

Market Differentiation Or CONSUMER CONFUSION?

John Staton
Eurofins | Dermatest



Cosmetics &
Personal Care

Potential: world market



7 Billion Dollars

NO No No's!



sunscreen free



oil free sunscreen

paraben free sunscreen

oxybenzone free sunscreen

chemical free sunscreen

alcohol free sunscreen

best oil free sunscreen

cruelty free sunscreen

fragrance free sunscreen

Report inappropriate predictions

HIGHER SPF



What's the difference between SPF30 and SPF50+?

Many Australians are surprised to learn that SPF50+ only offers marginally better protection than SPF30. SPF50+ filters out 98% of UVB radiation, while SPF30 blocks out 96.7% of UVB.

Sun Protection Factor

SPF **15** = **93%**

SPF **30** = **97%**

SPF **50** = **98%**

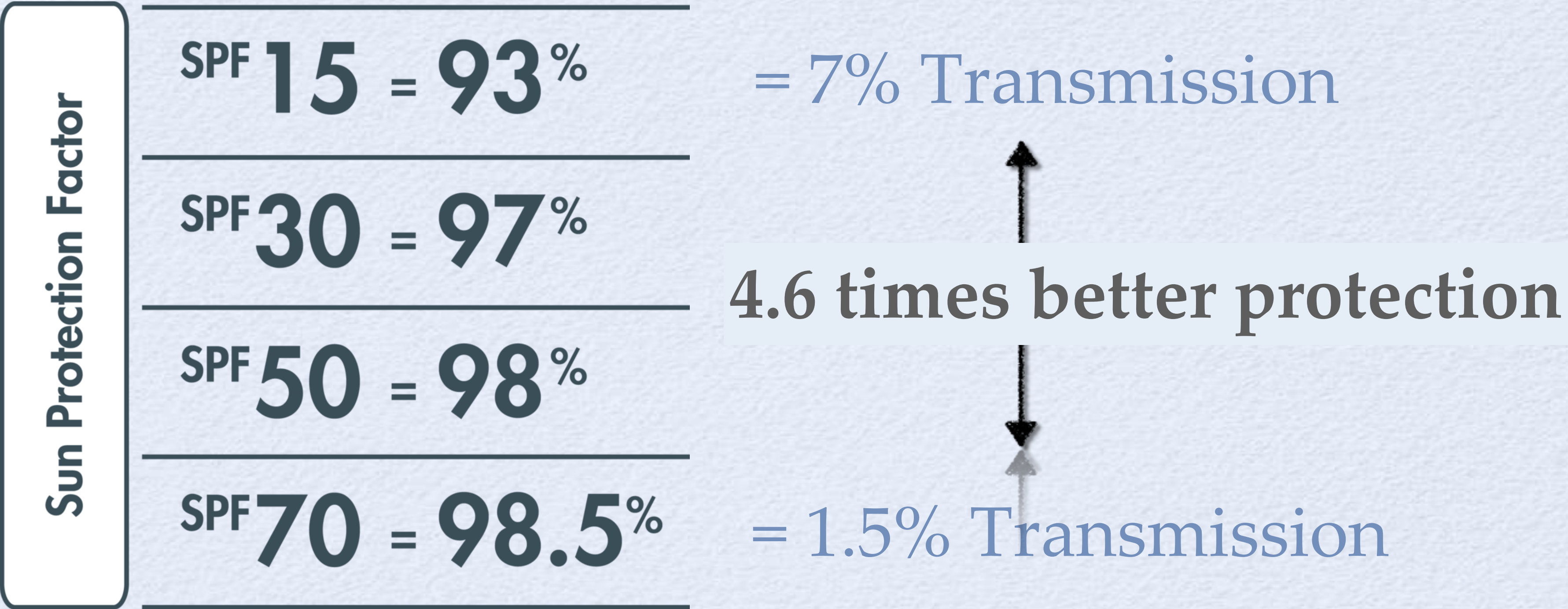
SPF **70** = **98.5%**

HIGHER SPF

It not what doesn't get through that does the damage



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HIGHER SPF



Ask the Expert: Does a High SPF Protect My Skin Better?

“An SPF 30 allows about 3 percent of UVB rays to hit your skin. An SPF of 50 allows about 2 percent of those rays through. That may seem like a small difference until you realize that the SPF 30 is allowing 50 percent more UV radiation onto your skin.”

Steven Q. Wang, MD, “ Director of Dermatologic Surgery and Dermatology at Memorial Sloan Kettering Cancer Center in Basking Ridge, New Jersey

HIGHER SPF



SPF 100



SPF 110



SPF 120



?

SPF ∞ ?

Study	ISO 24444
Study	ISO 24443

LONGER SPF



TGA and AS/NZS 2604
do not permit.
Must be re-applied



Only a play on words?

[50+ equals all day protection]

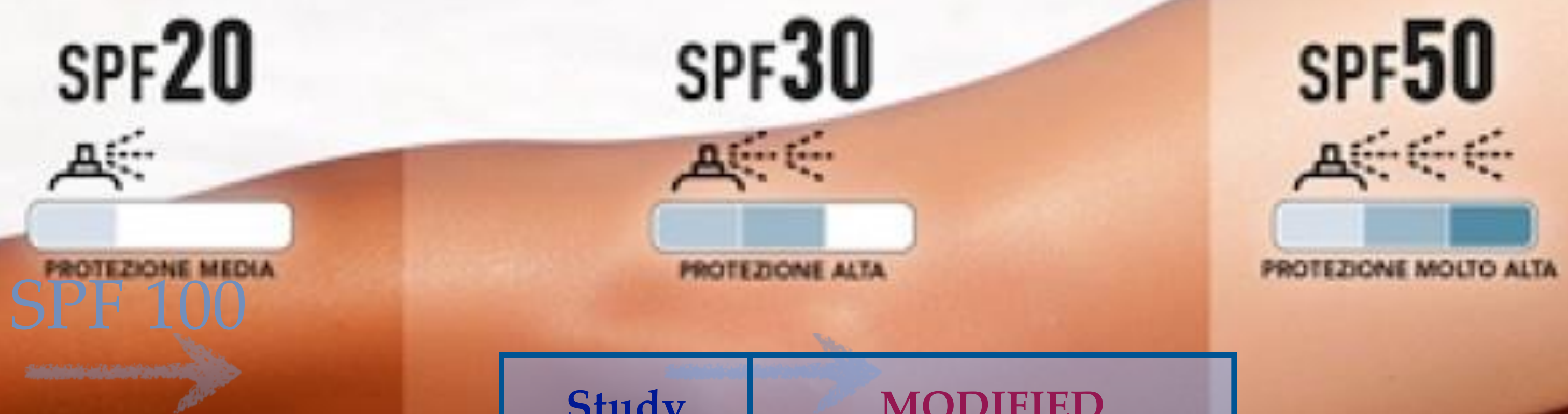
Study	ISO 24444
Study	ISO 24443

PROGRESSIVE SPF



?

