



Sarex Overseas

A division of Sarex Organics Pvt. Ltd.

UV ABSORBERS FOR

TEXTILE INDUSTRY

FABRICS THAT ENDURE: EXPLORE THE
MAGIC OF UV ABSORBERS IN
TEXTILE MANUFACTURING



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**SAREX OVERSEAS MANUFACTURING COMPLEX,
TARAPUR, INDIA**



**SAREX OVERSEAS NEW PLANT,
TARAPUR, INDIA**



**BIRD EYE VIEW SAREX OVERSEAS
MANUFACTURING COMPLEX, TARAPUR, INDIA**

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20+

Year of Experience

200+

No. of Customers Served

20+

Countries Served

About Sarex



Sarex Overseas Manufacturing Complex

Sarex Overseas is a Mumbai Based Company, manufacturing Fine Chemicals and Specialty Chemicals. Sarex Overseas is a division of Sarex Organics Pvt Ltd, Mumbai, India.

Sarex overseas is a leading manufacturer of Fine Chemicals and API Intermediates in India.

Sarex Overseas has corporate office in Mumbai. Sarex Overseas has its Manufacturing and R&D facility in Tarapur which is 100 Km from Mumbai.

Sarex Overseas manufacturing facility is GMP complied, but not certified. Many multinational companies have audited its facility and Sarex is their approved Vendor. Sarex is certified by ISO 9001, ISO 14001, and OHSAS 45001 by URS, UK. Besides Sarex has Ecovadis accreditation for business sustainability.

Sarex Overseas believes that People are their biggest strength and has most of the people working for many years at Sarex. Sarex Overseas has nearly 400 employees at various locations.

Over the years Sarex Overseas has become one of the largest leading manufacturer of Triazine based UV absorbers and light stabilizer and intermediates which are used in many Industries used as additive in plastics and coatings , Textile industry , Agro films, personal care industry to enhance their durability, colour fastness and performance. These UV absorbers are superior in their class as these have very low volatility at high process temperature of the plastics.

Sarex specializes in producing high value fine chemicals. Besides regular products, Sarex develop new products based on customer's requirements. R&D centre plays crucial role in handling complex chemistry and developing newer technologies. Other than additives for Plastic and Coatings Sarex Overseas also manufacture some API Intermediate as well as the contract manufacturer of the Fine Chemicals. Sarex is the market leader in Pharmaceutical intermediates of anti-diabetic API Pioglitazone Hydrochloride in India.

Sarex has a state of the art manufacturing facility with variety of unit operations. The entire plant operations is automated except solid charging / discharging using control system. Sarex Overseas have total 52 Reactors, in which 26 are Glass lined Reactors and 26 are Stainless Steel Reactors having 630 lit to 10kl capacity. Sarex Overseas have in house Primary, Secondary & Tertiary Effluent Treatment facility with Zero Liquid Discharge arrangement for liquid effluent.

Sarex has in-house Quality control development with HPLC, GC, UV-Vis Spectrophotometer, FTIR and many more analytical instruments with trained and skilled workforce. Sarex has in-house R&D facility with 8 fume hoods , rotary evaporator, Glass reactor etc. with high skilled & qualified manpower.



Glass Lined Reactors

Sarex is having adequate scrubbing arrangement to entrap gaseous emission.

Safety is one of the most important culture of Sarex. Utmost care has been taken while designing, operating and maintaining the plant. Majority of the safety is already built in the design of the plant and automation. Sarex is concerned with environment and committed to EHS (Environment, Health and safety).

Intellectual property rights and confidentiality is on the top priority list of Sarex.

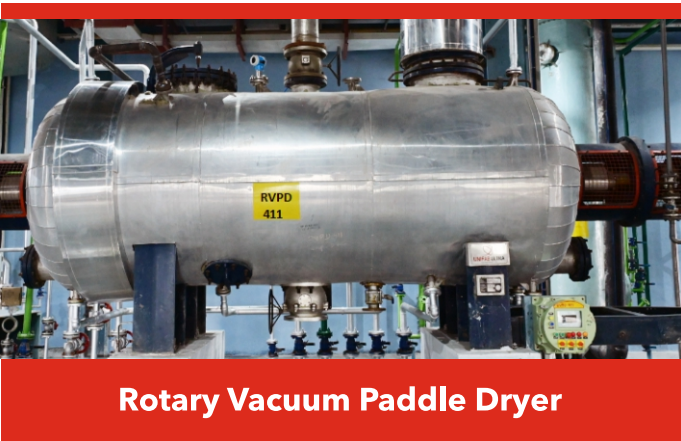


Sarex Overseas is engaged in the Bulk manufacturing and

- Our company is largest manufacturer of anti-diabetic Pioglitazone Hydrochloride intermediates 5 Ethylpyridine-2-ethanol and 2,4-Thiozolidenedione in India.
- Our company is Largest manufacturer of Triazine UV absorbers for Plastics, coatings additive , Textile industry and personal care industry India.
- Bulk chemical manufacturer for Pharmaceuticals, Plastics, Coatings, Electronics, Dyes & Pigment industries, Photoinitiator, Resin Raw materials, Antioxidants and Flame retardants.

