

Client: Nidaria Technology Ltd

ISO 24443 In-vitro UVAPF

Experimental Data

Our Ref: UV12P124-1

page 1 of 5

Confact: Amit Lotan

Product: Safe Sea

Batch/Formula No: **SEA 1075**

> Date Rec: Date of Test: 13/5/13 14/5/13

Profocol: The sample was evaluated according to the method described in ISO 24443 (2012)

nstrument: Shimadzu UV-2450 Spectrophotometer fitted with Integrating Sphere Device

Substrate: Moulded PMMA 6 um Helioscreen Substrate Ref:

S2 S.D.0.3 S2 Ref. Batch: J110 S2 Ref Test Date: 30/4/2013 S2 Mean: 13.9

In-Vivo SPF:51.4 static as determined (Full Panel) Quantity Applied: 1.30 mg/sq cm:

7.2 m W_{cm-}^2 [requirement 5 to 14 m W_{cm-}^2] Plate Temperature: 34 °C UVA irradiance:

Pre-irradiation Coeff of Calib. 1.059 Plate Drying: 350C for 30 minutes

UVA exposure Time:

hh:mm

UVA exposure Dose: 28.1 J/sq.cm

Constant C: 0.997

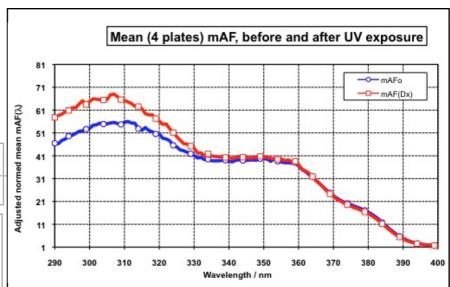
ISO in vitro UVAPFo: 26.82

(pre irradiation)

ISO in vitro UVAPF Dx: (post irradiation) C.I. %:

26.79 10.9%

(limit 17%)



Comments:



ISO 24443 In-vitro UVAPF Spreadsheet Data

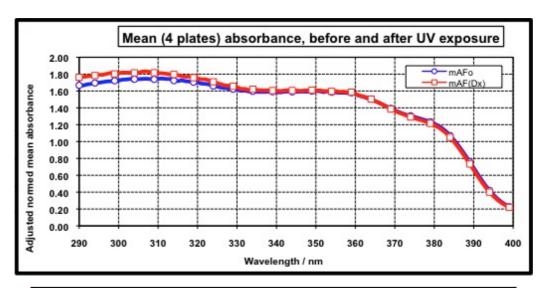
Our Ref: UV12P124-1

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Batch/Formula No: SEA 1075

Product: Safe Sea

Confact: Amit Lotan



	Final UV Absorbanc	e			
WL (nm)	Absorbance		Absorbance		Absorbance
290	1.761817	330	1.6475	370	1.36424
291	1.767919	331	1.62531	371	1.34267
292	1.772221	332	1.62585	372	1.32542
293	1.780349	333	1.61258	373	1.30689
294	1.783965	334	1.62141	374	1.2914
295	1.792679	335	1.61207	375	1.27664
296	1.79242	336	1.60927	376	1.26071
297	1.803777	337	1.60736	377	1.24966
298	1.813632	338	1.60815	378	1.23184
299	1.802264	339	1.60509	379	1.21462
300	1.8113	340	1.60443	380	1.19281
301	1.819277	341	1.59933	381	1.16923
302	1.817983	342	1.60574	382	1.13655
303	1.816897	343	1.60978	383	1.09907
304	1.815845	344	1.60598	384	1.05013
305	1.816896	345	1.60583	385	0.99596
306	1.830774	346	1.60198	386	0.93631
307	1.832502	347	1.60564	387	0.87115
308	1.825598	348	1.60753	388	0.80272
309	1.816945	349	1.60972	389	0.73344
310	1.814384	350	1.60736	390	0.66142
311	1.810096	351	1.60651	391	0.5887
312	1.805365	352	1.60061	392	0.52098
313	1.797558	353	1.59858	393	0.45647
314	1.796313	354	1.59576	394	0.40013
315		355	1.59835	395	0.35159
316	1.774023	356	1.58999	396	0.30835
317	1.769995	357	1.59313	397	0.27305
318	1.770478	358	1.58595	398	0.24447
319	1.758058	359	1.58612	399	0.21928
320	(200.15 T-0.10 T)	360	1.56926	400	0.19908
321	1.738366	361	1.54519		
322	1.0 mg 3.1 mg 2.1 mg 2.	362	1.53596		
323	JD011-1-1-10/15/16/16		1.52285		
324		364	1.5041		
325			1.47822		
326		366	1.45972		
327	100 100 100 100 100 100 100 100 100 100	367	1.43674		
328			1.40979		
329	1.655127	369	1.38607		