Multiple Applications



Study	MODIFIED
Study	ISO 24443

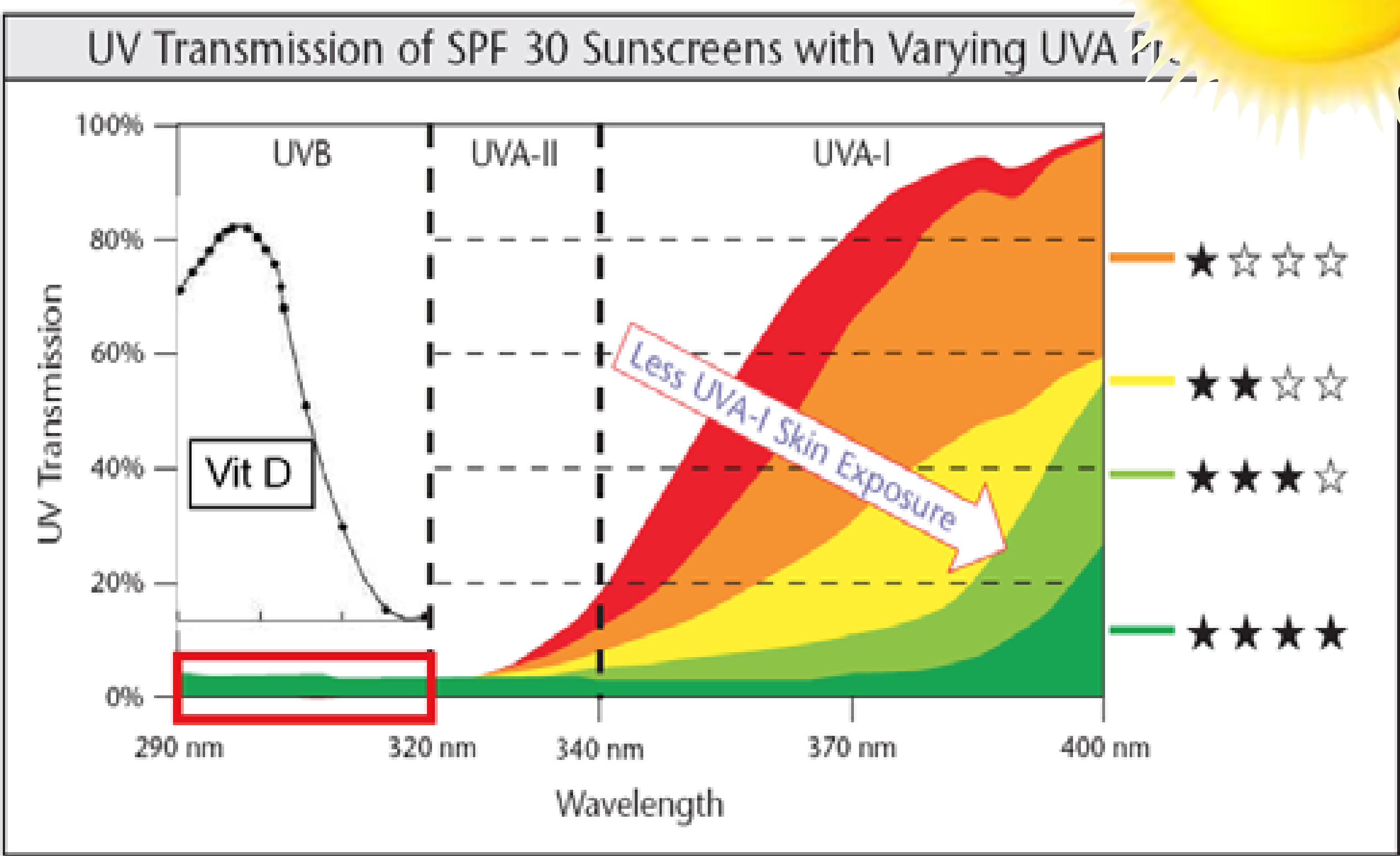
Vitamin D Transmission



Selective UVB
wavelength blocking

Study	UV Spectrum
Note	High UVA Balance

MORE STARS



Study	ISO 24442
	Boots Star

Boots 5 Stars

MORE UVA



PA +++++



Need In Vivo
UVAPF Testing

Mandated for
Japan and Korea

Study	ISO 24442	

UVA PROTECTION (ALONE)

The information on this page is provided only as an indication of possible results. These tests need to be performed separately. This information should not be relied upon for regulatory or marketing purposes.

ASSUMING AN IN VIVO SPF OF... 5.7

JCIA Japan, Korea and several other countries require that the UVAPF be performed *In vivo*. This estimated PA rating is indicative only.

Based on the post exposure mean UVAPF Value of... 4.38

The Estimated PA Value would be around... PA++

UVAPF Value	UVA Protection Grade
Less than 2	No UVA Protection
2 or more but less than 4	PA+
4 or more but less than 8	PA++
8 to less than 16	PA+++
16 or greater	PA++++

DA Broad Spectrum (C.W). 375+/- 2 n/a SPF less than 15

BOOTS The Boots Star rating system is proprietary to Boots Ltd and permission has to be obtained for use of this mark. Indicative values are estimated below. The actual test can be performed by Dermatest if required.

