION: The study of various commercially available hand sanitizers provide with the information that alcohol based hand sanitizers are the most effective and having high level out disinfection compared to non-alcohol based ones.

Simultaneously, the SDS and various science studies provide the information regarding long term use & side effects of the active ingredients in the hand sanitizers. Even though there is still further research work going on to provide sufficient proofs against topical application Ethanol(ethyl alcohol). Knowing long term side effects of regular use hand sanitizers, it should be concluded it is not always important to use hand sanitizers. The use should be restricted on to visits or work in hospitals or any germ prone place as such the hand sanitizers will help getting rid of germs, bacteria, fungi and virus it won't help getting away from dust and dirt.

Hence it is more important to cleans hands with soap and water on regular basis and restrict use of hand sanitizers on to visits to germ prone places.

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