Sarex not only avails you with the exceptional chemicals, but also shoulders the responsibility of after sales service. Thus, we provide thorough going service through our Technical support. Our quality analysts scrutinize each & every product before its delivery. We value your money & endeavour to bring you the optimum product service in exchange of that.

We are one of the India’s largest chemicals exporter & major portion of our produce is exported to more than 40 countries, primarily to the USA & Europe where our products have been well received & we have been successful in nurturing excellent relationships with our clients. We have been acclaimed a lot many times for our noteworthy range of chemicals.



Sarex stands for quality products!

Importance of Textile Industry



Triazine is a nitrogen-containing heterocyclic aromatic compound with a six-membered ring structure composed of three carbon atoms and three nitrogen atoms. It is a highly stable and versatile compound that finds use in a wide range of applications, including UV Absorbers for Polymer additives, Coating, Dyes and Textile, Flame Retardant, Healthcare and Personal care, Automotive Industry, Agro films, etc.

APPLICATION OF TRIAZINE

Triazines have a wide range of applications in various industries, including:

UV ABSORBER POLYMER ADDITIVES

Triazines are widely used as UV absorber additives in polymers like plastics, resins and coatings. It has distinct advantage over the rest of UVA absorbers such as Benzophenones (BZP) and Benzotriazoles (BZT). Some UV absorber for complex mouldings, fibers, plain and corrugated sheets, twin wall sheets, thin films, co-injected or coextruded semi-finished parts , allows polycarbonates and polyesters to achieve a higher resistance to weathering than conventional benzotriazole UV absorbers.

POLYMERS

Triazines can be used as monomers in the synthesis of novel polymers with desirable properties such as thermal stability, electrical conductivity, and mechanical strength.

COATINGS

Triazine is the best UV Absorbers. It helps to protect the coating by absorbing sunlight instead of letting it reach the adhesives, plastics, coatings, and elastomers. It is useful to protect adhesives, plastics, coatings, and elastomers from the damaging effects of outdoor weathering.

TEXTILES & DYES

Triazine compounds can be used to produce a range of dyes, including reactive dyes, acid dyes, and direct dyes. Triazine can be used as UV absorber in textile auxiliary. It can also be used in polycarbonates, injection moulding, thermoplastics, fibres, textiles and carpets for enhanced durability, color fastness and performance. It suitable for Dyeing and printing of polyester fibres, modified

polyester fibres and their blends that are exposed to critical light and heat conditions, For both Technical Textiles Such as upholstery fabrics, interior linings and seat belts and Apparel textile e.g. sportswear, uniforms, beach, swim and leisure wear, Hats, parasol fabrics (Umbrella, Tent) etc. It can be used in industrial paints and automotive paints with high thermal stability and durability requirements.

FLAME RETARDANTS

Triazines are used as flame retardants in a range of materials, including plastics, textiles, and construction materials.

HEALTHCARE & PHARMACEUTICALS

Triazine derivatives widely used in Healthcare and personal care industry. Triazine derivatives used as UV absorbers in sunscreen cream.s-Triazine is extensively studied because of its wide applications in biological systems as an antibacterial, antiviral, anticancer, and antifungal agent.

AUTOMOTIVE / ELECTRONIC INDUSTRY

In the automotive industry, that UV-absorbers (UVA) based on hydroxyphenyl-s-triazines (HPT) are capable of fulfilling the requirements such as higher performance and quality as well as cost pressures where 2-(2-hydroxyphenyl)-benzotriazoles (BTZ) tend to fail or show inferior properties.



AGRO FILM

Triazine can be used as a light stabilizer (UV-absorber) for all kinds of polymers. In high performance agro PE films for high resistance to pesticides.

WHAT ARE UV ABSORBERS

UV absorbers are used in all synthetic material such as Plastics which is made up of Polycarbonate (PC), Polyesters, Polyamide (PA), Polyethylene (PE), Polyethylene terephthalate (PET) and so on.