Indicative Star Rating:

Based on the initial mean UVA:UVB ratio of... 0.806
and post exposure mean UVA:UVB ratio of ... 0.813

the Boots Star Rating rating for this product could be expected to be ****
[4 stars]



Suggested
SPF 15
PA++++
C.W. 375
Boots ****

Study	ISO 24442
Study	ISO 24443

UVC PROTECTION



Originally supported
by IP ex University of Adelaide?



Ozone hole story

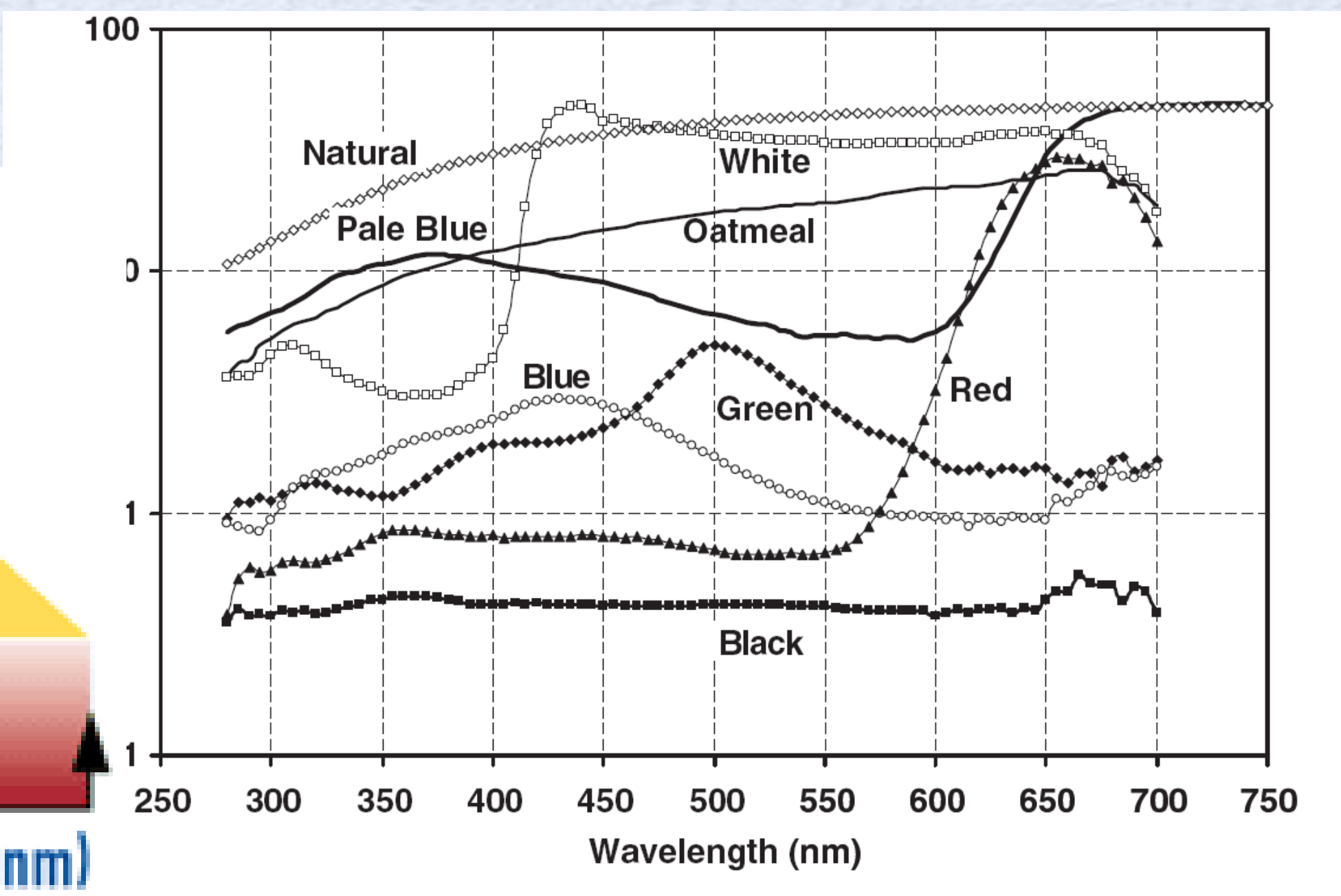
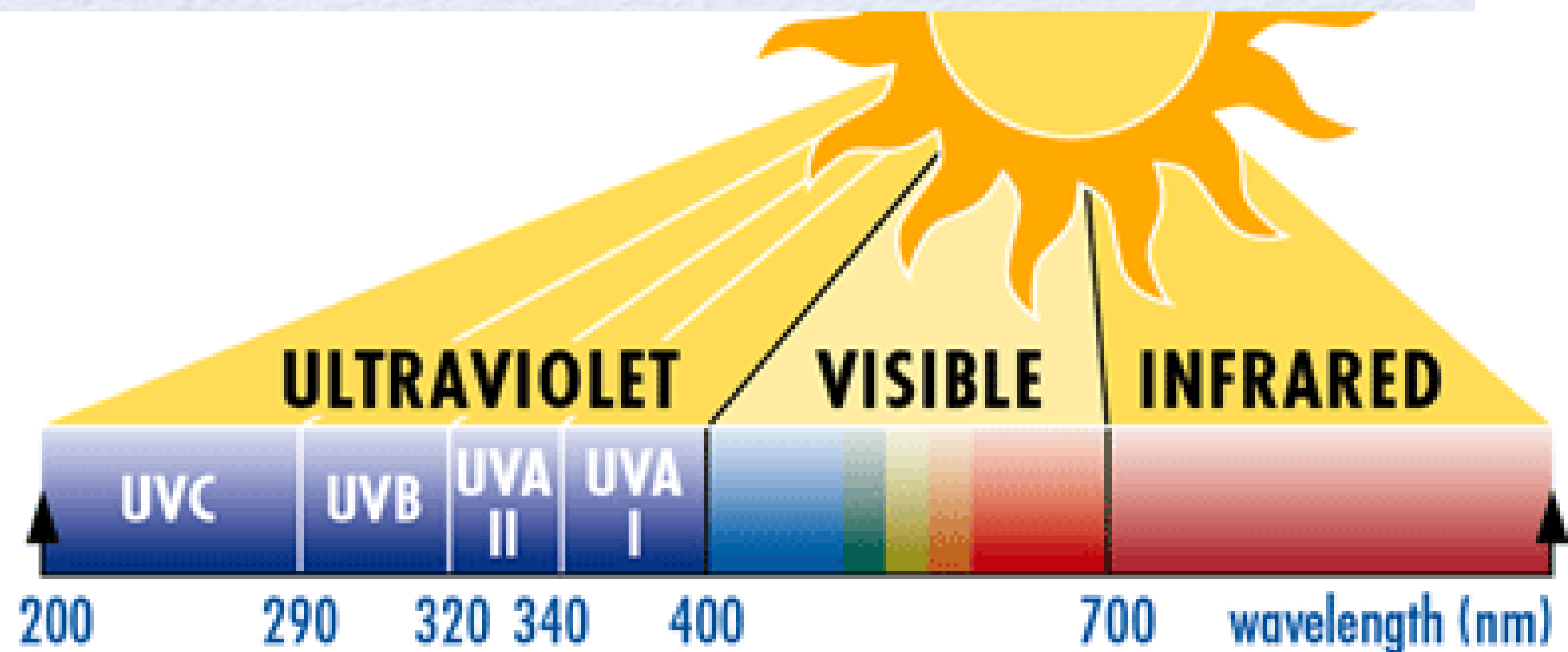
Study	Spectrophotometric
	Not Supported

