



better products  
cleaner environment

## ***HAND RUB*** **Anti-Microbial Hand Sanitizer**

### **Product Description**

**HAND RUB** is a no-rinse hand sanitizer based on a formulation that is alcohol free yet kills viruses and bacteria, making it extremely safe and comfortable to use. **HAND RUB** contains pH modifiers that neutralize the ionic bonds which hold the protein envelope enclosing hard-to-kill viruses, and plant oil extract molecules which then penetrate to destroy the nucleic acid and dissolve the virus in *seconds*. This breakthrough technology is the result of years of research funded by the British Government.

### **Areas of Use**

**HAND RUB** is highly recommended for use in offices, retail, restaurants, hotels, healthcare, schools, places of worship, food manufacturing assembly lines, even homes and wherever good personal hygiene is critical. It is especially useful where soap and running water is not conveniently accessible.

### **Special Features**

- Neutral pH and non-toxic
- Alcohol-free; does not sting grazed skin & leaves no “sticky feel” after use
- Liquid form provides effective skin coverage while foam discharge, if dispenser available, provides greater economy
- Pleasant fragrance leaves lingering scent after use.

#### **• Kill List**

##### *Viruses*

HIV, Caliciviruses (for Norovirus, Norwalk virus), Hepatitis B virus, Adenovirus, Herpes virus Type 1 & 2, Influenza virus Type A, Vaccinia virus, Feline Leukaemia viruses, Respiratory Syncytial virus, Rubella virus and **coronaviruses such as Infectious Bronchitis virus**

##### *Bacteria (as tested under EN1276)*

Staphylococcus Aureus, E. Coli, Pseudomonas Aeruginosa, Enterococcus, Enterobacter Aerogenes & Cloacae, Salmonella Typhimurium, Proteus Mirabilis & Vulgaris, Chlamydia Psittaci.

##### *Yeast and Fungi*

Canadida Albicans, Aspergillus Niger

### **Directions of Use**

Apply and spread thoroughly over hands. Rub until dry, no rinsing necessary.

### **Precautions**

For external use only. Non-corrosive & non-toxic, in unlikely event of discomfort due to inhalation, ingestion or contact with eyes, seek medical advice.

# SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION				
<b>Product Identifier:</b> HAND RUB		<b>Supplier:</b> Klenco (Singapore) Pte Ltd. <b>Address:</b> 18 Gul Crescent, Singapore 629527 <b>Department:</b> Chemical <b>Person in Charge:</b> Chemist		
<b>Other means of identification:</b> Hand Sanitizer		<b>Phone:</b> (65) 6862 3388		
<b>Date of SDS:</b> 11 February 2020		<b>Fax:</b> (65) 6861 7575 <b>Email:</b> info@klenco-asia.com <b>Emergency contact:</b> (65) 6862 3388 Ext 249		
<b>Recommended use and restrictions:</b> HAND RUB is ideal for use in offices, retail, restaurants, hotels, healthcare, schools, places of worship, food manufacturing assembly lines, even homes and wherever good personal hygiene is critical. It is especially useful where soap and running water is not conveniently accessible.				
SECTION 2 - HAZARDS IDENTIFICATION				
<b>GHS classification:</b> Acute toxicity: Category 4; Eye irritation: Category 2				
<b>GHS label elements:</b> Pictogram:		<b>Signal Words:</b> Warning		
				