IN THE UV ABSORBERS THERE ARE 3 TYPES

- Benzophenone
- Benzotriazole
- Triazine

USE OF BZT UV ABSORBERS: IMPACT AND CONCERN

- One of the primary concerns with benzotriazoles is their potential to act as endocrine disruptors. Like benzophenone derivatives, benzotriazole derivatives have been found to have estrogenic effects, meaning they can mimic the hormone estrogen in the body. This can lead to a range of negative health effects in humans and animals.
- Benzotriazole derivatives can also be toxic to aquatic organisms. Studies have shown that some derivatives can accumulate in fish and other aquatic organisms, potentially causing harm to these species.
- In addition to their potential environmental impacts, benzotriazole derivatives have also been linked to negative health effects in humans. Some studies have suggested that they may be carcinogenic, or cancer-causing, and can also cause skin irritation and other adverse health effects.
- First examples of UVA that suffered from REACH: Benzotriazoles e.g.
- BZT 329, BZT 327, BZT 328 that already got listed as SVHC.
- BZT 326 and some Benzophenones under examination it will appear in the SVHC list.

- Benzophenones are less expensive than Benzotriazoles, generally used in low-end, less demanding applications and are under scrutiny by REACH.

Benzotriazole is a compound that has been identified as a Substance of Very High Concern (SVHC) due to its potential negative impact on the environment. Here are some potential effects of benzotriazole on the environment:

PERSISTENCE

Benzotriazole can persist in the environment for a long time and can accumulate in sediment and biota.

TOXICITY

Benzotriazole has been shown to have toxic effects on aquatic organisms, including fish and invertebrates, even at low concentrations.

BIOACCUMULATION

Benzotriazole has the potential to bioaccumulate in organisms, which means it can build up in the tissues of organisms over time.

ENDOCRINE DISRUPTION

Benzotriazole has been shown to have endocrine-disrupting effects on aquatic organisms, which can have negative impacts on reproductive and developmental processes.

RESISTANCE DEVELOPMENT

Repeated exposure to benzotriazole can lead to the development of resistance in some microorganisms, which can have negative impacts on water treatment processes.



WHY TRIAZINE BETTER TO USE OVER BENZOTRIAZOLES AND BENZOPHENONES.

When comparing Triazines and Benzotriazole and Benzophenone, there are several factors to consider.

Here are some potential reasons why Triazines may be considered better than Benzotriazole

ENVIRONMENTAL IMPACT

Triazines are generally considered less persistent and less toxic to aquatic organisms compared to benzotriazole.

REGULATIONS

Triazines are more heavily regulated compared to benzotriazole, which means their use is subject to more scrutiny and restrictions, ensuring that they are used responsibly and safely.

AVAILABILITY

Triazines are more widely available compared to benzotriazole, which can make them a more accessible and cost-effective option.

PERSISTENCE

Triazines have a shorter half-life in soil compared to benzophenone and benzotriazoles, which means they break down more quickly and are less likely to persist in the environment.

MOBILITY

Triazines are less mobile in soil compared to benzophenone and benzotriazoles, which means they are less likely to leach into groundwater and contaminate water sources.

TOXICITY

While both triazines and benzotriazoles can have negative impacts on the environment, triazines are generally considered less toxic to aquatic organisms compared to benzophenone and benzotriazoles.

PERFORMANCE EXCELLENCE

Apart from the above Triazines (Hydroxy Phenyl Triazine, HPT) has performance excellence over Benzophenone, Benzotriazoles as a UVA absorber polymer additive. It has very high thermal degradation temperature. It is stable at high process temperature. It does not migrate or leech out.

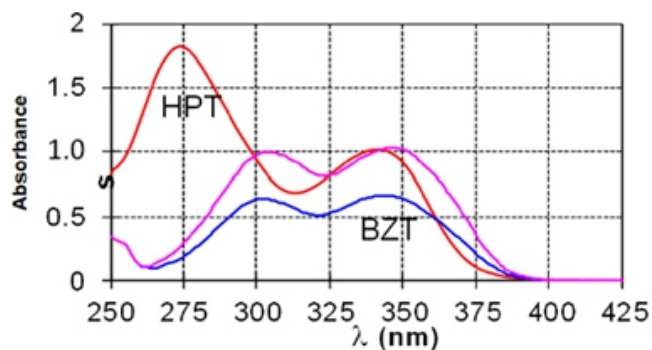
KEY FEATURES

- A Triazine UV absorber has excellent properties. In addition, the dosage you need to put into your polymer is usually lower compared to other UV absorbers.
- In the automotive industry, that UV-absorbers (UVA) based on hydroxyphenyl-s- triazines (HPT) are capable of fulfilling the requirements such as higher performance and quality as well as cost pressures where 2-(2-hydroxyphenyl)-benzotriazoles (BTZ) tend to fail or show inferior properties.
- Investigations have shown that HPT has very low-vapor pressure and the best photo permanence (resistant to the loss of stabilizer during the light exposure).
- Besides the photo permanence, the heat resistance (i.e., the low volatility)/heat stability is a key point.
- HPT shows, in addition, excellent chemical resistance without interaction with metals or strong alkalis.
- Triazines have very high thermal stability.
- Triazine shows best performance in terms of gloss and color retention.
- Intended for use in contact with food.
- High UV absorption efficiency (less dosage with better effect).
- Broad absorption spectrum.