VISIBLE AND INFRARED



List of
Vis and IR absorbers
ex Florida

T Shirt Transmission



Study	Spectrophotometric
	IR Light exposure?

BLUE LIGHT



Blue Light from
Digital Devices

Study	Spectrophotometric
	UV Spectrum exposure?

WHOLE SPECTRUM



More effective than a T shirt?

Study	Spectrophotometric

MORE WATER RESISTANT



Aust	Allowable Maximum	Measurement
Aust	4 hrs	100% of Post Immersion
USA	80 min	100% of Post Immersion
E.U.	80 min	Static if less than 49% wash off
<u>Mercosure</u>	80 min	Static if less than 49% wash off
Asean	80 min	Static if less than 49% wash off
Israel	80 min	Static if less than 25% wash off

WATER
RESISTANT
40min

EXTRA
WATER
RESISTANT
80min

Study	AS/NZS 2604
NEW	ISO 16217

MORE WATER RESISTANT

Water Block !



Colour patch
and check
Skin “stain”
regression



Study	AS/NZS 2604
Support	Regression

ALL KINDS OF WATER

- Wet Skin
- Salt Water
- Sweat
- Hard Water



<-Immediate Protection!



Water Type



Variant ->

Study	WR in Salt Water
	WR in Hard Water
	Sweat Room

ALL CONDITIONS



STAYS ON IN
7 CONDITIONS



ALL DAY PROTECTION



- More related to Secondary Sunscreens
- appropriate for alphabet creams



Claim	Contrary to TGA
?	AS/NZS Requirement

ANTIOXIDANT



“...with Antioxidant Defenders”



- Claimed to enhance SPF
- Anti-aging Claims

Treatment yes!
Protection No!

Study	In Use Multi
	Blemish Reduction

ANTI-INFLAMMATORY

“Shields skin against environmental aggressors with an antioxidant boost.”



Vitamin C and Green Tea,

Aust L?

Study	Erythematous Regression
	Chemical Reactions

SUITABLE FOR SENSITIVE SKIN



Human Repeat Insult Patch Testing is a safety test which should not be confused with efficacy claims.

Currently, 50% of Women claim to have “sensitive skin”

Study	RIPT Sensitive Panel
	Babies ?

DERMATOLOGICALLY TESTED



Dermatologically vis
Dermatologist

Study	Skin = Dermatologically
	Derm Certification

DERMATOLOGIST RECOMMENDED



For What?

Higher level of safety claims can be supported with specific in - use studies



Study	Scar Reduction
	Stretch Mark Reduction

HYPOALLERGENIC



Wiki

“The term lacks a medical definition, but it is in common usage and found in most standard English dictionaries.”

Claim to be
Restricted in E.U.



