



# Sarex Overseas

A division of Sarex Organics Pvt. Ltd.

# TRIAZINE CHEMISTRY

PRODUCTS

HETEROCYCLES, ENDLESS APPLICATIONS,  
NEW POSSIBILITIES



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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**

# Contents

## A. ABOUT SAREX

07-08

## B. IMPORTANCE OF TRIAZINE

09-13

## C. POLYMER ADDITIVES INDUSTRY

14-22

<b>01. APPOLO-1577</b> - 2-(2-Hydroxy-4-hexyloxyphenyl)-4,6-Bis(phenyl)-1,3,5-triazine	<b>15</b>
<b>02. APPOLO-1577 (FLK)</b> - 2-(2-Hydroxy-4-hexyloxyphenyl)-4,6-Bis(phenyl)-1,3,5-triazine	<b>15</b>
<b>03. APPOLO-1577 (GRANULES)</b> - 2-(2-Hydroxy-4-hexyloxyphenyl)-4,6-Bis(phenyl)-1,3,5-triazine	<b>15</b>
<b>04. APPOLO-1164</b> - 2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-octyloxyphenyl)-1,3,5-triazine	<b>16</b>
<b>05. APPOLO-1164 (M)</b> - 2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-octyloxyphenyl)-1,3,5-triazine	<b>16</b>
<b>06. APPOLO-1164 GL</b> - 2,4-Bis(2,4-dimethyl phenyl)-6-(2-hydroxy-4-methoxyphenyl)-1,3,5-triazine	<b>16</b>
<b>07. APPOLO-1000</b> - Bis[2-[4-(4,6-diphenyl-1,3,5-triazine-2-yl)-3-hydroxyphenoxy]ethyl]dodacenedioate	<b>17</b>
<b>08. APPOLO-46</b> - 2-(4,6-Diphenyl-1,3,5-triazin-2-yl)-5-[2-(2-ethylhexanoyloxy)ethoxy]phenol	<b>17</b>
<b>09. APPOLO-107</b> - 2,4-Bis(2,4-dimethylphenyl)-6-(2,4-dihydroxyphenyl)-1,3,5-triazine	<b>17</b>
<b>10. APPOLO-115</b> - 2-Chloro-4,6-diphenyl-1,3,5-triazine	<b>18</b>
<b>11. APPOLO-116</b> - 2-(2,4-Dihydroxyphenyl)-4,6-diphenyl-1,3,5-triazine	<b>18</b>
<b>12. APPOLO-117</b> - 2-(2-Hydroxy-4-ethoxyphenyl)-4,6-bis(phenyl)-1,3,5-triazine	<b>18</b>
<b>13. APPOLO-114</b> - 2,4-Diphenyl-6-hydroxy-1, 3, 5-triazine	<b>19</b>
<b>14. APPOLO-1578</b> - 2,4-Bisphenyl-6-(2-hydroxy-4-n-octyloxyphenyl)-1,3,5-triazine	<b>19</b>
<b>15. APPOLO-1580</b> - 2-(4,6-diphenyl-1,3,5-triazin-2-yl)-5-((2-ethylhexyl)oxy)phenol	<b>19</b>
<b>16. APPOLO-1163</b> - 2,4-Bis-(2,4-dimethyl phenyl)-6-(2-hydroxy-4-hexyloxyphenyl)-1,3,5-triazine	<b>20</b>
<b>17. APPOLO-1166</b> - 2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-(2-hydroxyethoxy)phenyl)-1,3,5-triazine	<b>20</b>

**21+**

Year of Experience

**200+**

No. of Customers Served

**20+**

Countries Served

<b>18. APPOLO-1100</b> - Bis(2-(4-(4,6-bis(2,4-dimethylphenyl)-1,3,5-triazin-2-yl)-3-hydroxyphenoxy)ethyl) dodecanedioate	<b>20</b>
<b>19. APPOLO-565</b> - 2,4-Bis-(octylthio)-6-(3,5-di tert butyl-4-hydroxyanilino)-1,3,5-triazine	<b>21</b>
<b>20. APPOLO-1790</b> - 1,3,5-Tris(4-tert- butyl-3-hydroxy-2,6-dimethyl benzyl)1,3,5-triazine-(1H,3H,5H)-trione	<b>21</b>
<b>21. APPOLO-567</b> - 1,3,5-triazine-2,4,6-triyl)tris(benzene-4,1-diyl))tris(ethane-2,1-diyl) triacetate	<b>21</b>
<b>22. SARACLEAR XT 386</b> - 1,3,5-tris-[2,2-dimethylpropionylamino]benzene	<b>22</b>
<b>23. APPOLO PPM TRIAZINE HF</b> - Poly [6-(4-morpholinyl)-1,3,5-triazine-2,4-diyl]-1,4-piperazinediyl	<b>22</b>

## D. COATING INDUSTRY

**23-27**

<b>01. APPOLO-1164L</b> - 2-(4,6-bis(2,4-dimethylphenyl)-1,3,5-triazin-2-yl)-5-((2-ethylhexyl)oxy)phenol	<b>24</b>
<b>02. APPOLO-462</b> - 2,4,6-Tris (2-hydroxy-4-hexyloxy-3-methylphenyl)-1,3,5-triazine	<b>24</b>
<b>03. APPOLO-460</b> - 2,4-Bis(2-hydroxy-4-butyloxyphenyl)-6-(2,4-bis-butyloxyphenyl)-1,3,5-triazine	<b>24</b>
<b>04. APPOLO-400 CRUDE</b> - 2-[4-[(2-Hydroxy-3-dodecyloxypropyl)oxy]-2-hydroxyphenyl]-4,6-bis (2,4-dimethylphenyl)-1,3,5-triazine & 2-[4-[(2-Hydroxy-3-tridecyloxypropyl)oxy] -2-hydroxyphenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine	<b>25</b>
<b>05. APPOLO-480</b> - 2,4,6-Tris(2-hydroxy-4-butoxyphenyl)-1,3,5-triazine	<b>25</b>
<b>06. APPOLO-1100</b> - Bis(2-(4-(4,6-bis(2,4-dimethylphenyl)-1,3,5-triazin-2-yl)-3-hydroxyphenoxy)ethyl) dodecanedioate	<b>25</b>
<b>07. APPOLO-1165</b> - 2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-methyl acetoxy)-1,3,5-triazine	<b>26</b>
<b>08. APPOLO-459</b> - 1,3-Benzenediol, 4,4',4''-(1,3,5-triazine-2,4,6-triyl)tris	<b>26</b>
<b>09. APPOLO-461</b> - 4,4',4''-(1,3,5-triazine-2,4,6-triyl)tris(2-methylbenzene-1,3-diol)	<b>26</b>
<b>10. APPOLO-477</b> - Octyl 2-[4-[4-[2,4-bis[(1-octoxy-1-oxopropan-2-yl)oxy]phenyl]-6-[2-hydroxy-4-(1-octoxy-1-oxopropan-2-yl)oxyphenyl]-1,3,5-triazin-2-yl]-3-hydroxyphenoxy]propanoate	<b>27</b>
<b>11. APPOLO-405</b> - 2-[2-Hydroxy-4-[3-(2-ethylhexyl-1-oxy)-2-hydroxypropyloxy]phenyl]-4,6-bis (2,4-dimethylphenyl)-1,3,5-triazine	<b>27</b>

## E. PERSONAL CARE INDUSTRY

**28-30**

<b>01. APPOLO-122</b> - 2,4-Dichloro-6-(4-methoxyphenyl)-1, 3,5-triazine	<b>29</b>
<b>02. APPOLO-125</b> - 2,4-Bis(2,4-dihydroxyphenyl)-6-(4-methoxyphenyl)-1,3,5-triazine	<b>29</b>
<b>03. SARASORB EHT</b> - Ethylhexyl Triazone	<b>29</b>
<b>04. SARASORB DHBT</b> - Diethylhexyl Butamido Triazone	<b>30</b>
<b>05. SARASORB BEMT</b> - 2,4-Bis[4-(2-ethylhexyloxy)-2-hydroxyphenyl]-6-(4-methoxyphenyl)-1,3,5-triazine	<b>30</b>

## F. TEXTILE INDUSTRY

31-33

- |   |    |
|---|----|
| <b>01. APPOLO-1579 (A-103)</b> - 2-(2-Hydroxy-4-methoxyphenyl)-4,6-diphenyl-1,3,5-triazine  | 32 |
| <b>02. APPOLO-325 70%</b> - 2-(4-(4-Methoxyphenyl)-6-phenyl-1,3,5-triazine-2-yl)phenol      | 32 |
| <b>03. APPOLO-425</b> - 2,4-Bis(2'-hydroxyphenyl)-6-phenylamino-s-triazine                  | 32 |
| <b>04. APPOLO-124</b> - 2,4-Bis(2-hydroxy-4-methoxyphenyl)-6-ethyl mercaptan 1,3,5-triazine | 33 |
| <b>05. APPOLO-123</b> - 2,4-Bis(2,4-dihydroxyphenyl)-6-ethyl mercaptan-1,3,5-triazine       | 33 |

