

TEST REPORT

REPORT NO.: AS-20-123

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CERTIFICATE OF ANALYSIS No.: AS20-123

For: LIQUIFIRE

RESULTS "ALCOHOL" CONTENT of HAND SANITIZER

1. Preamble

- 1.1 At present, alcohol-based hand sanitizers are the only known means for rapidly and effectively inactivating a wide array of potentially harmful microorganisms on hands.
- 1.2 The best effective means of determining the type and amount of alcohol used in the formulation is by Gas Chromatography.
- 1.3 The tests performed by AIRSEP follow the **WHO Specifications** and determine the alcohol content by means of a Gas Chromatographic analysis using certified reference standards.
- 1.4 All our instruments used are under constant validation protocol and comply with the ISO 17025 standard requirements.

2. Sample Information

PRODUCT	Liquifire Non Deo Sanitizer		
Batch No.		Batch Weight	
Production Date	01/05/2020	Report Date	05/05/2020

3. Test Data

Test Item	WHO Specification	SANS 490 Hygienic Handrub	Result
Appearance	Homogeneous liquid	Homogeneous liquid	Homogeneous liquid
pH	-	-	5.40
Density	-	-	0.8887 g/cm ³
Glycerol (% v/v)	1.45	-	0.707 %
Hydrogen Peroxide	0.125%	-	0.137 %
Alcohol as Ethanol (% v/v)	80 ±5 %	60 %	73.44 %
TOTAL ALCOHOL			73.44 %

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4. Comment

- 4.1 The WHO consensus of opinion of a WHO expert group recommend that hand rub formulations complying with WHO Specifications can be used for both hygienic hand antisepsis and for pre-surgical hand preparation.
- 4.2 The microbial activity of the WHO recommended formulation was tested by WHO reference Laboratories according to EN standards (EN1500). Their activity was found to be equivalent to the reference substance (isopropanol 60%v/v) for hygienic hand antisepsis.

5. Conclusion

- 5.1 Product "Santizer" **COMPLIES** as an alcoholic-based hygienic handrub.
- 5.2 No further bacterial testing required as the alcohol content complies with WHO Specifications – See Comment 4.2.

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