Study	Not Supported
	RIPT Sensitive

NON-COMEDOGENIC

Probably a low level claim



Study	Comedogenicity Test
	Acne - in use

SWEAT RESISTANT



Rule of Thumb
- Correlates with Water Resistance

Study	Sweat Chamber
	Add Water Resistance

SAND RESISTANT



New launch 2015



Both wet skin
and sand resistant

Study	Sand Resistance
	variable application

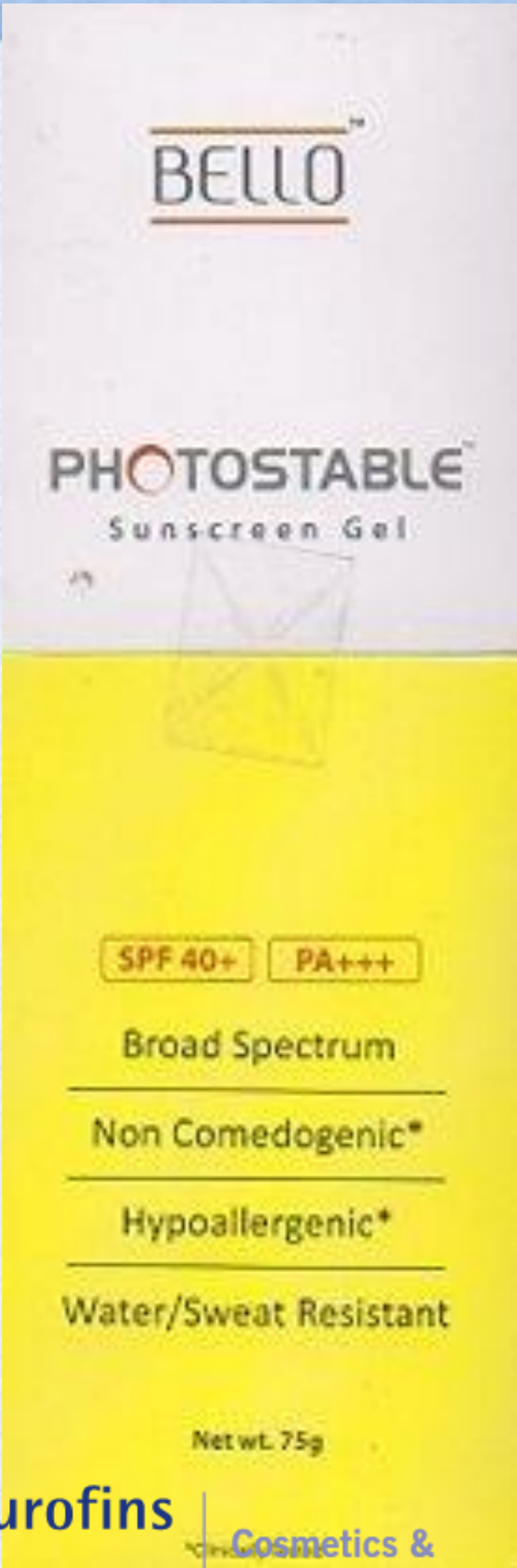
INSTANT



“ Reapply every 2 hours
when exposed to
sunlight “

Study	Not Instant?
	How?

PHOTOSTABILITY



- Rejected by ISO as not needing definition
- No standardised test

Study	ISO 24443
	In House Dermatest

DRY TOUCH



Replaces Oil Free?

Study	D-Squame

NON-WHITENING



Related..
No staining
No metal marking

Study	T Shirt Marking
	Minolta Spectro

WHITENING!



Study	In Use Multi
	Blemish Reduction

CHEMICAL TANNING



Large growth in Australia following banning of Tanning Beds.

Study	Tanning Development
	Tanning Regression

INSTANT TANNING



Study	Tanning Development
	Tanning Regression

INSTANT TANNING

Tanning



VITAMINS



B3



B12



C



D



E

Assay	Analytical
	Stability

ORGANIC



 NOP-USA	 EU	 P.R. CHINA	 JAPAN	 MALAYSIA	 Organic Alliance Malaysia
 USA	 USA	 USA	 USA	 USA	 CONTROL UNION HOLLAND
 GERMANY	 GERMANY	 GERMANY	 GERMANY	 GERMANY	 BRAZIL
 NEW ZEALAND	 NEW ZEALAND	 ITALY	 ITALY	 ITALY	 AUSTRALIA
 THAILAND	 BOLIVIA	 SWEDEN	 SWITZERLAND	 ARGENTINA	 GLOBAL PARTNERSHIP UK

Support	Ingredient Review
ISO	Organic Certification

New ISO Standard

EDIBLE

SKIN PROBLEMS?
MOOGOO
has helped herds of people.



Yoghurt



Greece



Korea

Support	Ingredient Selection
	Extrapolated Evidence

GLUTEN FREE

VEGAN

“Environmental Working Group’s (EWG) highest safety ratings”



“petroleum- fragrance- and gluten-free.”



“....no PABA or chemicals. Plus it’s free of peanuts, gluten, soy and dairy. Eco-friendly and 100% organic.”

Implication of no animal ingredients

Support	Ingredient Review
	Certification?

FOR ANIMALS



Not Tested on Animals?

ANIMAL NAMES



Message
Tends to be
high water
resistance

ANIMAL INSTINCT!



Chevy?