## G. PHARMACEUTICAL API INDUSTRY

34-35

- |   |    |
|---|----|
| <b>01. APPOLO-202 (DMTMM)</b> - 4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methyl morpholinium chloride | 35 |
| <b>02. APPOLO-205 (CYROMAZINE)</b> - N-cyclopropyl-1,3,5-Triazine-2,4,6-triamine                    | 35 |
| <b>03. APPOLO-206</b> - 2,4-Diamino-6-(2,5-dichlorophenyl)-1,3,5-triazine maleate                   | 35 |

## H. ELECTRONIC INDUSTRY

36-42

- |  |    |
|--|----|
| <b>01. STELLAR-2015</b> - 2-Chloro-4,6-bis(phenyl)-1,3,5-triazine                                  | 37 |
| <b>02. STELLAR-2016</b> - 2-(2,4-Dihydroxyphenyl)-4,6-diphenyl-1,3,5-triazine                      | 37 |
| <b>03. STELLAR-2018</b> - 1,3,5-Tripropyl-1,3,5-triazine-2,4,6-trione                              | 37 |
| <b>04. STELLAR-2034</b> - Triallyl Isocyanurate (TAIC)   | 38 |
| <b>05. STELLAR-2054</b> - 2,4-Dichloro-6-phenyl-1,3,5-triazine                                     | 38 |
| <b>06. STELLAR-2019</b> - 2-(Biphenyl-4-yl)-4-chloro-6-phenyl-1,3,5-triazine                       | 38 |
| <b>07. STELLAR-2024</b> - 2-Chloro-4,6-di(naphthalen-2-yl)-1,3,5-triazine                          | 39 |
| <b>08. STELLAR-2025</b> - 2-Chloro-4,6-bis[1,1',3',1''terphenyl-5'-yl]-1,3,5-triazine              | 39 |
| <b>09. STELLAR-2032</b> - Tris (carboxy methyl) isocyanurate                                       | 39 |
| <b>10. STELLAR-2042</b> - 2-Chloro-4,6-di-1-naphthalenyl-1,3,5-triazine                            | 40 |
| <b>11. STELLAR-2043</b> - Bis- $\alpha$ -naphthyl(2,4-dihydroxyphenyl)-1,3,5-triazine              | 40 |
| <b>12. STELLAR-2044</b> - Bis- $\alpha$ -naphthyl(2-hydroxy-4-n-hexyloxyphenyl)-1,3,5-triazine     | 40 |
| <b>13. STELLAR-2045</b> - 2-(4,6-Di-1-naphthalenyl-1,3,5-triazin-2-yl)-5-[(2-ethylhexyl)oxy]phenol | 41 |
| <b>14. STELLAR-2046</b> - 2-Chloro-4-(naphthalen-2-yl)-6-phenyl-1,3,5-triazine                     | 41 |
| <b>15. STELLAR-2047</b> - 2-Chloro-4-(dibenzo(b,d)furan-1-yl)-6-phenyl-1,3,5-triazine              | 41 |

<b>16. STELLAR-2048</b> - 2-Chloro-4,6-bis(1-dibenzofuranyl)1,3,5-triazine	<b>42</b>
<b>17. STELLAR-2049</b> - 2-Chloro-4-(dibenzofuran-1-yl)-6-(naphthalen-2-yl)-1,3,5-triazine	<b>42</b>
<b>18. STELLAR-2050</b> - 2-Chloro-4,6-bis (dibenzo[b, d]furan-4-yl)-1,3,5-triazine	<b>42</b>
<b>19. STELLAR-2051</b> - 2,4-Diphenyl-6-(3-(triphenylsilyl)phenyl)-1,3,5-triazine	<b>43</b>
<b>20. STELLAR-2052</b> - 9-[4,6-Bis[3-(triphenylsilyl)phenyl]-1,3,5-triazin-2-yl]-9h-carbazole	<b>43</b>
<b>21. STELLAR-2053</b> - 2-Chloro-4-(3-chloro-phenyl)-6-phenyl-[1,3,5]triazine	<b>43</b>

## I. AGROCHEMICALS

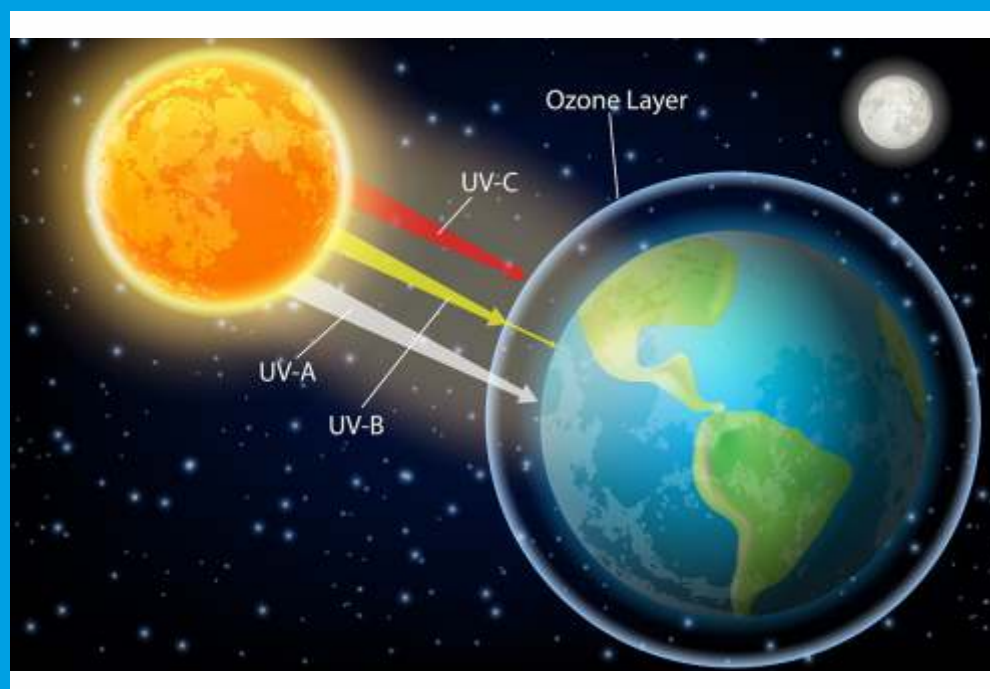
**44-45**

<b>01. APPOLO-577</b> - 2,4-Bis(trichloromethyl)-6-methyl-1,3,5-triazine	<b>45</b>
--	-----------

## J. OTHERS

**46-47**

<b>01. APPOLO-30 CH</b> - Trisodium,3-[[4,6-bis(3-carboxy-2-hydroxy-5-sulfonatoanilino)-1,3,5-triazin-2-yl]amino]-5-carboxy-4-hydroxybenzenesulfonate	<b>47</b>
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# About Sarex



**Sarex Overseas Manufacturing Complex**

**S**arex 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 is the GMP complied manufacturing facility. Many multinational companies have audited its facility as per ICH Q7-GMP guideline and Sarex is their approved Vendor. Sarex is certified by ISO 9001, ISO 14001, and OHSAS 45001 by URS, UK. Besides Sarex has Ecovadis GOLD rated Certificate 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 10 KL 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.



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.

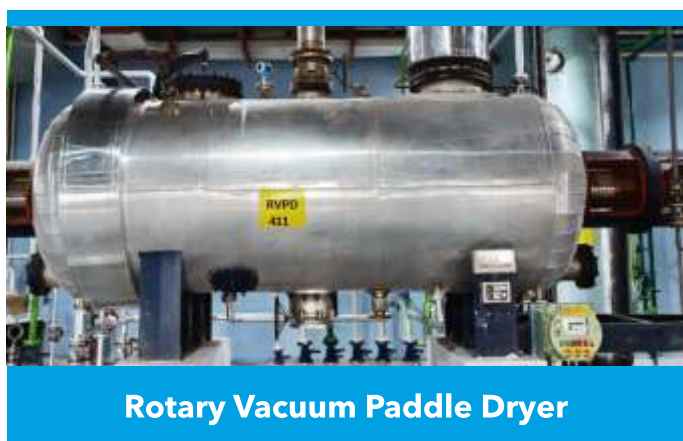


### Sarex Overseas is engaged in the Bulk manufacturing and

- 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.



Rotary Vacuum Paddle Dryer



Agitated Nutch Filter

**Sarex stands for quality products!**



# Importance of Triazine



**T**riazine 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,

- Technical Textiles Such as upholstery fabrics
- Interior linings and seat belts
- Apparel textile e.g. sportswear, uniforms, beach, swim and leisure wear, Hats, Curtains.
- 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.



#### ABBREVIATION:

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

## 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.

## ABBREVIATION:

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



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 do not migrate or leech out.



