

Sun Care

Next Generation UV filters

Natural Blue Light Protection & SPF booster



Comprehensive Protection Against UV and Blue Light

Sunlight is essential for life and vitamin D synthesis. However, it also poses significant risks. Ultraviolet (UV) radiation contributes to cellular damage, pigmentation disorders, premature skin aging, and increases the risk of skin cancer. UVB rays primarily induce sunburn, while UVA rays penetrate more deeply, accelerating photoaging and contributing to carcinogenesis.

In addition, artificial light sources such as computers, smartphones, and fluorescent lighting emit high-energy visible (HEV) blue light (400 - 700 nm). Compared with UV radiation (200 - 400 nm), blue light penetrates deeper into the dermis, where it induces oxidative stress, DNA damage, and degradation of collagen and elastin. Continuous exposure to HEV and UV radiation underscores the need for effective photoprotection, making it a daily priority, no matter the season

Our Solution: Next-Gen Filters & BluVLite™

Our portfolio of next-generation UV filters, together with the natural active ingredient BluVLite™, provides comprehensive protection against UVA, UVB, and HEV radiation. These solutions demonstrate high photostability, excellent skin compatibility, long-lasting efficacy, and are developed with a strong commitment to environmental responsibility.



Our Portfolio

Next Generation UV Filters

Product	INCI Name	Type of UV Absorber	Appearance	Solubility
UVA + UVB (280 - 400 nm)				
DHBT	Diethylhexyl Butamido Triazone	UVA + UVB	Powder	Oil Soluble
BMTZ	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	UVA + UVB	Powder	Oil Soluble
MBBT	Methylene Bis-Benzotriazolyl Tetramethylbutylphenol	UVA + UVB	Liquid	Water Soluble
UVB (280 - 320 nm)				
EHT	Ethylhexyl Triazone	UVB	Powder	Oil Soluble
PBSA	Phenyl Benzimidazole Sulfonic Acid	UVB	Powder	Water Soluble
UVA (320 - 400 nm)				
Avobenzone	Butyl Methoxydibenzoylmethane	UVA	Powder	Oil Soluble
DHHB	Diethylamino Hydroxybenzoyl Hexyl Benzoate	UVA	Powder	Oil Soluble
TDSA	Terephthalylidene Dicamphor Sulfonic Acid	UVA	Powder	Water Soluble

Natural Protection against Blue Light with proven Efficiency				
Blue Light (400 - 500 nm)				
BluVLite™	Glycerin, Punica granatum Peel Extract, Garcinia mangostana Peel Extract, Clitoria ternatea Flower Extract	Absorption spectra wavelength 200 - 700 nm	Blue-green to dark blue-green liquid	Water Soluble

High-Performance Sun Protection

Product Profiles

Diethyl Hexyl Butamido Triazone (DHBT)

INCI: Diethyl Hexyl Butamido Triazone

 Type of UV Absorber: UV-A+UV-B

 Appearance: Powder

 Solubility: Oil Soluble

 CAS number: 154702-15-5

EU Max. Concentrations according to Active Content: 10%

Applications:

Suitable for all sun care products such as lotions, creams, and BB creams.

Advantages:

- Effective in UVB and UVA II regions
- Delivers high SPF at low concentrations
- One of the most photostable sunscreens available (loses only 10% SPF after 25 hours)
- Hydrophobic nature supports water resistance
- Forms a protective barrier against UV radiation

Bemotrizinol (BMTZ)

INCI: Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine

 Type of UV Absorber: UV-A+UV-B

 Appearance: Powder

 Solubility: Oil Soluble

 CAS number: 187393-00-6

EU Max. Concentrations according to Active Content: 10%

Applications:

Suitable for all sun care formulations including lotions, creams, and BB creams.

Advantages:

- Broad-spectrum, highly photostable filter
- Compatible with both organic and inorganic UV filters
- Globally compliant with stringent safety standards
- Synergizes with EHT and DHHB for enhanced efficacy
- Minimal skin absorption, reducing irritation risk

High-Performance Sun Protection

Product Profiles



Bisotrizole (MBBT)

INCI: Methylene bis-benzotriazolyl tetramethylbutylphenol

☀️ Type of UV Absorber: UV-A+UV-B

💧 Appearance: Liquid

💧 Solubility: Water Soluble

📋 CAS number: 103597-45-1

EU Max. Concentrations according to Active Content: 10%

Applications:

A broad-spectrum filter for all skincare applications. Best suited for O/W emulsions; not recommended for W/O emulsions. Maintain formulation pH above 4 to prevent precipitation.