MARINE ENVIRONMENT

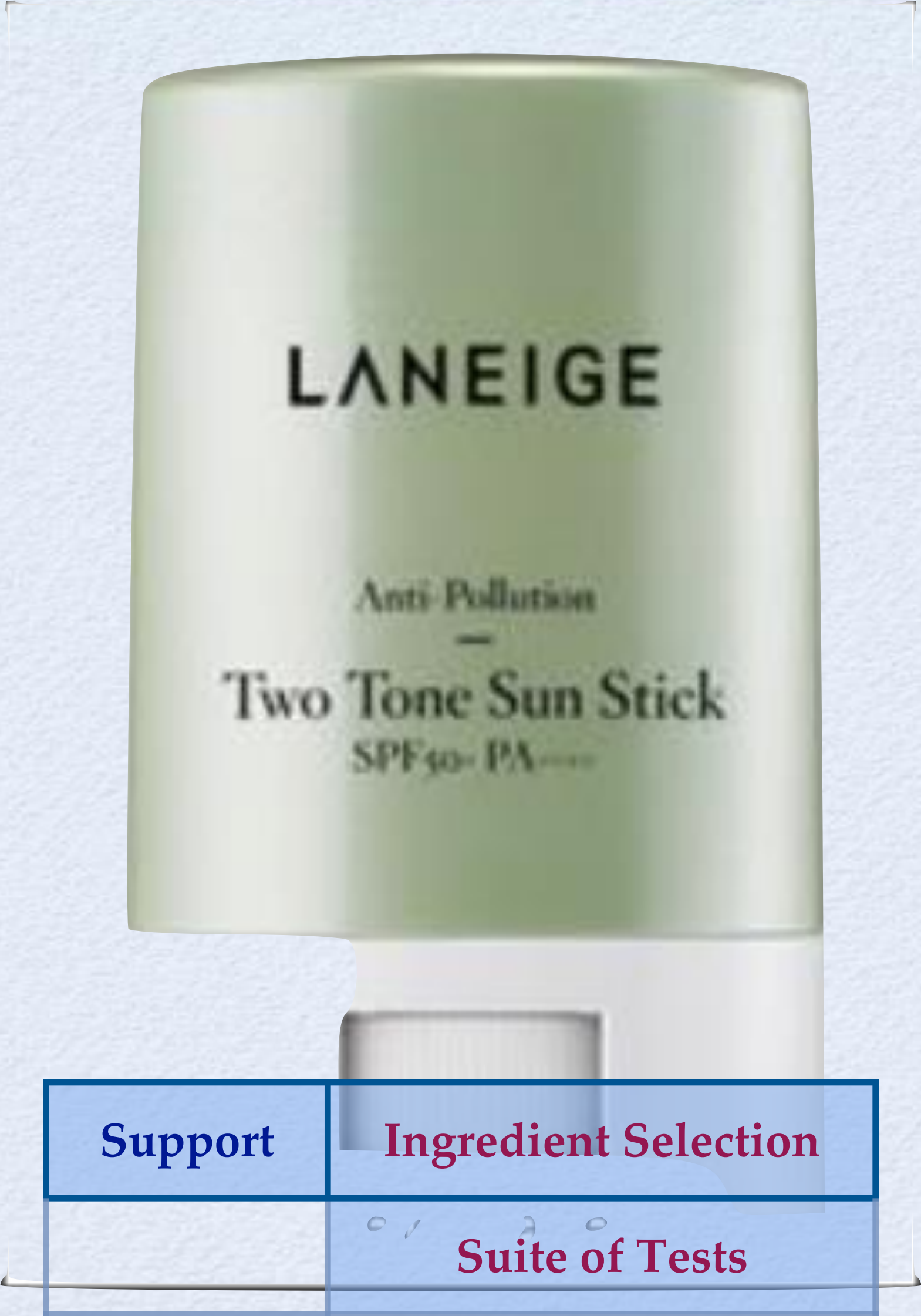


It provides effective in-water defense without harming the marine environment.



Support	Ingredient Review
	NO wash off

WHOLE ENVIRONMENT



Protects from
Free Radical
Damage

Support	Ingredient Selection
	Suite of Tests

GENETIC ALTERING



“Genetic
Protection
Factor”

Support	Ingredient Selection
	Extrapolation ?