## 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

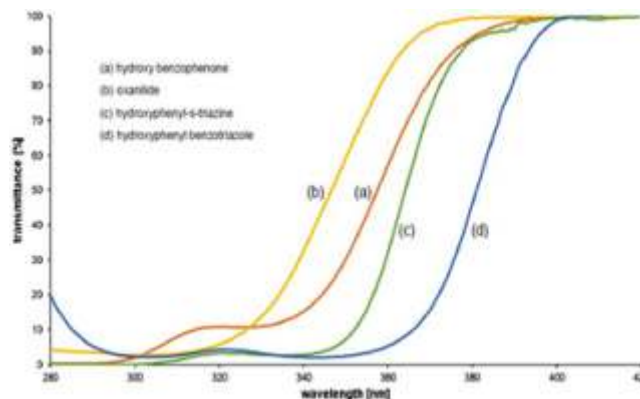
### KEY FEATURES

- 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.

#### ABBREVIATION:

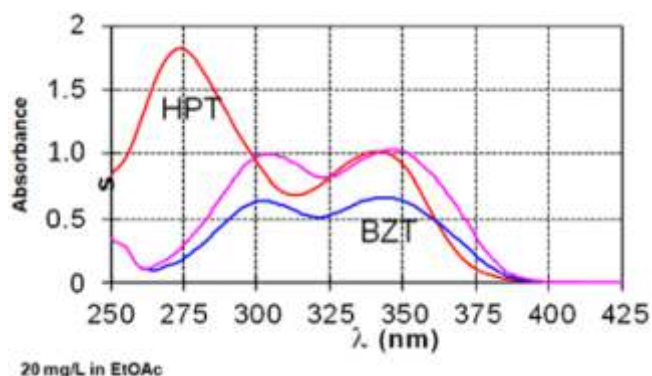
UVA: UV Absorbers, HPT: Hydroxyphenyl triazine, BZT: Benzotriazole, BZP: Benzophenone, SVHC: Substance of High Concern, PC: Polycarbonate, PET: Polyethylene terephthalate

- 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).



### 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 be decrease and Triazine will be 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.

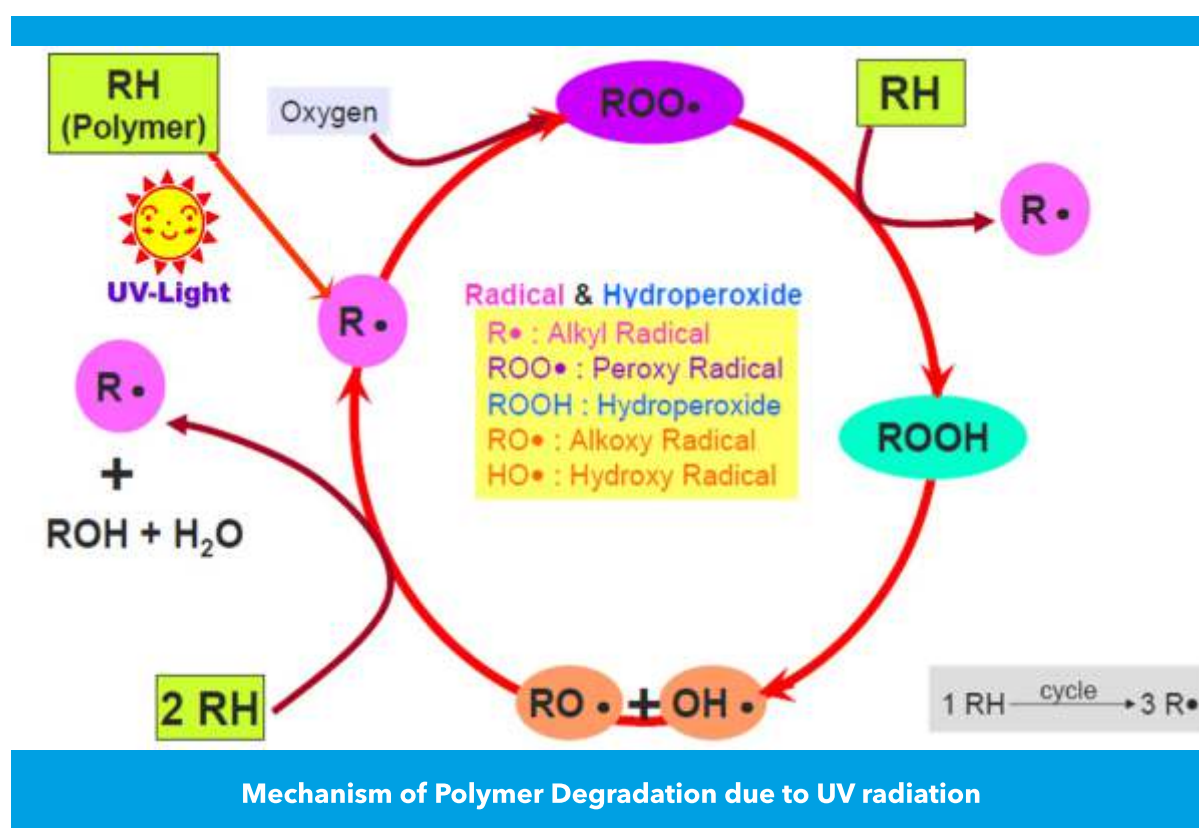
Sarex being at the forefront in Development of Triazine , has developed wide range of Triazine which has application in various industries like Plastic and Polymers, Electronics, personal care and healthcare and Pharmaceutical API intermediate.

- **Appolo** series deliver superior UV protection to enhance the performance of polymers in coatings, plastics and many advanced applications, preventing against degradation problems such as discoloration, gloss loss, as well as surface chalking.

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

- **Stellar** series have huge application in electronic industry specially in OLED Materials. 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.
- **Healthcare** series offers highly effective, broad-spectrum UVA (With longer wavelength) and UVB (with shorter wavelength) protection. It has good performance as a photo-stable broad-spectrum UV filter, is compatible with organic and inorganic filters, and meets high safety requirements and is oil soluble for high water resistance. This product meets the most stringent UV protection requirements around the world for UV protective day creams, and UVB filters for high-SPF sunscreens.
- **Sarafast** series offer highly effective UV Absorption capability on the Textile surface. It enhances the durability and color fastness capacity of the textile substrate.

*We have also developed Triazine based derivatives which has application as intermediate, coupling agents in API industry.*



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

# POLYMER ADDITIVE

PRODUCTS

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**ENHANCING POLYMERS WITH UV ABSORBERS:  
YOUR SECRET TO LONG-LASTING BRILLIANCE**



# TRIAZINE PRODUCTS

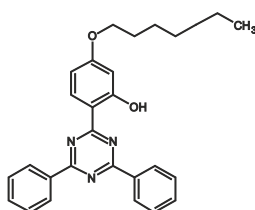
## POLYMER ADDITIVE INDUSTRY

### 01 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 : **C<sub>27</sub>H<sub>27</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **425.00**

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**

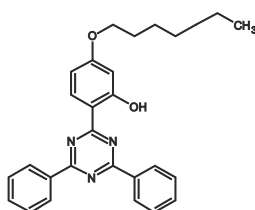
Annual Capacity : **200 MT**

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

Product Code : **005630**  
 CAS No : **147315-50-2**  
 Molecular formula : **C<sub>27</sub>H<sub>27</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **425.00**

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

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



#### Typical Properties

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

Annual Capacity : **80 MT**

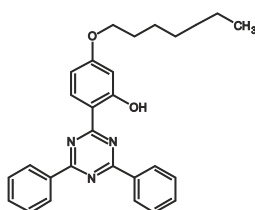
Advantages : **At the time of Application, it avoid dusting problem and facilitate with good flowability & it also avoid cohesion of the particle.**

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

Product Code : **010637**  
 CAS No : **147315-50-2**  
 Molecular formula : **C<sub>27</sub>H<sub>27</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **425.00**

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

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



#### Typical Properties

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

Annual Capacity : **100 MT**

#### Disclaimer

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#### Annual Capacity

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# TRIAZINE PRODUCTS

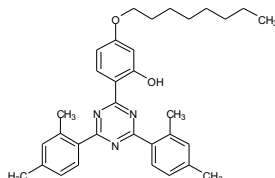
## POLYMER ADDITIVE INDUSTRY

### 04 APPOLO-1164 : 2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-octyloxyphenyl)-1,3,5-triazine

Product Code : **001305**  
 CAS No : **2725-22-6**  
 Molecular formula : **C<sub>33</sub>H<sub>39</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **509.68**

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

Application : **UV absorber additive in general plastics, automotive coatings, Agro films**



#### Typical Properties

Physical Appearance : **Off white to yellowish powder**  
 Melting Point : **90 to 92 °C**  
 Purity (HPLC) : **Min 99%**  
 Volatiles : **Max 0.50 %**  
 Transmittance @ 460nm : **Min 90%**  
 Transmittance @ 500nm : **Min 95%**

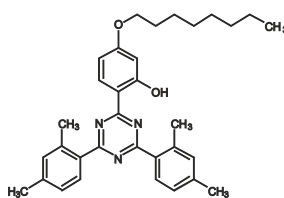
Annual Capacity : **250 MT**

### 05 APPOLO-1164 (M) : 2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-octyloxyphenyl)-1,3,5-triazine

Product Code : **010631**  
 CAS No : **2725-22-6**  
 Molecular formula : **C<sub>33</sub>H<sub>39</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **509.68**