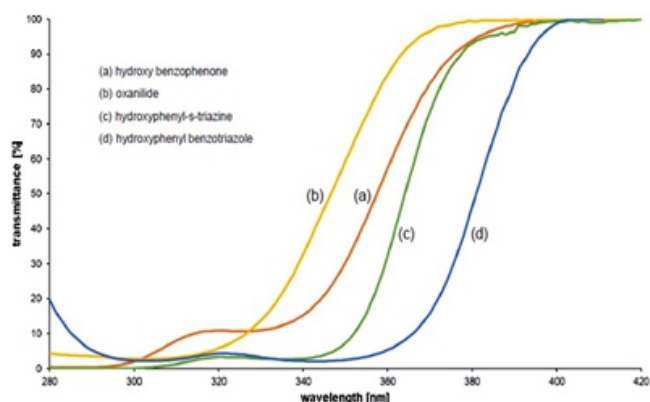
COMPARISON OF UV ABSORBANCE SPECTRA

The spectral properties of the HPT exhibit the strongest absorption in the region of 300 nm, with two absorption maxima; in the shortwave UV at about 300 nm (strong) and in the longwave UV at about 340 nm (less pronounced).





20 mg/L in EtOAc



RECOMMENDATIONS OF UVA FOR PLASTICS FOR THE FUTURE

- BZP 81 and BZT 326 in PE films industrial packaging substitute by HPT1164.
- BZT 234 in Polyamide and polyester test HPT 1164 and 1577.
- Use HPT 1164 for high performance agro PE films for high resistance to pesticides.
- Use HPT 1164 in PE applications for protection of content.
- HPT 1577 and newly developed HPT 1000 for engineering plastics type PC and PET glazing.

CONCLUSION

Over the time Use of Benzotriazoles will decrease and Triazine will increase.

Overall, when used responsibly and with appropriate regulations in place, triazines can provide significant benefits over benzophenone and benzotriazoles in terms of their potential impact on the environment as well as performance excellence.

Sarex being at the forefront in the development of UV Absorber has developed Triazine based UV Absorbers for textile which are environment friendly and better in performance. These Triazine based Appollo products plays the main part as Active Ingredients for emulsions used in Textile Industry.



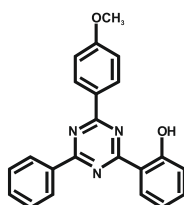
ABBREVIATION:

UVA: UV Absorbers, HPT: Hydroxyphenyl triazine, BZT: Benzotriazole, BZP: Benzophenone, SVHC: Substance of High Concern, PC: Polycarbonate, PET: Polyethylene terephthalate

TRIAZINE UV ABSORBER PRODUCTS FOR TEXTILE AND DYESTUFFS INDUSTRY

01 APPOLO-325 70% : 2-(4-(4-Methoxyphenyl)-6-phenyl-1,3,5-triazine-2-yl)phenol

Product Code : **010670**
CAS No : **154825-62-4**
Molecular formula : **C₂₂H₁₇N₃O₂**
Molecular weight : **355.38**



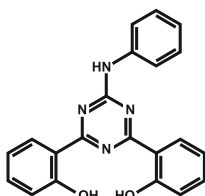
Typical Properties

Physical Appearance : **Light Yellow Solid**
Identification (HPLC) : **RT of Sample Should Match with RT of Standard**
Solid Content (%) : **NLT 70.0%**
Purity (HPLC) : **NLT 95.0%**
Annual Capacity : **200 MT**

Safety &
Transit hazards : **Non Hazardous Substance**
Application : **Used as UV absorber in Textile Auxiliary**

02 APPOLO-425 : 2,4-Bis(2'-hydroxyphenyl)-6-phenylamino-s-triazine

Product Code : **010906**
CAS No : **1248-66-4**
Molecular formula : **C₂₁H₁₆N₄O₂**
Molecular weight : **356.38**



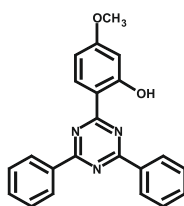
Typical Properties

Physical Appearance : **Off White to Light Yellow Powder**
Transmittance at 460 nm : **NLT 75.0%**
Transmittance at 500 nm : **NLT 85.0%**
Purity (HPLC) : **NLT 98.5%**
Melting point : **240.0 to 243.0°C**
Annual Capacity : **200 MT**

Safety &
Transit hazards : **Non Hazardous Substance**
Application : **It is used as UV absorber in Textile Auxiliary.**

03 APPOLO-1579 (A-103) : 2-(2-Hydroxy-4-methoxyphenyl)-4,6-Bis(phenyl)-1,3,5-triazine

Product Code : **005631**
CAS No : **106556-36-9**
Molecular formula : **C₂₂H₁₇N₃O₂**
Molecular weight : **355.00**



Typical Properties

Physical Appearance : **Yellow colour powder**
Melting Point : **205-207°C**
Purity (HPLC) : **Min 98%**
Solubility (2% in NMP) : **Clear Solution**
Annual Capacity : **80 MT**

Safety &
Transit hazards : **Non Hazardous Substance**
Application : **Used in automotive Industry in PET fiber, Polyester fibers for Seat fabrics, Safety belt, Air bags etc.**

Disclaimer

Typical properties should not be considered as specification.