Signed: Craig Dennyson



ISO 24443 In-vitro UVAPF

Calibration Report

Our Ref: UV12P124-1

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Confact: Amit Lotan

Product: Safe Sea

Batch/Formula No: SEA 1075

Instrument: Shimadzu UV-2450 Spectrophotometer fitted with Integrating Sphere Device

Calibration Date: 30/4/2013

Plate Transmission Test

Plate Manufacturer: Moulded PMMA 6 um Helioscreen Lot #: 125

nm Limits:

290 >60%

300 >69% 320 >81%

	, 0	
71.8	%	PASS
82.4	%	PASS

66.2 % PASS

Spectrophotometric Wavelength Accuracy

Reference Wavelength

Measured Wavelength

 $\mathsf{P}_{\text{eak}}\,\mathsf{V}_{\text{alue}}$

Limit +/- 1

361 nm
361.0 nm
0.469
TRUE

Spectrophotometric Linearity Test

Dynamic Range Limit

Linearity Limit

2.6		PASS	min 2.2
97.7	%	PASS	R ₂₌ 85% min

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Calibrated by: Craig Dennyson



Client: Nidaria Technology Ltd

AS/NZS 2604 (2012)

Broad Spectrum Compliance

Our Ref: UV12P124-1

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Confact: Amit Lotan

Batch/Formula No: SEA 1075

Product: Safe Sea

The sample was evaluated according to the method described in ISO 24443. Pre-irradiation of the sample was calculated based on an SPF value of 51.4 which was static as determined (Full Panel).

1. Based on Label SPF of: 50

UVAPFDx/Label SPF= 0.535

PASS

Broad Spectrum compliance has been calculated based on the client advised intended Label SPF value of 50 and may vary if the label SPF is different. The required value is > or = 0.33 and the sample PASSES this requirement.

2. Critical Wavelength

[Post Irradiation] = 377.9 nm PASS

The Critical Wavelength was found to be equal or greater than 370nm and the product PASSES this part of the test requirement

		Ratio vis	Category Des	cription for AS/N	ZS 2604 F	Performance of this sample
SPF Found		Category Description	Primary	Se	UVAPF Ratio "Broad Spectrum"	
Tested SPF	Label SPF			Skin Care	Colour and/or	r Lip
4-14	4	Low	Compulsory	Compulsory	Optional	6.69 PASS
	6	Low	Compulsory	Compulsory	Optional	4.46 PASS
	8	Low	Compulsory	Compulsory	Optional	3.34 PASS
	10 Low		Compulsory	Compulsory	Optional	2.67 PASS
15-29	15	Medium	Compulsory	Compulsory	Optional	1.78 PASS
	20	or Moderate	Compulsory	Compulsory	Optional	1.33 PASS
	25		Compulsory	Compulsory	Optional	1.07 PASS
30-59	30	High	Compulsory	Compulsory**	Compulsory	.893 PASS
	40	High	Compulsory	Compulsory**	Compulsory	.669 PASS
	50	High	Compulsory	Compulsory**	Compulsory	.535 PASS
60 or higher	50+	Very High	Compulsory	Compulsory**	Compulsory	n/a

Datis via Catagory Description for AC/NIC 2604

This compliance report should be read in conjunction with the attached 3 pages describing the required procedure as defined in ISO 24443

Signed: Craig Dennyson

^{**} Moisturisers above SPF 29 may be considered not to be a Secondary Sunscreens under NICNAS requirements



E.U Compliance

UVAPF and Critical Wavelength based on ISO 24443 Test

Client: Nidaria Technology Ltd Our Ref: UV12P124-1

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Confact: Amit Lotan Batch/Formula No: SEA 1075

Product: Safe Sea

The sample was evaluated according to the method described in ISO 24443. Pre-irradiation of the sample was calculated based on the In vivo SPF value.

1. Jakel SDF 50

E.U. UVAPFD_x 0.535 Label SPF The UVAPFo and UVAPFx values have been calculated based on the static as determined (Full Panel) SPF value of 51.4The Official Journal of the European Union 22nd Sept 2006 requires that this value should be at least 0.33 and the sample PASSES this requirement. The value may vary if the label SPF is different (see chart below). Additionally, the Criticial Wavelength must be 370nm or greater and the sample was found to PASS this test requirement.

