



Hand Sanitizing Dispenser Comparison




Germstar Touchless vs. Leading Competitors' Touchless and Mechanical



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	GERMSTAR (TOUCHLESS)	COMPETITOR (TOUCHLESS)	COMPETITOR (MECHANICAL)
DISPENSER FUNCTION:	 <p><i>See Appendix A.1 for Full Size</i></p>	 <p><i>See Appendix A.2 for Full Size</i></p>	 <p><i>See Appendix A.3 for Full Size</i></p>
	Touchless feature eliminates contact with potentially highly contaminated lever surface, reducing danger of cross infection.	Touchless feature.	Hand contact with highly contaminated lever (over 250,000 microorganisms per sq. inch)
	Self-collapsing solution bag seals against outside air and prevents cross contamination. Liquid rinse eliminates build up of residue at solution bag opening.	Potential for residue build-up at bag opening due to gel consistency.	Substantial accumulation of dried solution residue underneath the dispenser and surrounding opening (→ SEE PICTURE: Purell Dispenser vs. Germstar Dispenser after months of use.)
	Portion adjustable from: 0.7ml – 5ml	Preset portion - no adjustment possible.	Preset portion – no adjustment possible.



See Appendix A.4 for Full Size



	GERMSTAR (TOUCHLESS)	COMPETITOR (TOUCHLESS)	COMPETITOR (MECHANICAL)
SOLUTION:	American Corn Ethanol-based sanitizer rinse contains just four all-natural, environmentally friendly ingredients (less dependency on petroleum carbonate).	Gel-based Sanitizer has nine ingredients. Foam product contains 18 ingredients.	Gel-based Sanitizer has nine ingredients. Foam product contains 18 ingredients.
	Isopropyl-based solution for situations where the broadest germ-killing spectrum is required, i.e. for medical or pandemic applications	Isopropyl-based solution not available	Isopropyl-based solution not available
	Extra Mild Liquid Soap (all natural and environmentally degradable ingredients), non-drying to the skin.	Soap available	Soap available
	Liquid Degreaser (all natural and environmentally degradable ingredients)	Not offered	Not offered




ENVIRONMENTAL IMPACT:	Gravity-assisted dispensing with infrared-controlled PC board. Automatic power-saving mode during night hours prolongs battery life.	Multiple gears and levers require larger amount of battery power.	
	Batteries last for 50,000 activations (over 16 months if activated 100 times/day, 7 days a week) → full government recycling infrastructure in place.	Multiple moving parts reduce battery life expectancy → more batteries and waste anticipated.	
	AC/DC available	No known AC/DC version available at this time	
	Same unit can be run on AC/DC or on batteries in the event of power failure.	Not available at this time	
	Gravity-assisted dispensing guarantees silent operation.	Loud activation noise	




	GERMSTAR (TOUCHLESS)	COMPETITOR (TOUCHLESS)	COMPETITOR (MECHANICAL)
RELIABILITY:	Innovative dispensing system requiring no mechanical moving parts → no mechanical failure possible.	Complex mechanical movement with gearbox increases potential for dispenser malfunction.	Mechanical parts and regular physical activation increase expectation for breakage or unit failure and cross contamination.
DESIGN:	Unique and appealing design promotes curiosity, usage and increases compliance → informal studies have shown that the Germstar system is preferred over standard, industrial looking dispensers.	Generic design can be less appealing. End-users may overlook the unit, potentially resulting in lower compliance, which could be counter-productive for an effective hand hygiene program.	Industry generic design.
	Ergonomic shape allows for natural hand position while sanitizing (one or both hands).	Natural hand position more difficult.	Natural hand position more difficult. Only one-handed activation possible.
	Spherical shape suppresses accumulation of dust-borne microorganisms.	Rectangular shape allows dust to settle.	Rectangular shape allows dust to settle.
	Transparent housing facilitates fluid level monitoring.	Solution levels not easily monitored through small window.	Solution levels not easily monitored through small window.



	GERMSTAR (TOUCHLESS)	COMPETITOR (TOUCHLESS)	COMPETITOR (MECHANICAL)
MAINTENANCE:	Smooth unit surface without gaps or indentations virtually eliminates accumulation of dust → cleaning and bag exchange very simple.	Vertical seams collect dust.	Vertical seams collect dust.
	Transparent housing and clear cartridge permit hassle-free monitoring of solution levels from all sides and from a distance.	More time and effort required for monitoring of solution level.	More time and effort required for monitoring of solution level.
	Easy bag and battery exchange without the need for tools.	Tools required (such as Phillips screwdriver) to open screws and gain access to the battery compartment – more time-consuming.	
	Green Status LED showing correct functioning.	Green Status LED showing correct functioning.	Operation has to be checked manually.
	Red Status LED alerts impending battery exchange while allowing for continued functioning of the unit for several hundred uses.	LED switches off if batteries have to be replaced → no warning indication light in most models.	
EFFICIENCY OF BOTTLE/BAG:	Bottle Content: 946ml	Bottle Content: 1200ml (example: Purell)	Bottle Content: varies
	Portions at adult hand setting: approx. 1,350. Fully adjustable portion control between 0.7ml and 5ml.	Theoretically 1,268 portions but 168 portions remain in the bottle and are discarded (example: Purell).  <i>See Appendix B.1/2 for Full Size</i>	