Product covered by valid patents are not offered or supplied for commercial use. The Patent position should be verified by the customer.

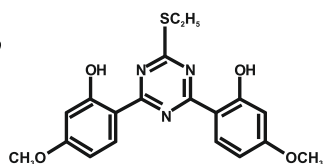
Products currently covered by valid US patents are offered for R&D use in accordance with 35 USC 271 (e) (I).

Above information is given in good faith and without warranty.

TRIAZINE UV ABSORBER PRODUCTS FOR TEXTILE AND DYESTUFFS INDUSTRY

04 APPOLO-124 : 2,4-Bis(2-hydroxy-4-methoxyphenyl)-6-ethyl mercaptan 1,3,5-triazine

Product Code : **009673**
CAS No : **195873-19-9**
Molecular formula : **C₁₉H₁₉N₃O₄S**
Molecular weight : **385.44**



Safety &
Transit hazards : **Non Hazardous Substance**

Application : **Used in textile auxiliary as UV absorber.**

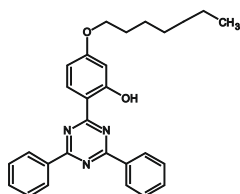
Typical Properties

Physical Appearance : **Pale yellow Powder**
Purity (HPLC) : **NLT 97%**
Transmittance
@ 460nm : **Min 80%**
Transmittance
@ 500nm : **Min 90%**
Moisture Content : **NMT 0.5%**

Annual Capacity : **150 MT**

05 APPOLO-1577 : 2-(2-Hydroxy-4-hexyloxyphenyl)-4,6-Bis(phenyl)-1,3,5-triazine

Product Code : **002967**
CAS No : **147315-50-2**
Molecular formula : **C₂₇H₂₇N₃O₂**
Molecular weight : **425**



Safety &
Transit hazards : **Non Hazardous Substance**

Application : **Good compatibility with most polymers, additives and formulation resins.**

Typical Properties

Physical Appearance : **Yellowish powder**
Melting Point : **148-150 °C**
Purity (HPLC) : **NLT 98.5%**
Transmittance
@ 450nm : **NLT 87.5%**
Transmittance
@ 500nm : **NLT 98%**
Solubility : **Clear Solution**

