# **Head Tissue Simulating Liquids**

Application	Specific absorption rate according to standards (e.g., IEC 62209-x, IEEE 1528)							
Packaging	Plastic container of 10 liters	with nozzle						
Life Time	Life time and stability of the simulating liquid	e liquid depend on usage, storage, a	nd handling of tissue					
Options	Tissue simulating liquids for request (please contact info	r frequencies outside the below listence (Compared to the below listence)	ed ranges are available upon					
Head Tissue	Parameters according to IEE	EE 1528 / IEC 62209-1/ IEC 62209-2 /	FCC KDB 865664					
Narrow- Band Solutions (±5% Tolerance)  Broad- Band Solutions	Product  HSL300V2 HSL450V2 HSL750V2 HSL900V2  Product  HBBL1350-1850V3	Test Frequency (MHz)  300 450 750 835, 900  Test Frequency (MHz)  1450 - 1800	Main Ingredients  Water, Sugar Water, Sugar Water, Sugar Water, Sugar  Main Ingredients  Water, Tween					
(±5% Tolerance)	HBBL1550-1850V3 HBBL1550-1950V3 HBBL3500-5800V5	1750 - 1850 1750 - 1850 1950 - 3000 3500 - 5800	Water, Tween Water, Tween Water, Oil					
Broad- Band Solutions (±10% Tolerance)	Product  HBBL4-250V3  HBBL1350-1850V3  HBBL1550-1950V3  HBBL1900-3800V3  HBBL600-10000V6	Test Frequency (MHz)  4 - 250  1300 - 1850  1550 - 1950  1900 - 3800  600 - 10000	Main Ingredients  Water, Tween Water, Tween Water, Tween Water, Tween Water, Oil					

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## Measurement Certificate / Material Test

Item Name Head Tissue Simulating Liquid (HBBL4-250V3)

SL AAH 005 AD (Batch: 211221-1) Product No.

Manufacturer SPEAG

## Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Target

#### Setup Validation

Validation results were within ± 2.5% towards the target values of Methanol.

# **Target Parameters**

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Diff.to Target [%]

∆-eps

## **Test Condition**

Environment temperatur (22 ± 3)°C and humidity < 70%. Ambient

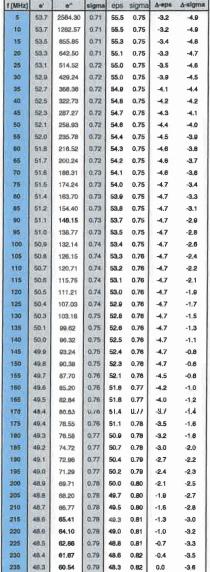
TSL Temperature 22°C Test Date 7-Jan-22 JML Operator

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Additional Information TSL Density 1.042 g/cm3

TSL Heat-capacity 3.574 kJ/(kg\*K)

	-5.0 -7.5						Į		H			
Dev. Permittivity %	-2.5			220	1				_	-		
Pem	0.0	1	4			3						-
量	2.5	1	-	-	Hi						W.	
£	5.0			-				-				
	7.5		1									H



48.1

0.82 0.3

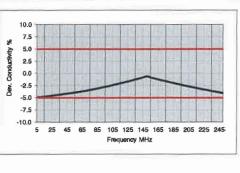
0.83 0.0 -3.8

-3.9

-4,1

59.45 0.79

58.41 0.80 47.9 0.83 0.6



240 48.2

245 48 1