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

Application : **UV absorber additive in general plastics, automotive coatings, Agro films**



#### Typical Properties

Physical Appearance : **Yellowish Fine Powder**  
 Melting Point : **89.5 to 92.0 °C**  
 Purity (HPLC) : **NLT 99.0%**  
 Transmittance @ 460nm : **NLT 90.0%**  
 Transmittance @ 550nm : **NLT 95.0%**  
 Particle Size : **Less Than 800 Micron (90%)**

Annual Capacity : **50 MT**

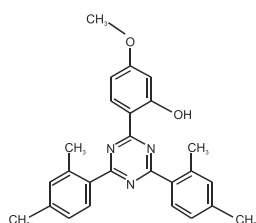
Advantages : **High rate of dissolution, Improved performance of final product & UV radiation absorption increases with smaller particles.**

### 06 APPOLO-1164 GL : 2,4-Bis-(2,4-dimethyl phenyl)-6-(2-hydroxy-4-methoxyphenyl)-1,3,5-triazine

Product Code : **010072**  
 CAS No : **1820-28-6**  
 Molecular formula : **C<sub>26</sub>H<sub>25</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **411.50**

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

Application : **UV absorber used as polymer additive. UV absorber used in polymer fibers**



#### Typical Properties

Physical Appearance : **Light Yellow Powder**  
 Purity (HPLC) : **NLT 99%**  
 Volatiles : **NMT 0.2%**

Annual Capacity : **50 MT**

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#### Annual Capacity

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# TRIAZINE PRODUCTS

## POLYMER ADDITIVE INDUSTRY

### 07 APPOLO-1000 : Bis[2-[4-(4,6-diphenyl-1,3,5-triazine-2-yl)-3-hydroxyphenoxy]ethyl] dodacenedioate

Product Code : **010136**

CAS No : **1482217-03-7**

Molecular formula : **C<sub>58</sub>H<sub>56</sub>N<sub>6</sub>O<sub>8</sub>**

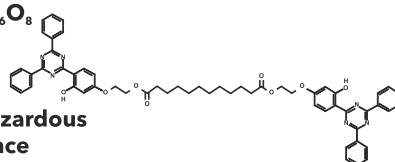
Molecular weight : **965.10**

Safety &

Transit hazards : **Non Hazardous Substance**

Application

: **Used as UV absorber additive in general plastics, engineering plastics especially Polycarbonate**



#### Typical Properties

Physical Appearance

: **Pale Yellow Powder**

Purity (HPLC)

: **NLT 98%**

Volatiles

: **NMT 1%**

Melting Point

: **180 - 190 °C**

Annual Capacity

: **50 MT**

### 08 APPOLO-46 : 2-(4,6-Diphenyl-1,3,5-triazin-2-yl)-5-[2-(2-ethylhexanoyloxy)ethoxy]phenol

Product Code : **010197**

CAS No : **371146-04-2**

Molecular formula : **C<sub>31</sub>H<sub>33</sub>N<sub>3</sub>O<sub>4</sub>**

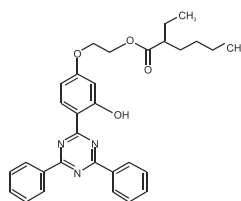
Molecular weight : **511.62**

Safety &

Transit hazards : **Non Hazardous Substance**

Application

: **UV absorber additive in engineering plastic PBT, PC, PET. It Offers Low volatility and excellent thermal stability. It offers high absorption between 280 nm & 300 nm UV region.**



#### Typical Properties

Physical Appearance

: **Light Yellow Flakes Or Powder**

Volatiles

: **NMT 0.5%**

Purity (HPLC)

: **NLT 98%**

Solubility

: **Clear Solution**

Annual Capacity

: **50 MT**

### 09 APPOLO-107 : 2,4-Bis(2,4-dimethylphenyl)-6-(2,4-dihydroxyphenyl)-1,3,5-triazine

Product Code : **009560**

CAS No : **1668-53-7**

Molecular formula : **C<sub>25</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>**

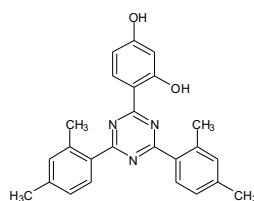
Molecular weight : **397.69**

Safety &

Transit hazards : **Non Hazardous Substance**

Application

: **Intermediate for Appolo-1164L, 1164, 400, 405. The UV absorber additives for Plastics & Coatings**



#### Typical Properties

Physical Appearance

: **Off white to pale yellow powder**

Purity (HPLC)

: **Min 99%**

Volatiles

: **Max 0.5%**

Transmittance @ 450nm

: **Min 70%**

Transmittance @ 500nm

: **Min 80%**

Annual Capacity

: **120 MT**

#### Disclaimer

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#### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# TRIAZINE PRODUCTS

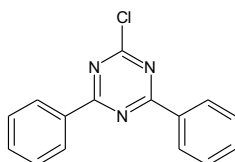
## POLYMER ADDITIVE INDUSTRY

### 10 APPOLO-115 : 2-Chloro-4,6-diphenyl-1,3,5-triazine

Product Code : **010078**  
 CAS No : **3842-55-5**  
 Molecular formula : **C<sub>15</sub>H<sub>10</sub>ClN<sub>3</sub>**  
 Molecular weight : **267.71**

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

Application : **Intermediate for Appolo-1577 additive  
 for Plastics. Used in electronics industries  
 in LED**



#### Typical Properties

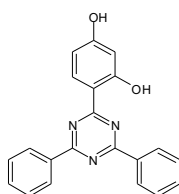
Physical Appearance : **Off White To Light Brown  
 Powder**  
 Purity (HPLC) : **NLT 95%**  
 Volatiles : **Max 0.50%**  
 Tris Impurity : **NMT 4%**  
 Annual Capacity : **60 MT**

### 11 APPOLO-116 : 2-(2,4-Dihydroxyphenyl)-4,6-diphenyl-1,3,5-triazine

Product Code : **001326**  
 CAS No : **38369-95-8**  
 Molecular formula : **C<sub>21</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **341.00**

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

Application : **Intermediate for Appolo-1577 additive  
 for Plastics**



#### Typical Properties

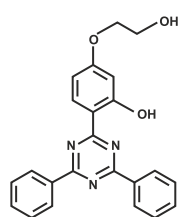
Physical Appearance : **White To Pale Yellow Powder**  
 Identification (HPLC) : **Identical**  
 Loss on drying : **NMT 0.50%**  
 Purity (HPLC) : **NLT 99%**  
 Annual Capacity : **60 MT**

### 12 APPOLO-117 : 2-(2-Hydroxy-4-ethoxyphenyl)-4,6-bis(phenyl)-1,3,5-triazine

Product Code : **001334**  
 CAS No : **184782-88-5**  
 Molecular formula : **C<sub>23</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>**  
 Molecular weight : **385.42**

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

Application : **Intermediate for synthesize various  
 UV Absorbers. Intermediate for  
 Appolo-1000**



#### Typical Properties

Physical Appearance : **Off White to Light Brownish  
 Powder**  
 Identification (HPLC) : **Identical**  
 Solubility : **Clear to Slight Hazy Solution  
 (2% in NMP)**  
 Volatile : **NMT 1.00%**  
 Purity : **NLT 97%**  
 Annual Capacity : **100 MT**

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#### Annual Capacity

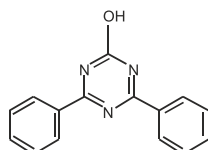
Annual capacity mentioned is indicative and can be enhanced  
 by changing product mix.

# TRIAZINE PRODUCTS

## POLYMER ADDITIVE INDUSTRY

### 13 APPOLO-114 : 2,4-Diphenyl-6-hydroxy-1,3,5- triazine

Product Code : **010032**  
 CAS No : **1917-44-8**  
 Molecular formula : **C<sub>15</sub>H<sub>11</sub>N<sub>3</sub>O**  
 Molecular weight : **249.27**



#### Typical Properties

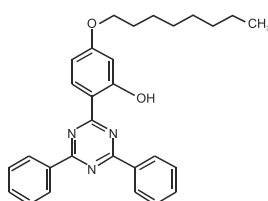
Physical Appearance : **White To Yellowish Powder**  
 Identification (HPLC) : **Identical**  
 Loss on drying : **NMT 0.50%**  
 Purity (HPLC) : **NLT 98.0%**

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

Application : **Used as Intermediate of UV absorber** Annual Capacity : **50 MT**

### 14 APPOLO-1578 : 2,4-Bisphenyl-6-(2-hydroxy-4-n-octyloxyphenyl)-1,3,5-triazine

Product Code : **010074**  
 CAS No : **139123-70-9**  
 Molecular formula : **C<sub>29</sub>H<sub>31</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **453.58**



#### Typical Properties

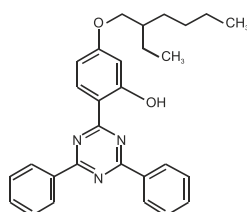
Physical Appearance : **Yellow Powder**  
 Purity (HPLC) : **NLT 98%**  
 Identification (HPLC) : **RT of Sample should match  
 with RT of Standard**  
 Loss on Drying : **NMT 0.5%**