Advantages:

- Broad-spectrum protection against UVA and UVB
- Safe, cold-processable organic compound
- Highly efficient at low concentrations
- Water-phase solubility enhances oil-phase compatibility

Ethylhexyl Triazone (EHT)

INCI: Ethylhexyl Triazone

☀️ Type of UV Absorber: UV-B

💧 Appearance: Powder

💧 Solubility: Oil Soluble

📋 CAS number: 88122-99-0

EU Max. Concentrations according to Active Content: 5%

Applications:

Ideal for water-resistant products due to its high substantivity on skin.

Advantages:

- Highly effective and photostable UVB filter
- Delivers high SPF at low usage levels
- Compatible with UVA filters, providing broad-spectrum protection
- High molecular weight ensures superior surface coverage
- Odorless and colorless, suitable for fragrance-free formulations
- Lightweight and versatile, ideal for various sun care products

High-Performance Sun Protection

Product Profiles

Phenyl Benzimidazole Sulphonic Acid (PBSA)

INCI: Phenyl Benzimidazole Sulphonic Acid

☀️ Type of UV Absorber: UV-B

📦 Appearance: Powder

💧 Solubility: Water Soluble

📄 CAS number: 27503-81-7

EU Max. Concentrations according to Active Content: 5%

Applications:

Ideal for water-based sun care products such as serums, gels, & sprays with high SPF values.

Advantages:

- Efficient UVB protection to prevent sunburn and skin damage
- Absorbs and dissipates UV radiation, allowing for lightweight high-SPF formulations
- Solubility improves with pH adjustment using a buffer
- Excellent compatibility with diverse ingredients and packaging materials



Avobenzene (AVB)

INCI: Butyl Methoxydibenzoylmethane

☀️ Type of UV Absorber: UV-A

📦 Appearance: Powder

💧 Solubility: Oil Soluble

📄 CAS number: 70356-09-1

EU Max. Concentrations according to Active Content: 5%

Applications:

Universally approved for all sun care formulations. Offers a strong safety profile with low irritation potential.

Advantages:

- Broad-spectrum UVA absorption
- Provides complete protection when combined with UVB filters
- Best used with filters like OCR, HMS, and OMC for balanced formulations
- Reduces photoaging, helping to preserve youthful skin

High-Performance Sun Protection

Product Profiles

Diethylamino Hydroxybenzoyl Hexyl Benzoate (DHHB)

INCI: Diethylamino Hydroxybenzoyl Hexyl Benzoate

☀️ Type of UV Absorber: UV-A

🧴 Appearance: Powder

💧 Solubility: Oil Soluble

📋 CAS number: 302776-68-7

EU Max. Concentrations according to Active Content: 10%

Applications:

UVA protection & anti-aging. Suitable for formulations like lotions and creams.

Advantages:

- Strong UVA absorption
- Low skin penetration, minimizing irritation risk
- Protects against both acute and chronic photodamage
- Considered an anti-aging ingredient
- Excellent photostability and compatibility
- High formulation flexibility

Terephthalylidene dicamphor sulfonic acid (TDSA)

INCI: Terephthalylidene dicamphor sulfonic acid

☀️ Type of UV Absorber: UV-A

🧴 Appearance: Powder

💧 Solubility: Water Soluble

📋 CAS number: 6197-30-4

EU Max. Concentrations according to Active Content: 10%

Applications:

Ideal for daily sun care & anti-aging skincare. Water-soluble with a pleasant sensory profile.

Advantages:

- High UVA-PF efficacy
- Cold-processable, water-soluble, and easy to formulate
- Synergizes with other UV filters for improved performance

Natural Active Ingredient BluVLite™

IINCI: Glycerin, Punica granatum Peel Extract, Garcinia mangostana Peel Extract, Clitoria ternatea Flower Extract

Claim: Natural Blue Light + UV Protector

Appearance: Blue-green to dark blue-green liquid

Type: Water-Soluble Extract

Applications:

Suitable for daily skin care, sun care, and anti-aging formulations

Effective concentration: 0.8% - 5.0%

Advantages:

- Shields skin from blue light and UV-induced damage
- Protects skin from collagen & elastin degradation
- Inhibits the formation of glycation wrinkles
- Prevents skin aging that is generated through accelerated cell senescence
- 1.78x stronger antioxidant activity vs. commercial natural sunscreen (DPPH test)
- Soluble in water
- Easy to integrate into skin care products
- Cosmos-approved

A sustainable, natural alternative that works in synergy with next-gen UV filters for enhanced broad-spectrum protection and skin health.



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