Annual Capacity : **200 MT**



Disclaimer

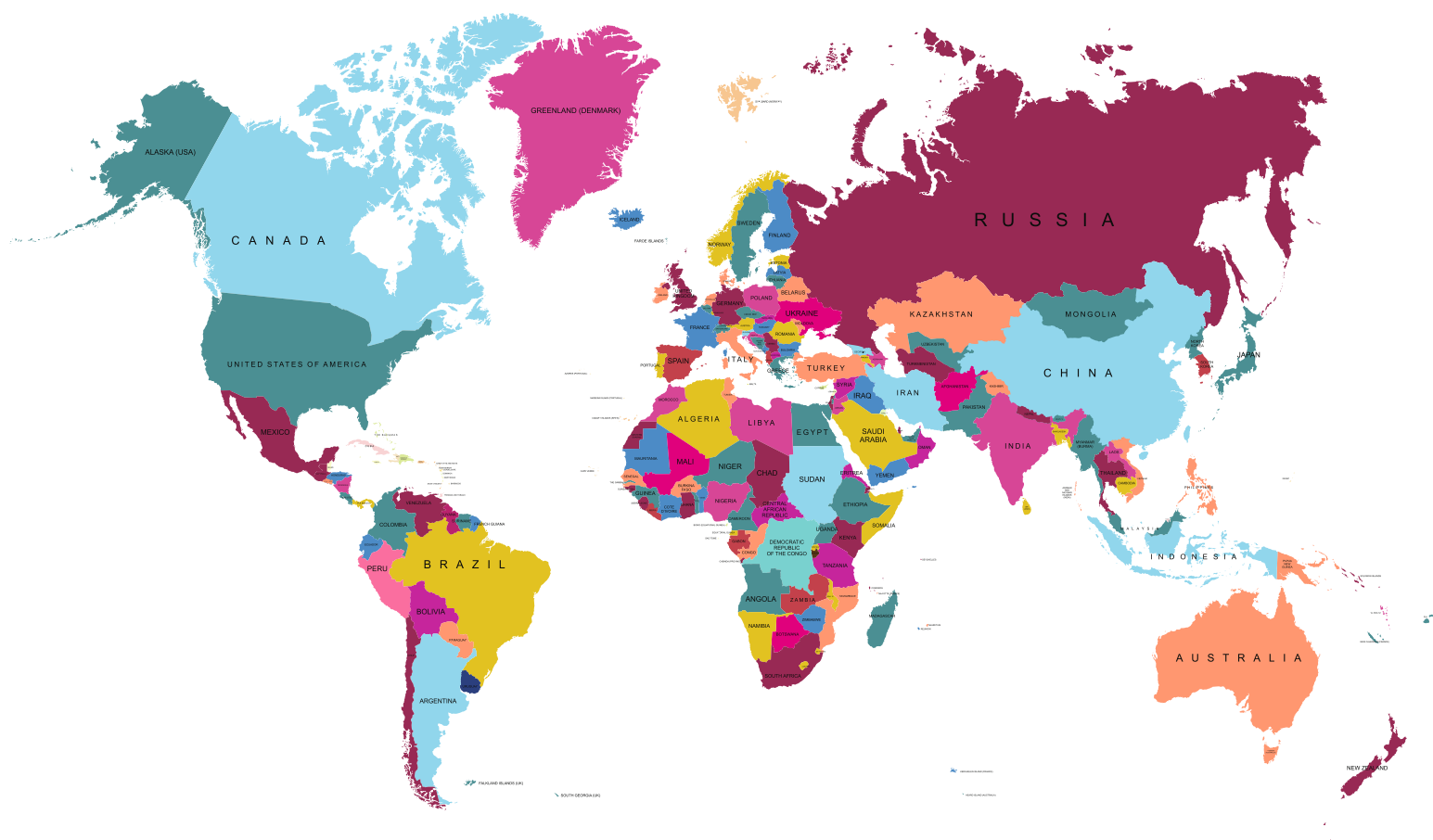
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COUNTRIES / REGIONS WHERE **SAREX IS SELLING**



- | | |
|-----------------|-------------------------------------|
| 01. Germany | 11. Spain |
| 02. Switzerland | 12. Hong Kong |
| 03. USA | 13. Turkey |
| 04. Netherlands | 14. France |
| 05. Indonesia | 15. Japan |
| 06. China | 16. Brazil |
| 07. South Korea | 17. United Kingdom |
| 08. Belgium | 18. Colombia |
| 09. Taiwan | 19. Slovakia |
| 10. Italy | 20. Portugal and many more.. |

EMULSION FOR

TEXTILE INDUSTRY

**FABRICS THAT ENDURE: EXPLORE THE
MAGIC OF UV ABSORBERS IN
TEXTILE MANUFACTURING**



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20+

Year of Experience

200+

No. of Customers Served

20+

Countries Served

Importance of Emulsion

Creating sustainable solutions is essential for addressing the complex challenges faced by world today. As environmental concerns, social inequality, and economic instability continue to grow, it is crucial to develop and implement strategies that ensure the well-being of current and future generations. Sustainable solutions encompass a holistic approach that balances environmental, social, and economic aspects, aiming to meet the needs of the present without compromising the ability of future generations to meet their own needs.



Sarex being at the forefront in the development of UV Absorber has taken up a challenge to develop Triazine based UV Absorbers for textile which are environment friendly and better in performance.

Triazine chemistry is undeniably a cornerstone of modern industrial advancements, known for best UV stability.

Textiles are treated with UV Absorbers by coating, padding and exhaust during dyeing using water as a medium.

Triazine UV absorbers used in textile industry are generally water insoluble. And hence the are required to be used in dispersion form while treating textiles. Keeping in mind the need of the industry Sarex has developed a range of emulsion (water dispersion form) of these triazine based UV absorbers to get desired results.

These water dispersion including Triazine UV Absorbers are useful to

- Increase light fastness property of fiber.
- Decrease color fading on fabric.
- Improve UPF factor of the fabric.

Here are some other benefits of emulsion form

IMPROVED UNIFORMITY

Emulsions allow for better dispersion and distribution of chemicals onto the textile surface, leading to a more even and consistent application compared to powders. This is crucial when trying to achieve uniform effects or functionalities on the fabric.

EASY PENETRATION

Emulsions can penetrate the fibers more effectively than powders, ensuring better adherence and a stronger bond between the substance and the textile. This is especially important for treatments that require deep penetration, such as dyeing or waterproofing.

REDUCED DUST GENERATION

Working with powders can create airborne particles that may pose health hazards to workers and contaminate the surrounding environment. Emulsions minimize dust generation, making them a safer and cleaner option for textile applications.