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

Application : **UV absorber additive for general plastics** Annual Capacity : **50 MT**

### 15 APPOLO-1580 : 2-(4,6-diphenyl-1,3,5-triazin-2-yl)-5-((2-ethylhexyl)oxy)phenol

Product Code : **010075**  
 CAS No : **1251831-39-6**  
 Molecular formula : **C<sub>29</sub>H<sub>31</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **453.58**



#### Typical Properties

Physical Appearance : **Yellow Powder**  
 Purity (HPLC) : **NLT 99%**  
 Volatiles : **NMT 0.5%**

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

Application : **UV absorber additive for general plastics** Annual Capacity : **50 MT**

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#### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# TRIAZINE PRODUCTS

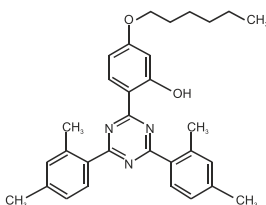
## POLYMER ADDITIVE INDUSTRY

### 16 APPOLO-1163 : 2,4-Bis-(2,4-dimethyl phenyl)-6-(2-hydroxy-4-hexyloxyphenyl)-1,3,5-triazine

Product Code : **010073**  
 CAS No : **168921-86-6**  
 Molecular formula : **C<sub>31</sub>H<sub>35</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **481.64**

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

Application : **UV absorber for general plastics**



#### Typical Properties

Physical Appearance : **Yellow Powder**  
 Purity (HPLC) : **NLT 99%**  
 Volatiles : **NMT 0.5%**

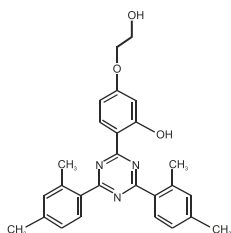
Annual Capacity : **50 MT**

### 17 APPOLO-1166 : 2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-(2-hydroxyethoxy)phenyl)-1,3,5-triazine

Product Code : **009674**  
 CAS No : **1440-08-0**  
 Molecular formula : **C<sub>27</sub>H<sub>27</sub>N<sub>3</sub>O<sub>3</sub>**  
 Molecular weight : **441.2**

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

Application : **UV absorber for general plastics**



#### Typical Properties

Physical Appearance : **Off White to Pale Yellow Powder**  
 Purity (HPLC) : **NLT 97.5%**  
 Volatiles : **NMT 0.5%**

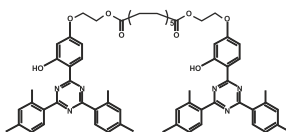
Annual Capacity : **50 MT**

### 18 APPOLO-1100 : Bis(2-(4-(4,6-bis(2,4-dimethylphenyl)-1,3,5-triazin-2-yl)-3-hydroxyphenoxy)ethyl)dodecanedioate

Product Code : **010761**  
 CAS No : **1939280-95-1**  
 Molecular formula : **C<sub>66</sub>H<sub>72</sub>N<sub>6</sub>O<sub>8</sub>**  
 Molecular weight : **1077.34**

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

Application : **Used in Polycarbonate, polyethylene terephthalates etc.**



#### Typical Properties

Physical Appearance : **Yellow Powder**  
 Purity (HPLC) : **NLT 98%**  
 Loss on Drying : **NMT 1.0%**  
 Melting Point : **158 - 160°C**

Annual Capacity : **50 MT**

#### Disclaimer

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#### Annual Capacity

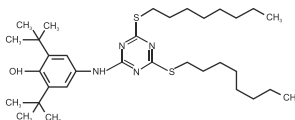
Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# TRIAZINE PRODUCTS

## POLYMER ADDITIVE INDUSTRY

### 19 APPOLO-565 : 2,4-Bis-(octylthio)-6-(3,5-di tert butyl-4-hydroxyanilino)-1,3,5-triazine

Product Code : **010071**  
 CAS No : **991-84-4**  
 Molecular formula : **C<sub>33</sub>H<sub>56</sub>N<sub>4</sub>OS<sub>2</sub>**  
 Molecular weight : **588.95**



#### Typical Properties

Physical Appearance : **White to Yellow Powder**  
 Melting Point : **91- 96°C**  
 Purity (GC) : **NLT 99%**  
 Loss On Drying : **NMT 0.5%**

**Under Development**

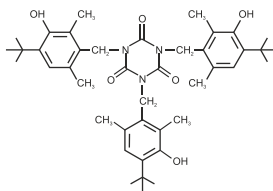
Safety &  
 Transit hazards : **Non Hazardous  
 Substance**

Application : **Antioxidant for unsaturated  
 elastomers such as BR, IR & SBR**

Annual Capacity : **50 MT**

### 20 APPOLO-1790 : 1,3,5-Tris(4-tert-butyl-3-hydroxy-2,6-dimethyl benzyl)1,3,5-triazine -(1H,3H,5H)-trione

Product Code : **010076**  
 CAS No : **40601-76-1**  
 Molecular formula : **C<sub>42</sub>H<sub>57</sub>N<sub>3</sub>O<sub>6</sub>**  
 Molecular weight : **699.93**



#### Typical Properties

Physical Appearance : **White powder**  
 Melting range : **158 - 162°C**  
 Purity (HPLC) : **NLT 96%**

**Under Development**

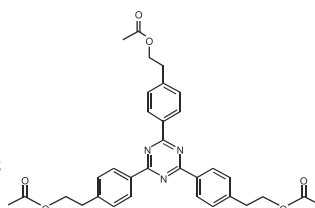
Safety &  
 Transit hazards : **Non Hazardous  
 Substance**

Application : **Phenolic antioxidant used in polyolefin  
 such as polyethylene film, polypropylenes  
 film, polyacetals, polyamides etc.**

Annual Capacity : **50 MT**

### 21 APPOLO-567 : 1,3,5-triazine-2,4,6-triyl)tris(benzene-4,1-diyl))tris(ethane-2,1-diyl) triacetate

Product Code : **010684**  
 CAS No : **Not available**  
 Molecular formula : **C<sub>33</sub>H<sub>33</sub>N<sub>3</sub>O<sub>6</sub>**  
 Molecular weight : **567.64**



#### Typical Properties

Purity (HPLC) : **NLT 95%**  
 Volatiles : **NMT0.5%**  
 Ash : **NMT 0.1%**  
 Transmittance @ 460nm : **NLT 60%**  
 Transmittance @ 500nm : **NLT 75%**

**Under Development**

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

Applicationz : **It is triazine based UV Absorber  
 used in general plastic**

Annual Capacity : **50 MT**

#### Disclaimer

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#### Annual Capacity

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 by changing product mix.

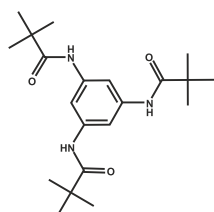
# TRIAZINE PRODUCTS

## POLYMER ADDITIVE INDUSTRY

### 22 SARACLEAR XT 386 : 1,3,5-tris-[2,2-dimethylpropionylamino]benzene

Under Development

Product Code : **011050**  
 CAS No : **745070-61-5**  
 Molecular formula : **C<sub>21</sub>H<sub>33</sub>N<sub>3</sub>O<sub>3</sub>**  
 Molecular weight : **375.5**



#### Typical Properties

Physical Appearance : **White powder**  
 Melting Point : **370-375 °C**  
 Loss on Drying : **NMT 0.5%**  
 Purity (HPLC) : **NLT 98%**

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

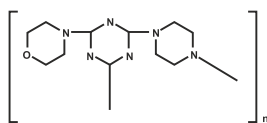
Application : **It is suited for polypropylene random copolymer applications such as thin-wall injection molding of transparent food containers and extrusion and injection stretch blow molding of bottles.**

Annual Capacity : **20 MT**

### 23 APPOLO PPM TRIAZINE HF : Poly [6-(4-morpholinyl)-1,3,5-triazine-2,4-diyl]-1,4-piperazinediyl

Under Development

Product Code : **011336**  
 CAS No : **93058-67-4**  
 Molecular formula : **(C<sub>11</sub>H<sub>16</sub>N<sub>6</sub>O)<sub>n</sub>**  
 Molecular weight : **Approx. 2755**