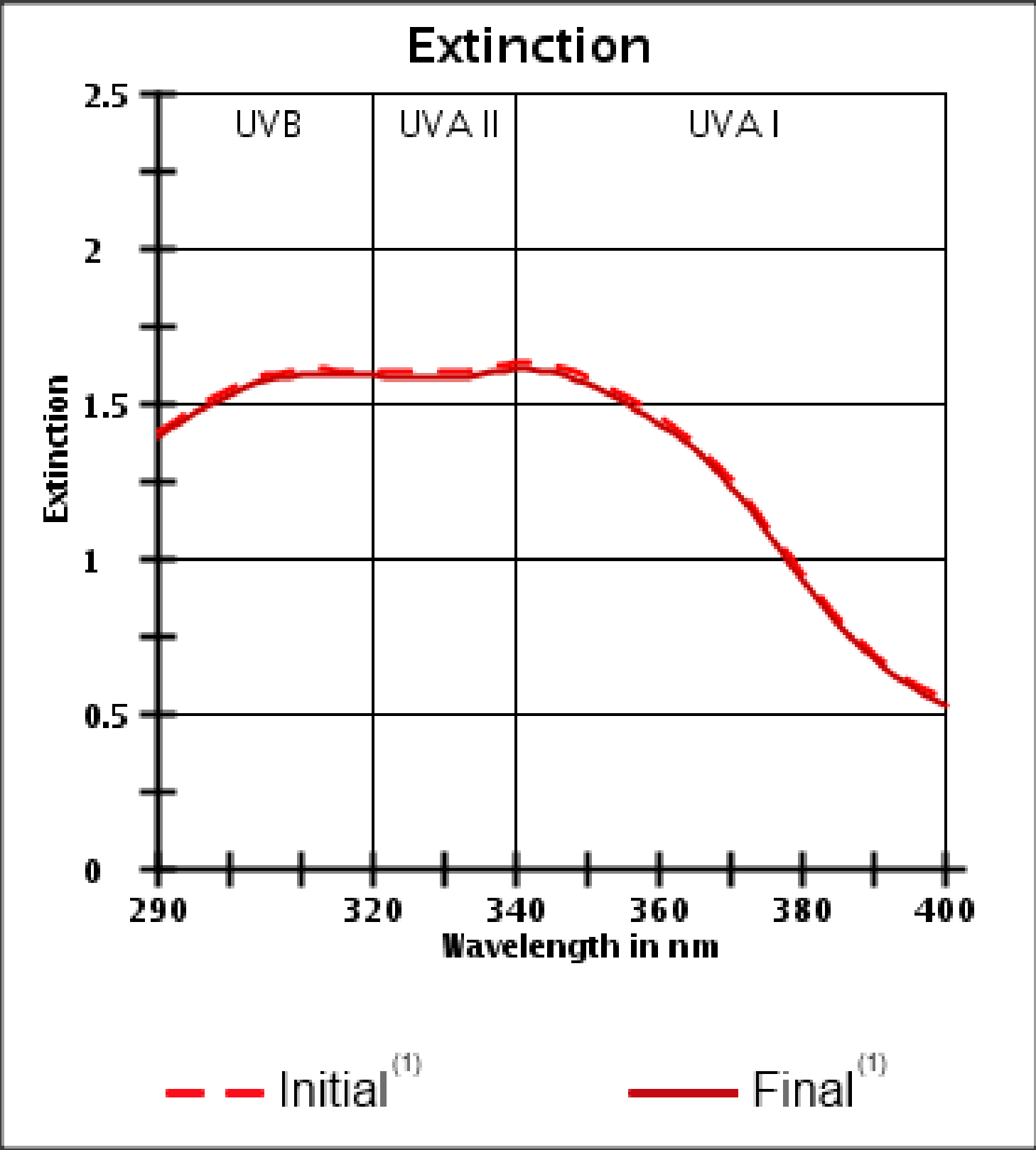
NEW RESOURCE - ETHICAL

Tinasorb A2B

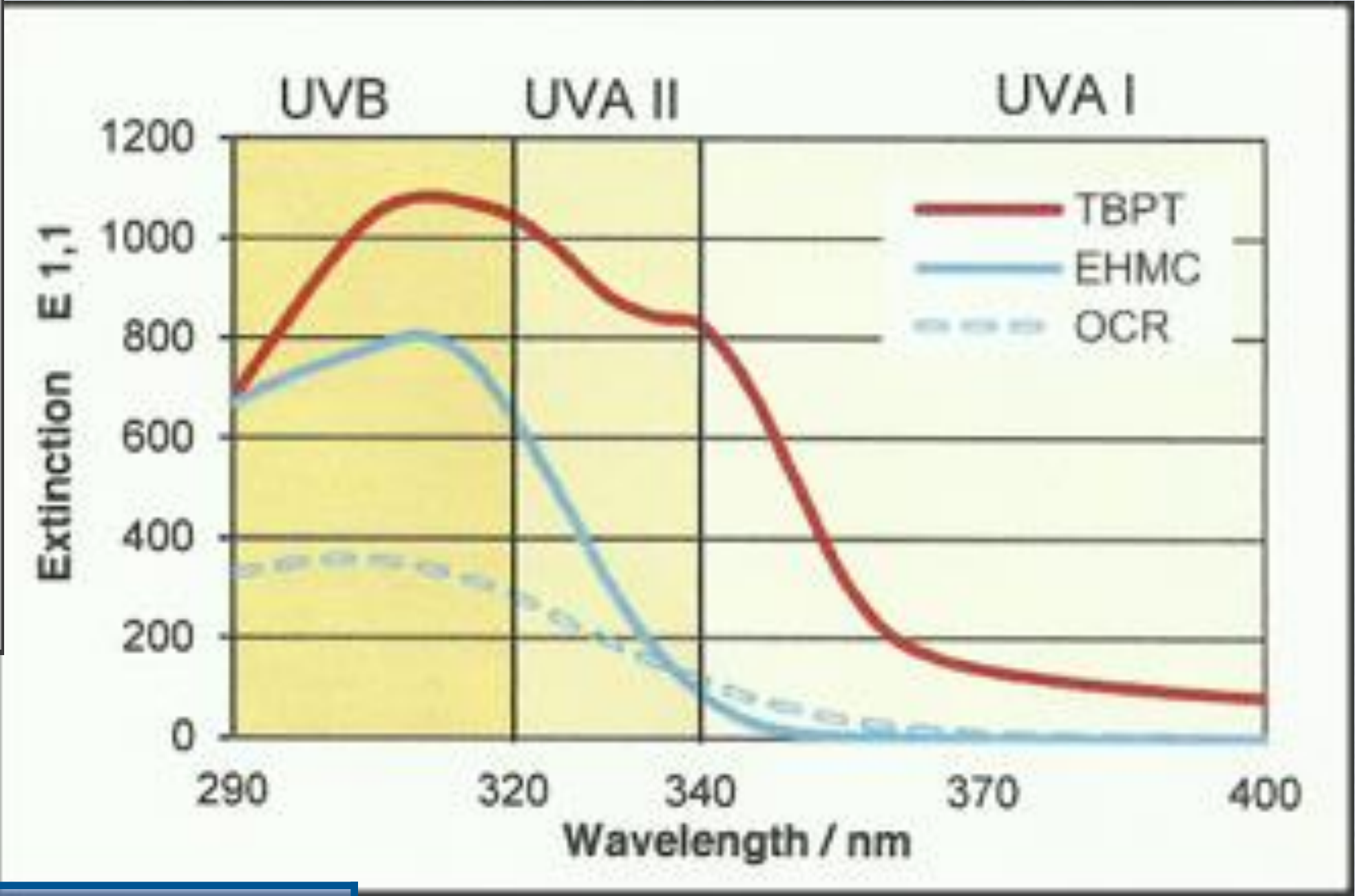


INCI Name:
Tris-Biphenyl Triazine (nano),

Abbreviation: TBPT (nano)



Claims



Study	New Resource
	R & D

SUMMARY :PROGRESSION OF CLAIMS



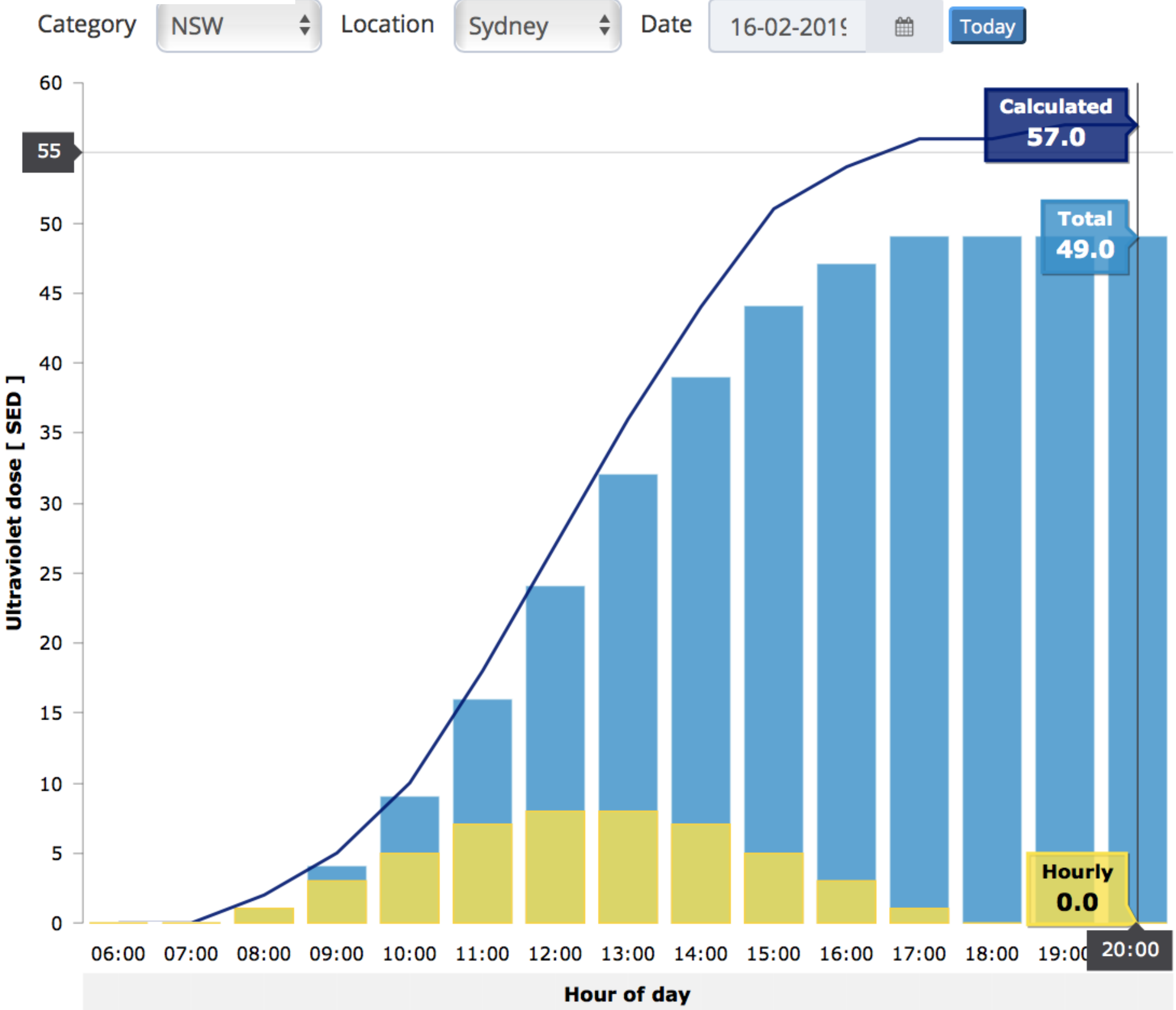
Were to
from here?