ENHANCED SOLUBILITY

Emulsions often consist of substances that have limited solubility in water or other solvents. By creating stable emulsions, these substances can be effectively dispersed and utilized on textiles, offering improved performance compared to the same substance in powder form.



CONTROL OVER CONCENTRATION

Emulsions provide better control over the concentration of chemicals applied to textiles. Manufacturers can easily adjust the formulation to achieve the desired effects without the risk of over- or under-applying the substance.

LESS WASTE

Emulsions reduce the likelihood of excess product being left on the fabric or getting wasted during application, as the process allows for more precise and efficient use of chemicals.

FLEXIBILITY IN APPLICATION METHODS

Emulsions can be applied through a variety of techniques, such as spraying, padding, or coating. This versatility makes them suitable for different types of textiles and production processes.

Understanding Ultraviolet Protection Factor (UPF) for Textiles

Ultraviolet (UV) radiation from the sun poses significant risks to human skin, including sunburn, premature aging, and even skin cancer. As a result, the need for effective sun protection is paramount, not only through sunscreen application but also through clothing choices. This is where Ultraviolet Protection Factor (UPF) comes into play.

ULTRAVIOLET PROTECTION FACTOR (UPF)

UPF is a numerical rating system that measures the ability of textiles to provide protection against harmful UV radiation. Similar to the SPF (Sun Protection Factor) used in sunscreen products, UPF indicates the fabric's capacity to block UV rays from reaching the skin.

HOW UPF IS CALCULATED

The UPF value is determined based on several factors, including the type of fiber, weave, color, and any additional UV-absorbing treatments the fabric might have. The UPF value signifies the fraction of UV radiation that can penetrate the fabric. For example, a fabric with a UPF of 50 allows only 1/50th of the UV radiation to pass through, effectively blocking 98% of the UV rays.

KEY CONSIDERATIONS

FIBER TYPE

Certain fibers naturally provide better UV protection. For instance, densely woven fabrics like denim, wool, and synthetic fibers generally offer higher UPF ratings.

WEAVE

Tightly woven fabrics with smaller gaps between threads tend to have higher UPF values as they create a physical barrier against UV radiation.

COLOR

Darker colors usually absorb more UV radiation than lighter ones, but the color alone isn't the sole factor affecting UPF.

FINISHING TREATMENTS

Some textiles are treated with UV-absorbing compounds during the manufacturing process to enhance their UPF. As concerns about the harmful effects of ultraviolet (UV) radiation on human skin grow, the importance of effective sun protection cannot be overstated. Textiles play a significant role in safeguarding against UV exposure, and the incorporation of UV absorbers is a key strategy in improving the Ultraviolet Protection Factor (UPF) of fabrics. Understanding the significance of UV absorbers in textiles can pave the way for enhanced sun protection and overall well-being.

- UV absorbers are instrumental in raising the UPF of textiles. Fabrics treated with UV absorbers can block a higher percentage of UV radiation, reducing the amount that reaches the skin and minimizing the risk of sunburn and long-term skin damage.
- UV absorbers can be incorporated into various types of textiles, including clothing, swimwear, hats, and outdoor gear. This versatility allows individuals to benefit from enhanced sun protection across a wide range of activities.

PRODUCTS FOR EMULSION

01

SARAFAST AS NEW LIQ UV Absorber for Technical Textile

Typical Properties

Physical appearance	: White, Low viscosity dispersion
Chemical Constitution	: Dispersant- containing Triazine derivative
Ionic nature	: Anionic
pH of 1% solution	: 6.5-8
Specific Gravity at 20 C	: 1.05 g/cm ³
Miscibility	: Dispersible with water
Compatibility	: Compatible anionic and non-ionic products
Annual Capacity	: 1000 MT

Information:

- Sarafast AS New Liq. is a Triazine based dispersion, suitable for High Temperature Exhaust Application, printing and continuous pad-thermosol application.
- It suitable for Dyeing and printing of polyester Fibres, modified polyester Fibres and their blends that are exposed to critical light and heat conditions. This intense light and heat often cause fabric color to fade more quickly and polyester Fibre to weaken.

Application:

The light fastness requirements specified by motor vehicle manufacturers are therefore extremely high, and only carefully selected products can meet them. For example upholstery fabrics , interior linings and seat belts.

02

SARAFAST HLF NEW UV Absorber for Technical Textile

Typical Properties

Physical appearance	: White to pale yellow dispersion
Chemical Constitution	: Dispersant- containing Triazine derivative
Ionic nature	: Anionic
pH of 1% solution	: 6.5-8
Specific Gravity at 20 C	: 1.05 g/cm ³
Miscibility	: Dispersible with water
Compatibility	: Compatible anionic and non-ionic products
Stability	: Stable in hard water to acids and alkalies, pH values 4 to 10
Annual Capacity	: 1000 MT

Information:

- Sarafast HLF New is Triazine based dispersion, suitable for High Temperature Exhaust Application, printing and continuous pad-thermosol application.
- It is suitable for Dyeing and printing of polyester Fibres, modified polyester Fibres and their blends that are exposed to critical light and heat conditions.