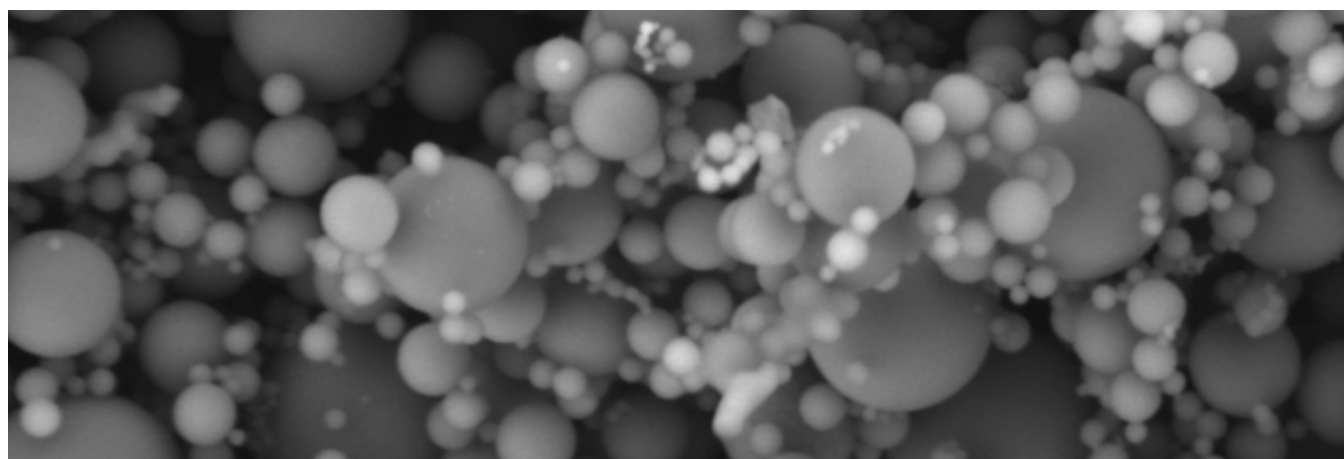
#### Typical Properties

Physical Appearance : **Off-white Crystalline Powder**  
 Identification (HPLC) : **Identical**  
 Melting Point : **Infusible (> 290 °C)**  
 Solubility : **Insoluble In Water**

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

Application : **It acts as flame retardant. The protective layer also imparts a heat-insulation effect, reduces oxygen permeability and prevents dripping of molten polymer.**

Annual Capacity : **50 MT**



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#### Annual Capacity

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# COATING INDUSTRY

PRODUCTS

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**COAT WITH CONFIDENCE:  
HARNESS THE POWER OF UV ABSORBERS  
FOR ULTIMATE PROTECTION**



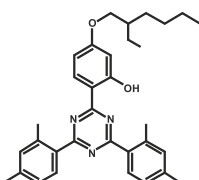
# TRIAZINE PRODUCTS COATING INDUSTRY

## 01 APPOLO-1164L : 2-(4,6-bis(2,4-dimethylphenyl)-1,3,5-triazin-2-yl)-5-((2-ethylhexyl)oxy)phenol

Product Code : **001323**  
 CAS No : **652991-75-8**  
 Molecular formula : **C<sub>33</sub>H<sub>39</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **509.68**

Safety & Transit hazards : **Hazardous Substance**

Application : **UV absorber additive for polyurethanes, unsaturated polyester, coatings, resins and paints**



### Typical Properties

Physical Appearance : **Yellow orange liquid**  
 Specific gravity : **1.0 - 1.02**  
 Assay : **NLT 65%**

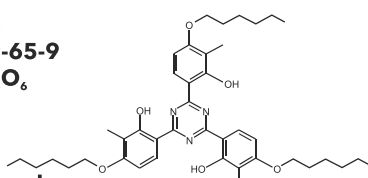
Annual Capacity : **100 MT**

## 02 APPOLO-462 : 2,4,6-Tris (2-hydroxy-4-hexyloxy-3-methylphenyl)-1,3,5-triazine

Product Code : **010196**  
 CAS No : **222529-65-9**  
 Molecular formula : **C<sub>42</sub>H<sub>57</sub>N<sub>3</sub>O<sub>6</sub>**  
 Molecular weight : **699.00**

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

Application : **Used in Copper Clad Laminate (CCL). Triazine-based UVA that has a very high absorption capacity in the ultraviolet region near 350 to 380 nm**



### Typical Properties

Physical Appearance : **Yellow powder**  
 Melting Point : **144-150°C**  
 Purity (HPLC) : **NLT 98%**  
 Loss on Drying : **NMT 0.5%**

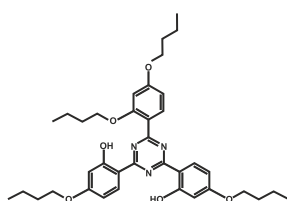
Annual Capacity : **50 MT**

## 03 APPOLO-460 : 2,4-Bis(2-hydroxy-4-butyloxyphenyl)-6-(2,4-bis-butyloxyphenyl)-1,3,5-triazine

Product Code : **001330**  
 CAS No : **208343-47-9**  
 Molecular formula : **C<sub>37</sub>H<sub>47</sub>N<sub>3</sub>O<sub>6</sub>**  
 Molecular weight : **629.78**

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

Application : **It is UV absorber used in Industrial coatings. It is used for high-performance printing and packaging applications**



### Typical Properties

Physical Appearance : **Off White To Yellowish Powder Or Granules**  
 Purity (HPLC) : **NLT 98.0%**  
 Melting point : **93.0 - 102.0°C**  
 Loss on drying : **NMT 0.5%**

Annual Capacity : **50 MT**

#### Disclaimer

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#### Annual Capacity

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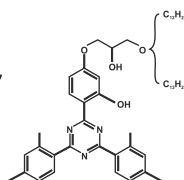
# TRIAZINE PRODUCTS COATING INDUSTRY

## 04 APPOLO-400 CRUDE : 2-[4-[(2-Hydroxy-3-dodecyloxypropyl)oxy]-2-hydroxyphenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine & 2-[4-[(2-Hydroxy-3-tridecyloxypropyl)oxy]-2-hydroxyphenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine

Product Code : **001158**  
 CAS No : **153519-44-9**  
 Molecular formula : **C<sub>28</sub>H<sub>28</sub>N<sub>3</sub>O<sub>4</sub> · C<sub>12</sub>H<sub>25</sub>/C<sub>13</sub>H<sub>27</sub>**  
 Molecular weight : **653.89**

Safety & Transit hazards : **Hazardous Substance**

Application : **It can be used in industrial paints and automotive paints with high thermal stability and durability requirements**



### Typical Properties

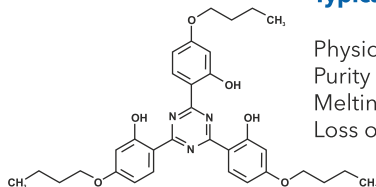
Physical Appearance : **Yellow To Brown Viscous Liquid**  
 Color of solution 460 nm : **NLT 60.0%**  
 Color of solution 500 nm : **NLT 80.0%**  
 Purity (HPLC) : **NLT 98.0%**  
 Annual Capacity : **200 MT**

## 05 APPOLO-480 : 2,4,6-Tris(2-hydroxy-4-butoxyphenyl)-1,3,5-triazine

Product Code : **010282**  
 CAS No : **3135-19-1**  
 Molecular formula : **C<sub>33</sub>H<sub>39</sub>N<sub>3</sub>O<sub>6</sub>**  
 Molecular weight : **573.69**

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

Application : **UV absorption ability and anti-oxidation. Therefore it is used in plastic coating additive**



### Typical Properties

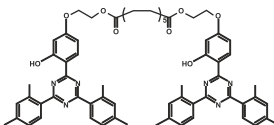
Physical Appearance : **Yellow Powder**  
 Purity (HPLC) : **NLT 90.0%**  
 Melting Point : **151-155°C**  
 Loss on Drying : **NMT 2.00%**  
 Annual Capacity : **80 MT**

## 06 APPOLO-1100 : Bis(2-(4-(4,6-bis(2,4-dimethylphenyl)-1,3,5-triazin-2-yl)-3-hydroxyphenoxy)ethyl)dodecanedioate

Product Code : **010761**  
 CAS No : **1939280-95-1**  
 Molecular formula : **C<sub>66</sub>H<sub>72</sub>N<sub>6</sub>O<sub>8</sub>**  
 Molecular weight : **1077.34**

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

Application : **It is used in Polycarbonate, polyethylene terephthalates etc.**



### Typical Properties

Physical Appearance : **Yellow Powder**  
 Purity (HPLC) : **NLT 98%**  
 Loss on Drying : **NMT 1.00%**  
 Melting Point : **158 to 160 °C**  
 Annual Capacity : **50 MT**

#### Disclaimer

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#### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced by changing product mix.