- MORE “Nos”
- MORE SPF
- MORE UVA
- MORE WATER RESISTANCE
- MORE of the SPECTRUM
- MORE of the ENVIRONMENT
- MORE SAFE
- MORE ELEGANT

CUMMULATIVE UV INDEX



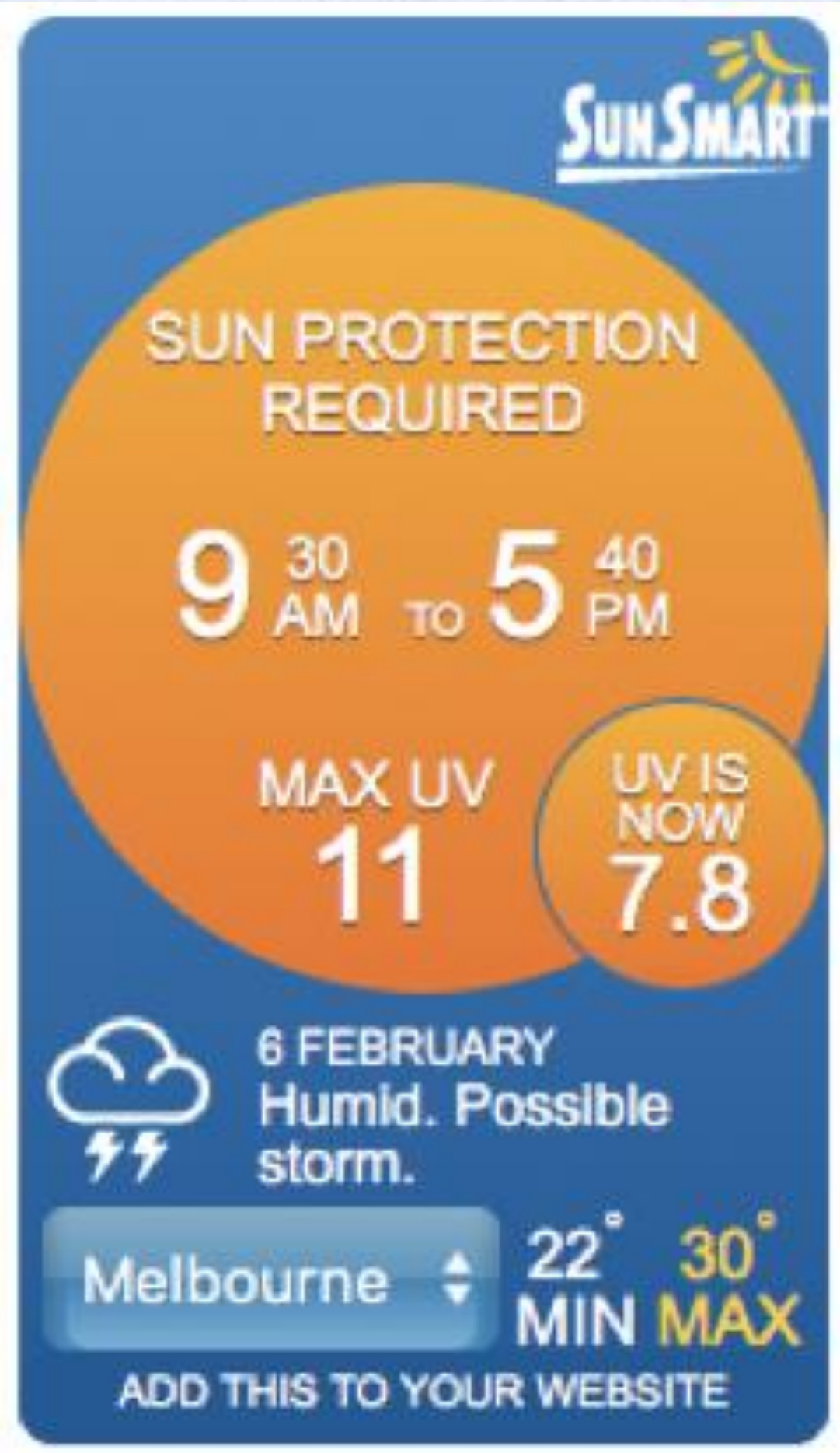
Sydney UV dose - Saturday, 16 February 2019



IDEA!

SEDs
Versus
MEDs ?

SUN PROTECTION APP



SUN PROTECTION APP

IDEA!



CANCER COUNCIL SURVEY 2017



Almost half of Australians confused about sunscreen

17 % of respondents were worried that sunscreens contain ingredients that
are bad for your health

20 % believed that using sunscreen regularly would result in not having
enough vitamin D.

If we do not focus on the Sun Protection message,
do we end up only confusing our users?