	GERMSTAR (TOUCHLESS)	COMPETITOR (TOUCHLESS)	COMPETITOR (MECHANICAL)
BOTTLE RECYCLING:	<p>32oz self-collapsing cartridge uses every drop of solution → no product left in bag, fully recyclable, takes up less space in recycling container.</p>  <p><i>See Appendix C.1 for Full Size</i></p>	<p>Gel: 1.2 liter bottle does not collapse and approx. 13% solution portion remains in empty bottle, takes up more space in recycling container (example: Purell).</p>  <p><i>See Appendix C.2 for Full Size</i></p>	<p>Gel: 1.2 liter bottle does not collapse and approx. 13% solution portion remains in empty bottle, takes up more space in recycling container (example: Purell).</p>  <p><i>See Appendix C.3 for Full Size</i></p>
	<p>Empty bottle is clean and free of any residues. → Environmentally safe to recycle.</p>	<p>“Empty” bottle still contains over 145g of gel (example: Purell); the waste is considered HAZARDOUS and FLAMMABLE → expensive recycling</p>	



	GERMSTAR (TOUCHLESS)	COMPETITOR (TOUCHLESS)	COMPETITOR (MECHANICAL)
ACCESSORIES/MOUNTING OPTIONS:	<p>Many accessories available:</p> <ul style="list-style-type: none">• Dispensers in different colors and finishes. Custom graphics and colors available.• Dispenser lockable tamper-free metal cage• Floor stand in different colors and finishes. Custom colors available.• Table stand in different colors. Custom colors available.• Dispenser adhesive tile or mirror mount bracket• Dispenser wall-mount drip tray• Bottles products offered: 8ml, 2oz and 16oz for added mobility. Custom labels available.• Bottle belt clip• Belt Holster• Program continually updated 	<p>Accessories:</p> <ul style="list-style-type: none">• Floor stand	<p>None available</p>



APPENDIX A.1



APPENDIX A.2



APPENDIX A.3



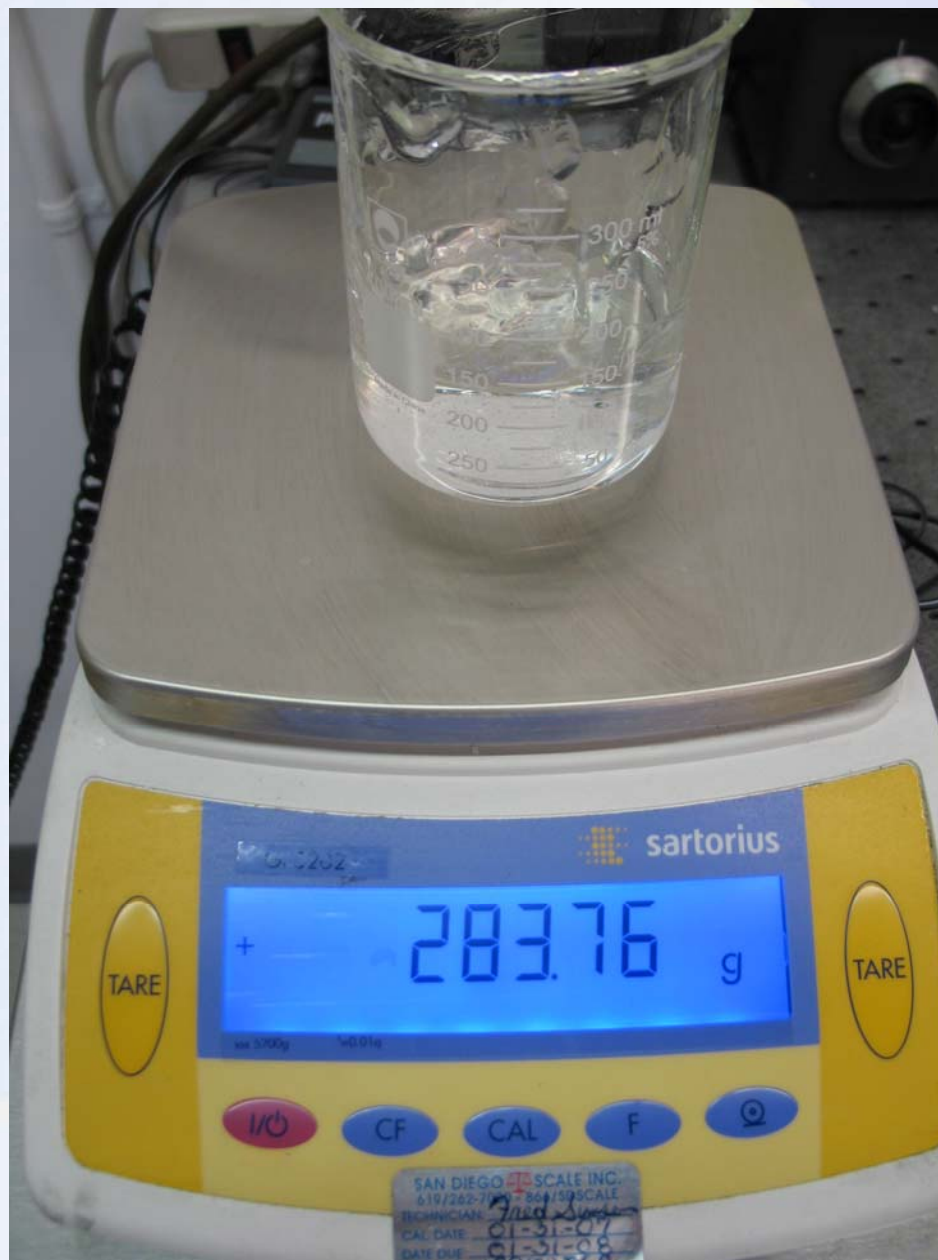
APPENDIX A.4



APPENDIX B.1



APPENDIX B.2



APPENDIX C.1



APPENDIX C.2



APPENDIX C.3



APPENDIX D.1



APPENDIX D.2





APPENDIX D.3



APPENDIX D.4