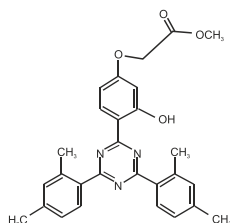
# TRIAZINE PRODUCTS COATING INDUSTRY

## 07 APPOLO-1165 : 2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-methyl acetoxymethyl)-1,3,5-triazine

Product Code : **009643**  
 CAS No : **Not available**  
 Molecular formula : **C<sub>28</sub>H<sub>27</sub>N<sub>3</sub>O<sub>4</sub>**  
 Molecular weight : **469.00**

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

Application : **UV absorber general plastic additive**



### Typical Properties

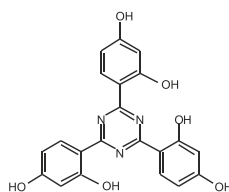
Physical Appearance : **Yellow powder**  
 Purity (HPLC) : **NLT 99%**  
 Melting Point : **144-148 °C**  
 Volatiles : **NLT 0.5%**  
 Transmittance @ 460nm : **Min 60%**  
 Transmittance @ 500nm : **Min 70%**  
 Annual Capacity : **50 MT**

## 08 APPOLO-459 : 1,3-Benzenediol, 4,4',4''-(1,3,5-triazine-2,4,6-triyl)tris

Product Code : **009556**  
 CAS No : **2125-23-7**  
 Molecular formula : **C<sub>21</sub>H<sub>15</sub>N<sub>3</sub>O<sub>6</sub>**  
 Molecular weight : **405.36**

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

Application : **It is triazine intermediate to manufacture  
 UV absorbers as plastic additive such  
 as Appolo-477**



### Typical Properties

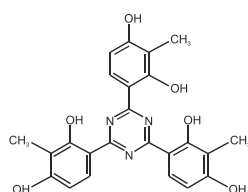
Physical Appearance : **Yellow powder**  
 Purity (HPLC) : **NLT 99%**  
 Loss on Drying : **Max 1%**  
 Identify by FTIR : **Complies**  
 Annual Capacity : **100 MT**

## 09 APPOLO-461 : 4,4',4''-(1,3,5-triazine-2,4,6-triyl)tris(2-methylbenzene-1,3-diol)

Product Code : **010661**  
 CAS No : **434942-20-8**  
 Molecular formula : **C<sub>24</sub>H<sub>21</sub>N<sub>3</sub>O<sub>6</sub>**  
 Molecular weight : **447.45**

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

Application : **Used as intermediate to manufacture  
 Appolo-462 which is UV absorber additive  
 for general plastics and coatings**



### Typical Properties

Physical Appearance : **Yellow powder**  
 Purity (HPLC) : **NLT 98%**  
 Loss On Drying : **NMT 2.0%**  
 Annual Capacity : **50 MT**

#### Disclaimer

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#### Annual Capacity

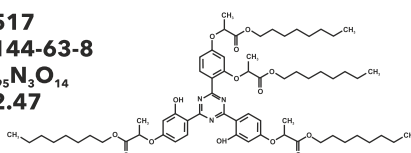
Annual capacity mentioned is indicative and can be enhanced  
 by changing product mix.

# TRIAZINE PRODUCTS COATING INDUSTRY

10

## APPOLO-477 : Octyl 2-[4-[4-[2,4-bis[(1-octoxy-1-oxopropan-2-yl)oxy]phenyl]-6-[2-hydroxy-4-(1-octoxy-1-oxopropan-2-yl)oxyphenyl]-1,3,5-triazin-2-yl]-3-hydroxyphenoxy]propanoate

Product Code : **010517**  
 CAS No : **348144-63-8**  
 Molecular formula : **C<sub>65</sub>H<sub>95</sub>N<sub>3</sub>O<sub>14</sub>**  
 Molecular weight : **1142.47**



Safety & Transit hazards : **Hazardous Substance**

Application : **Used as UV absorber additive in general plastics**

### Typical Properties

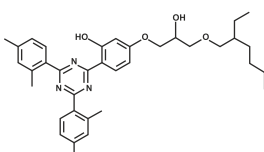
Physical Appearance : **Yellowish to Light Brownish Viscous Liquid**  
 Moisture Content (KF) : **NMT 1.0%**  
 Lambda Max : **353 ± 5.0 nm**  
 Annual Capacity : **100 MT**

**Under Development**

11

## APPOLO-405 : 2-[2-Hydroxy-4-[3-(2-ethylhexyl-1-oxy)-2-hydroxypropoxy]phenyl]-4,6-bis(2,4-dimethylphenyl)-1,3,5-triazine

Product Code : **001306**  
 CAS No : **137658-79-8**  
 Molecular formula : **C<sub>36</sub>H<sub>45</sub>N<sub>3</sub>O<sub>4</sub>**  
 Molecular weight : **583.76**



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

Application : **Used as UV absorber in automotive clear coats, automotive powder coats. Powder coatings for plastics and wood and high performance industrial coatings**

### Typical Properties

Physical Appearance : **Light Yellow Solid**  
 Purity (HPLC) : **NLT 96.0%**  
 Melting Point : **73-77 °C**  
 Annual Capacity : **50 MT**

**Under Development**



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#### Annual Capacity

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# PERSONAL CARE INDUSTRY

PRODUCTS

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SUN-KISSED SAFELY: TRUST OUR UV ABSORBERS  
FOR SKIN-LOVING PERSONAL CARE



# TRIAZINE PRODUCTS

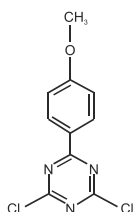
## PERSONAL CARE INDUSTRY

### 01 APPOLO-122 : 2,4-Dichloro-6-(4-methoxyphenyl)-1,3,5-triazine

Product Code : **010030**  
 CAS No : **90723-86-7**  
 Molecular formula : **C<sub>10</sub>H<sub>7</sub>Cl<sub>2</sub>N<sub>3</sub>O**  
 Molecular weight : **256.09**

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

Application : **It is Intermediate of UV absorber**



#### Typical Properties

Physical Appearance : **Off white to Light Yellow powder**  
 Purity (HPLC) : **NLT 98%**  
 Moisture (KF) : **NMT 0.5%**

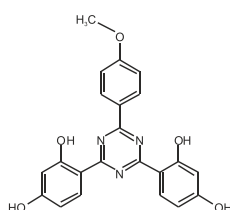
Annual Capacity : **150 MT**

### 02 APPOLO-125 : 2,4-Bis(2,4-dihydroxyphenyl)-6-(4-methoxyphenyl)-1,3,5-triazine

Product Code : **001344**  
 CAS No : **1440-00-2**  
 Molecular formula : **C<sub>22</sub>H<sub>17</sub>N<sub>3</sub>O<sub>5</sub>**  
 Molecular weight : **403.38**

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

Application : **It is intermediate of Bemotrizinol which is used in sun screen creams in cosmetics**



#### Typical Properties

Physical Appearance : **Light Yellow powder**  
 Purity (HPLC) : **Min 98%**  
 Loss on Drying : **NMT 2.0%**

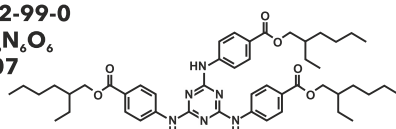
Annual Capacity : **200 MT**

### 03 SARASORB EHT : Ethylhexyl Triazone

Product Code : **011296**  
 CAS No : **88122-99-0**  
 Molecular formula : **C<sub>48</sub>H<sub>66</sub>N<sub>6</sub>O<sub>6</sub>**  
 Molecular weight : **823.07**

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

Application : **EthylhexylTriazone is used in sunscreen formulations as a UV filter to block out harmful ultraviolet light**



#### Typical Properties

Physical Appearance : **White To Off White Powder**  
 Purity : **NLT 98.0%**  
 Melting Point : **121.0 to 128.0 °C**

Annual Capacity : **100 MT**

#### Disclaimer

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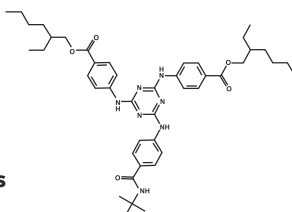
#### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# TRIAZINE PRODUCTS PERSONAL CARE INDUSTRY

## 04 SARASORB DHBT : Diethylhexyl Butamido Triazone

Product Code : **011318**  
 CAS No : **154702-15-5**  
 Molecular formula : **C<sub>44</sub>H<sub>59</sub>N<sub>3</sub>O<sub>5</sub>**  
 Molecular weight : **765.98**



### Typical Properties

Physical Appearance : **White To Off White Powder**  
 Purity : **NLT 98.5%**  
 Melting Point : **90.0 to 110.0 °C**

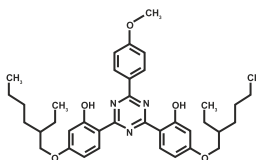
Safety &  
 Transit hazards : **Non Hazardous  
 Substance**

Application : **It is a triazine based organic compound that readily absorbs UVA and UVB radiation. It is commonly found in sunscreen and other sun care products**

Annual Capacity : **75 MT**

## 05 SARASORB BEMT : 2,4-Bis[4-(2-ethylhexyloxy)-2-hydroxyphenyl]-6-(4-methoxyphenyl)-1,3,5-triazine

Product Code : **001157**  
 CAS No : **187393-00-6**  
 Molecular formula : **C<sub>38</sub>H<sub>49</sub>N<sub>3</sub>O<sub>5</sub>**  
 Molecular weight : **627.81**



