

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

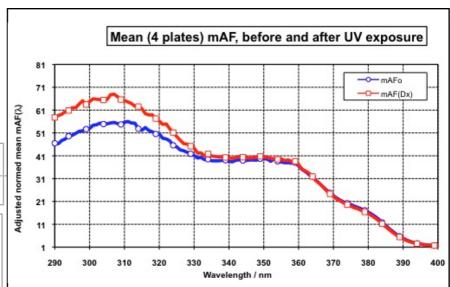
ISO in vitro UVAPFo: 26.82

(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

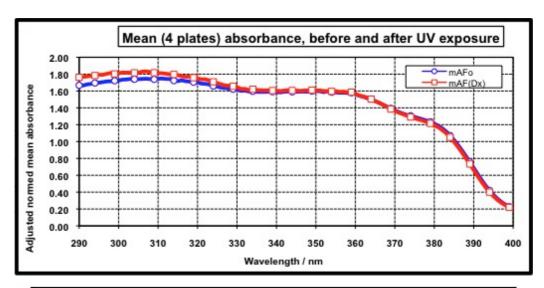
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page 2 of 5

Batch/Formula No: SEA 1075

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| Final UV Absorbance | | | | | | |
|---------------------|--|------------|---------|-----|------------|--|
| 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 | 1.0 (1.0 (1.0 (1.0 (1.0 (1.0 (1.0 (1.0 (| 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

page 3 of 5

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

page 4 of 5

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 Description for AS/NZS 2604 Performance of this samp | | | | | | erformance of this sample |
|---|-------------------------|----------------|------------|--------------|---------------|---------------------------------|
| SPF Found | Category Description | | Primary | Se | econdary | UVAPF Ratio "Broad Spectrum" |
| Tested SPF | Label SPF | | | Skin Care | Colour and/or | 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

page 5 of 5

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 |
| 15-29 30-59 | 20 | or | Compulsory | 1.33 PASS |
| | 25 | Moderate | Compulsory | 1.07 PASS |
| | 30 | High | Compulsory | .893 PASS |
| | 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