Application:

This applies in particular to textiles in the automotive sector such as upholstery fabrics, interior linings and seat belts.

Disclaimer

Typical properties should not be considered as specification.

Product covered by valid patents are not offered or supplied for commercial use. The Patent position should be verified by the customer.

Products currently covered by valid US patents are offered for R&D use in accordance with 35 USC 271 (e) (I).

Above information is given in good faith and without warranty.

PRODUCTS FOR EMULSION

03

SARAFAST P

UV Absorber for Technical Textile

Typical Properties

Physical appearance	: White to pale yellow dispersion
Chemical Constitution	: Dispersant- containing Triazine derivative
Ionic nature	: Anionic
pH of 1% solution	: 6.5-8
Specific Gravity at 20 C	: 1.05 g/cm ³
Miscibility	: Dispersible with water
Compatibility	: Compatible anionic and non-ionic products
Annual Capacity	: 1000 MT

Information:

- Sarafast P is Triazine based dispersion, suitable for High Temperature exhaust application, printing and continuous pad-thermosol application.
- It is suitable for dyeing and printing of polyester Fibres, modified polyester Fibres and their blends that are exposed to critical light and heat conditions.

Application:

Suitable for technical textile. Eg. Automotive Industry and Exterior textile like Parasol, etc.

04

SARAFAST SUN PES

UV Absorber for Apparel Industry

Typical Properties

Physical appearance	: White to pale yellow dispersion
Chemical Constitution	: Dispersant- containing Triazine derivative
Ionic nature	: Anionic
pH of 1% solution	: 6.5-9
Specific Gravity at 20 C	: 1.05 g/cm ³
Miscibility	: Dispersible with water
Compatibility	: Compatible anionic and non-ionic products
Stability	: Stable in hard water to acids and alkalies, pH values 4 to 10
Annual Capacity	: 1000 MT

Information:

- To improve the sun screening properties and stability to light of technical textiles such as tenting, roofing, awning and parasol fabrics, other fabrics used to provide shadow, shade and household textiles such as blinds.
- Sarafast SUN PES provide outstanding stability against heat and light.

Application:

- To improve the sun screening properties of items such as children's and baby wear, open-air sports wear (e.g. jogging, football, tennis, golf, sailing, etc.), beach, swim and leisure wear (T-shirts, shirts, blouses, hats, etc.), agricultural work wear, and uniforms (military, post office, police, school, etc.).

Disclaimer

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PRODUCTS FOR EMULSION

05

SARAFAST TR LIQ

UV Absorber for Technical Textile

Typical Properties

Physical appearance	: White, Low viscosity dispersion
Chemical Constitution	: Dispersant- containing Triazine derivative
Ionic nature	: Anionic
pH of 1% solution	: 6.6-8
Specific Gravity at 20 C	: 1.05 g/cm ³
Miscibility	: Dispersible with water
Compatibility	: Compatible anionic and non-ionic products
Stability	: Stable in hard water to acids and alkalies, pH values 4 to 10
Annual Capacity	: 1000 MT

Information:

- Sarafast TR Liq.is a Triazine based dispersion, suitable for High Temperature Exhaust Application, printing and continuous pad-thermosol application.
- It suitable for Dyeing and printing of polyester Fibres, modified polyester Fibres and their blends that are exposed to critical light and heat conditions.

Application:

The light fastness requirements specified by motor vehicle manufacturers are therefore extremely high, and only carefully selected products can meet them.

06

SARAFAST UVT

UV Absorber for Technical Textile

Typical Properties

Physical appearance	: White to pale yellow dispersion
Chemical Constitution	: Dispersant- containing Triazine derivative
Ionic nature	: Anionic
pH of 1% solution	: 6.5-8
Specific Gravity at 20 C	: 1.05 g/cm ³
Miscibility	: Dispersible with water
Compatibility	: Compatible anionic and non-ionic products
Stability	: Stable in hard water to acids and alkalies, pH values 4 to 10
Annual Capacity	: 1000 MT

Information:

- Sarafast UVT is Triazine based dispersion, suitable for High Temperature Exhaust Application, printing and continuous pad-thermosol application.
- It is suitable for Dyeing and printing of polyester Fibres, modified polyester Fibres and their blends that are exposed to critical light and heat conditions.

Application:

Sarafast UVT provide outstanding stability against heat and light.

Disclaimer

Typical properties should not be considered as specification.

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Date: **01.09.23**



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