<b>Hazard statements:</b> H320: Causes eye irritation				
<b>Precaution statements:</b> P233: Keep container tightly closed.				
SECTION 3 - COMPOSITION/ INFORMATION ON INGREDIENTS				
Chemical Identification	Component & Composition	Chemical Formula	CAS NO.	EC NO.
Water	> 90.0 %	H <sub>2</sub> O	7732-18-5	231-791-2
Nonyl phenol ethoxylates	< 4.0 %	C <sub>33</sub> H <sub>60</sub> O <sub>10</sub>	26571-11-9	247-816-5
Quaternary Ammonium Compound	0.4 %	C <sub>21</sub> H <sub>38</sub> NCl	68424-85-1	270-325-2
Perfume	< 3.0 %	Mixture	NA	NA
SECTION 4 – FIRST AID MEASURES				
<b>Inhalation:</b> Move to area of fresh air. If breathing has stopped, artificial respiration should be started. Oxygen may be administered if available. Call a physician. Never give anything by mouth to an unconscious person.				
<b>Skin contact:</b> Wash with large amounts of soap and water. If irritation persists, consult a physician.				
<b>Eye contact:</b> Flush with cool water for at least 15 minutes. Then consult a physician immediately.				
<b>Ingestion:</b> Do not induce vomiting. Dilute by drinking water. Call a physician immediately.				
<b>Notes to Physicians:</b> Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.				
SECTION 5 – FIRE-FIGHTING MEASURES				
<b>Suitable fire-extinguishing media:</b> Water, dry chemical, carbon dioxide and foam.				
<b>Specific hazards arising from the chemical:</b> Burning can produce carbon dioxide and/or carbon monoxide.				
<b>Special protective actions for fire fighters:</b> Fire fighters may be exposed to the products of combustion should wear a self-contained breathing apparatus with full protective equipment.				
SECTION 6 - ACCIDENTIAL RELEASE MEASURE				
<b>Personal precautions, protective equipment, and emergency measure:</b> Use proper protective equipment (chemical protection suit, gloves, goggles, mask, etc).				
<b>Environmental precautions:</b> Chemical substance should not be released into the environment (water, soil).				
<b>Methods and materials for containment and cleaning up:</b> Stop spill at source. Contain material, as necessary, with dike or barrier. Mop, shovel or absorb with inert material and place in sound containers. Rinse remaining residue with excess water. Cover spills with absorbent clay, sawdust or inert material and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.				
SECTION 7 - HANDLING AND STORAGE				
<b>Precaution for safe handling:</b> Wash thoroughly after handling, especially before eating and drinking. Wash contaminated goggles, face-shield, and gloves. Launder contaminated clothing before re-use.				
<b>Conditions for safe storage, including any incompatibilities:</b> Store in cool, dry, well-ventilated area at room temperature. Do not re-use empty container for food, clothing or products for human or animal consumption or where skin contact can occur.				
SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION				
<b>Control parameters/ Occupational exposure limits:</b> ACGIH - TLV: No hazardous ingredients				
<b>Appropriate engineering control measures:</b> Ventilation not required				
<b>Personal Protection:</b> Normally not required. Safety glasses / goggles can be worn if splashing is anticipated.				

<b>SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES</b>	
<b>Appearance &amp; Odour:</b>	Clear liquid with mild odour.
<b>Solubility in water:</b>	Complete.
<b>Boiling Point:</b>	100 ° C
<b>Specific Gravity:</b>	1.000 +/- 0.005 g/cm <sup>3</sup>
<b>PH:</b>	7.0 +/- 0.5
<b>Flash Point (T.C.C.):</b>	None to boiling <b>Flammable Limits - Upper:</b> Not applicable <b>Lower:</b> Not applicable
<b>Vapour Pressure:</b>	Not determined
<b>Vapour Density:</b>	Not determined
<b>SECTION 10 - STABILITY AND REACTIVITY</b>	
<b>Reactivity/ In compatible materials:</b>	None
<b>Chemical stability:</b>	Stable under normal temperature and pressure.
<b>Possibility of hazardous reaction:</b>	Will not occur.
<b>Condition to avoid:</b>	Not applicable
<b>SECTION 11 – TOXICOLOGICAL INFORMATION</b>	
<b>Acute toxicity: Oral:</b>	LD 50 (rat): > 4500 mg/kg; This product contains no hazardous ingredients.
<b>SECTION 12 – ECOLOGICAL INFORMATION</b>	
<b>Persistence and degradability:</b>	Product degrades readily by action of microorganism.
<b>Bioaccumulative potential:</b>	It is soluble in water and does not bio-accumulate.
<b>SECTION 13 – DISPOSAL CONSIDERATIONS</b>	
<b>Disposal method:</b>	Dispose off in an approved waste facility according to local regulations. It is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) Re-cycle or rework if feasible (2) Incinerate at an authorized facility (3) Treat at an acceptable waste treatment facility.
<b>SECTION 14 – TRANSPORT INFORMATION</b>	
This material is non-regulated and no special requirement is necessary. HS Code: 34021200	
<b>SECTION 15 – REGULATORY INFORMATION</b>	
<b>International regulation:</b>	
Classification:	This product has not been allocated any classification.
Risk phrases:	R00      None required
Safety phrases:	S07      Keep container tightly closed
<b>SECTION 16 – OTHER INFORMATION</b>	
<b>Hazard Rating: HMIS (Hazardous Materials Information System)</b>	
<b>HEALTH:</b>	0
<b>FLAMMABILITY:</b>	0
<b>REACTIVITY:</b>	0
0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Extreme	

**NOTICE:** SDS is correct at date of publication. It is not necessarily fully adequate for every circumstance, nor to be confused with or followed in violation of applicable laws or insurance requirements. Health hazards and effects of over-exposure apply only to negligent handling or misuse of product in its concentrated form (as supplied); and not routine exposure to diluted product under normal use. No warranty, express or implied, of merchantability, fitness or accuracy of data is made; as such the vendor assumes no responsibility for injury or damages resulting from use of this product.