2. Critical Wavelength
[Post Irradiation] = 377.9 nm
PASS

The Critical Wavelength was found to be equal or greater than 370nm and the product PASSES this part of the test requirement

Ratio vis Category Description for Eurpoean Union Labelling

SPF Found		Category Description	Requirement	UVAPF Ratio (for varied label SPF)
Tested SPF	Label SPF			
	6	Low	Compulsory	4.46 PASS
6-14	10	Low	Compulsory	2.67 PASS
	15	Medium	Compulsory	1.78 PASS
	20	or	Compulsory	1.33 PASS
15-29	25	Moderate	Compulsory	1.07 PASS
	30	High	Compulsory	.893 PASS
30-59	50	High	Compulsory	.535 PASS
60 or higher	50+	Very High	Compulsory	n/a

This compliance report should be read in conjunction with the attached pages 1-3 describing the required procedure as defined in ISO 24443

Signed: Craig Dennyson



SPF Test Result Table

International SPF Test Method-2006

Client: Nidaria Technology Ltd

Protocol: Static Testing

	Product:	Safe Sea	SEA 10)75								E	xpected SDF: 50	UV	Sour	ce: XI
	Report 6	Reference	Number	:08696												
	T	Test Subjects								Report P1 of 4						
Subj N°	Exposure Date	Technician	Subj Code	Skin Type	MEDus secs	MEDps secs	SPFi	SPFn	s(n ¹)	Result $c(n^1)$		Conclusion: $c(n^{1}) < Cn^{1}$		Comments Ref MEDr SP		
1	10/10 /08	H.FENG	797	II	14	788	56.3				(0.23PI n)		c(n) < Cn		************	
2	13/10 /08	H.FENG	794	111	12	600	50.0	-	-					P2	222	15.9
3	14/10 /08	H.FENG	651	11	12	612	51.0	AND DESCRIPTION OF THE PARTY OF				************		P2	185	15.4
4	16/10 /08	H.FENG	688	II	16	826	51.6	***************************************	-			-		P2	180	15.0
	21/10 /08	H.FENG	767	II	11	572	52.0	-	-					P2	255	15.9
-	23/10 /08	H.FENG	612	1	17	894	52.6		-					P2	179	16.3
and the same of th	6/11 /08	H.FENG	396	III	11	572	52.0		-					P2	255	15.0
0	7/11 /08	H.FENG	824	II	11	506	46.0		-					P2	165	15.0
Address of the Owner,	10/11 /08	H.FENG	327	III	15	765	51.0		-	***************************************		***************************************		P2	165	15.0
10	11/11 /08	H.FENG	611	III	14	720	51.4	51.4	2.5	1.81	10.28		COMPLIES	P2	228	15.2
11								01.4	2.0	1.01	10.20			P2	220	15.7
12											-					
13							***************************************									
14																
15																
16							***************************************	THE PARTY OF THE P	***************************************			***************************************				
17														-		
18																
19																
20																
FI	NAI.		SPF	= 5 1	1.4		S= 2	2.5		C=	1.81	Q	5% Cl 49.6 to 53	2	n=	10

Our Reference: 08696

Client Fax: 97246750367

Signed



SPF Test Result Table

International SPF Test Method-2006

Client: Nidaria Technology Ltd

Protocol: Water Resistant Testing for 80 min

	Product:	Safe Sea	SEA 10)75								E	xpected SDF: 30	UV	Source	ce: XE
	Report 6	Reference 1	Yumber	:08697			Mo	atching	Static	Repor	t: 08696					
	Ι	est		Su	bjects					Resul	ts			Repo	ort P1	of 4
Subj N°	Exposure Date	Technician	Subj Code	Skin Type	MEDuw secs	MEDpw secs	SPFi	SPFn	s(n ¹)	-		n	Conclusion: $c(n^1) < Cn^1$		omm	
1	10/10 /08	H.FENG	797	II	14	473	33.8	T	1	***************************************	(C.ZOPIII)		c(n) < cn	DO.		
2	13/10 /08	H.FENG	794	П	12	420	35.0		-	***************************************	MAN were resembled to the companies of t			P2	222	15.9
3	14/10 /08	H.FENG	651	II	12	420	35.0	***************************************	***					P2	185	15.4
4	16/10 /08	H.FENG	688	TI	16	625	39.1		-					P2	180	15.0
5	21/10 /08	H.FENG	767	11	11	396	36.0		 					P2	255	15.9
6	23/10 /08	H.FENG	612	I	17	591	34.8		†					P2 P2	179 255	16.3
-	6/11 /08	H.FENG	396	III	11	385	35.0							P2	165	15.0
8	7/11 /08	H.FENG	824	II	11	443	40.3							P2	165	15.0 15.0
9	10/11 /08	H.FENG	327	III	15	540	36.0		-					P2	228	15.0
10	11/11 /08	H.FENG	611	III	14	518	37.0	36.2	2.0	1.46	7.24	***********	COMPLIES	P2	220	15.7
11								OO.L			7.21			12	220	13.7
12											***************************************					
13							***************************************									
14														_		
15	-														****	
16	10.000 post (p. 10.000 p. 10.0						***************************************								et et en	
17												***************************************				
18																
19																
20																
FI	YAI.		SPF	= 36	6.2		s= 2	2.0		C=	1.46	9	5% Cl34.7 to 3	7 7	n=	10

Our Reference: 08697

Client Fax: 97246750367

Signed