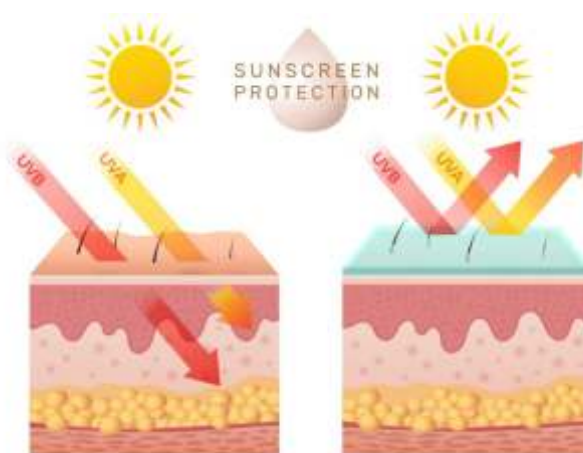
### Typical Properties

Physical Appearance : **Yellow Fine to Coarse Powder**  
 Purity (HPLC) : **NLT 98.0%**  
 Moisture Content (KF) : **NMT 0.50%**  
 Melting Point : **75-80 °C**

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

Application : **It is a preservative-free, high performance broad-spectrum UV filter. It provides good UVA protection and photo-stability. It is suitable for formulations with innovative sensory profiles**

Annual Capacity : **200 MT**



### Disclaimer

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### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# TEXTILE INDUSTRY

PRODUCTS

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



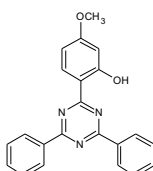
# TRIAZINE PRODUCTS TEXTILE INDUSTRY

## 01 APPOLO-1579 (A-103) : 2-(2-Hydroxy-4-methoxyphenyl)-4,6-diphenyl-1,3,5-triazine

Product Code : **005631**  
 CAS No : **106556-36-9**  
 Molecular formula : **C<sub>22</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **355.00**

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

Application : **Used in automotive Industry in PET fiber,  
 Polyester fibers for Seat fabrics, Safety belt,  
 Air bags etc.**



### Typical Properties

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

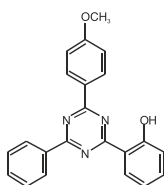
Annual Capacity : **80 MT**

## 02 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 : **C<sub>22</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **355.38**

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

Application : **Used as UV absorber in Textile Auxiliary**



### Typical Properties

Physical Appearance : **Light Yellow Powder or  
 Chunks**  
 Purity (HPLC) : **NLT 95%**  
 Solid Content (%) : **NLT 70%**  
 Odour : **No Unpleasant Odour**

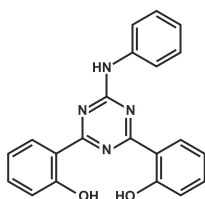
Annual Capacity : **200 MT**

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

Product Code : **010906**  
 CAS No : **1248-66-4**  
 Molecular formula : **C<sub>21</sub>H<sub>16</sub>N<sub>4</sub>O<sub>2</sub>**  
 Molecular weight : **356.38**

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

Application : **It is used as UV absorber in  
 Textile Auxiliary**



### 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**

#### Disclaimer

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#### Annual Capacity

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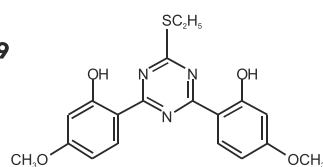
# TRIAZINE PRODUCTS TEXTILE INDUSTRY

## 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 : **C<sub>19</sub>H<sub>19</sub>N<sub>3</sub>O<sub>4</sub>S**  
 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%**

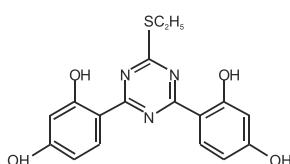
Annual Capacity : **150 MT**

## 05 APPOLO-123 : 2,4-Bis ( 2,4-dihydroxyphenyl)-6-ethyl mercaptan-1,3,5-triazine

Product Code : **010031**  
 CAS No : **195873-17-7**  
 Molecular formula : **C<sub>17</sub>H<sub>15</sub>N<sub>3</sub>O<sub>4</sub>S**  
 Molecular weight : **357.38**

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

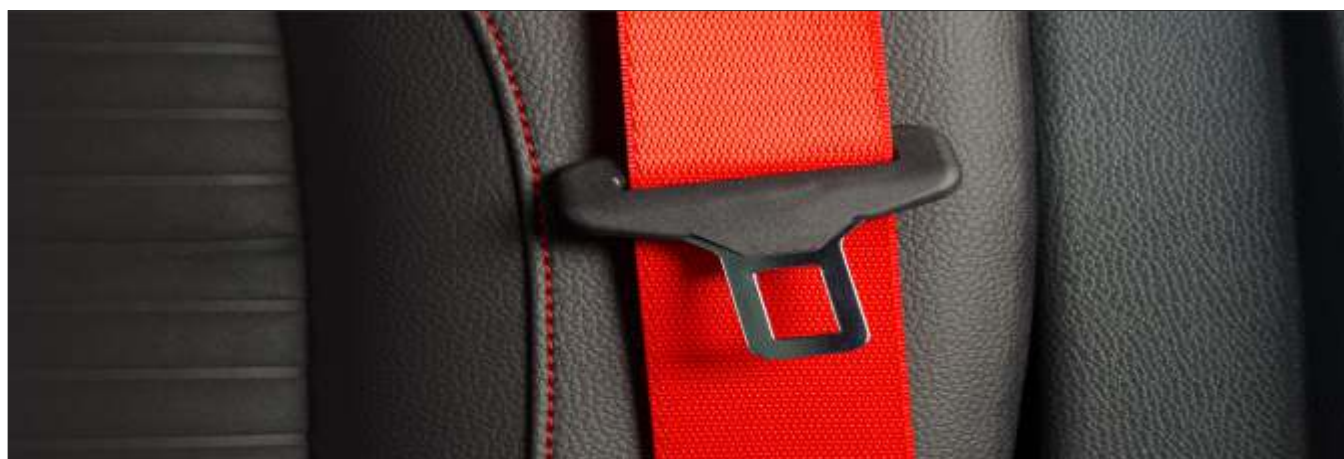
Application : **Intermediate of UV absorber Appolo-124**



### Typical Properties

Physical Appearance : **Off white Powder**  
 Purity (HPLC) : **NLT 97%**  
 Moisture (KF) : **NMT 0.5%**

Annual Capacity : **150 MT**



#### Disclaimer

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#### Annual Capacity

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# PHARMACEUTICAL API INDUSTRY

PRODUCTS

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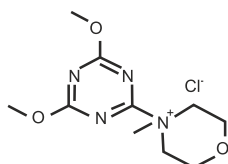
**API INTERMEDIATES:  
THE BACKBONE OF EFFECTIVE MEDICINES**



# TRIAZINE PRODUCTS PHARMACEUTICAL API INDUSTRY

## 01 APPOLO 202 : 4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methyl morpholinium chloride

Product Code : **002338**  
 CAS No : **3945-69-5**  
 Molecular formula : **C<sub>10</sub>H<sub>17</sub>ClN<sub>4</sub>O<sub>4</sub>**  
 Molecular weight : **294.74**



### Typical Properties

**Under Development**

Physical Appearance : **White Color Powder**  
 Melting Point : **118-120°C**  
 Assay (HPLC) : **NLT 98%**

Safety &  
 Transit hazards : **Hazardous Substance**

Application : **DMTMM used as coupling agent for activating carboxylic acid in solution and solid phase peptide synthesis**

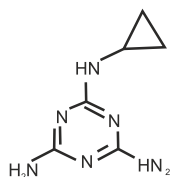
Annual Capacity : **50 MT**

API : **Teneligliptin, Revefenacin**

## 02 APPOLO 205 : N-cyclopropyl-1,3,5-triazine-2,4,6-triamine

**Under Development**

Product Code : **005655**  
 CAS No : **66215-27-8**  
 Molecular formula : **C<sub>6</sub>H<sub>10</sub>N<sub>6</sub>**  
 Molecular weight : **166.18**



### Typical Properties

Physical Appearance : **White Powder**  
 Melting Point : **219-222°C**  
 Assay (HPLC) : **NLT 98%**

Safety &  
 Transit hazards : **Hazardous Substance**

Application : **Used in antiparasite in poultry, ex. for Sabices deases. Used as veterinary medicine**

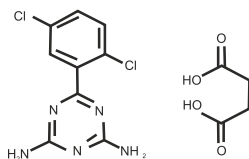
Annual Capacity : **50 MT**

API : **Eluxadoline**

## 03 APPOLO 206 : 2,4-Diamino-6-(2,5-dichlorophenyl)-1,3,5-triazine maleate

**Under Development**

Product Code : **001165**  
 CAS No : **84504-69-8**  
 Molecular formula : **C<sub>13</sub>H<sub>11</sub>Cl<sub>2</sub>N<sub>5</sub>O<sub>4</sub>**  
 Molecular weight : **372.17**



### Typical Properties

Physical Appearance : **White Powder**  
 Melting Point : **182°C**  
 Solubility : **DMSO and ethanol, methanol**  
 Assay (HPLC) : **NLT 98% by area**  
 Assay (by Titration Non Aqueous) : **NLT 98%**

Safety &  
 Transit hazards : **Hazardous Substance**

Application : **Antioxidant, antiinflammatory drug. Used for treatment of gastric, ulcer**

Annual Capacity : **50 MT**

API : **Irsogladine**

#### Disclaimer

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#### Annual Capacity

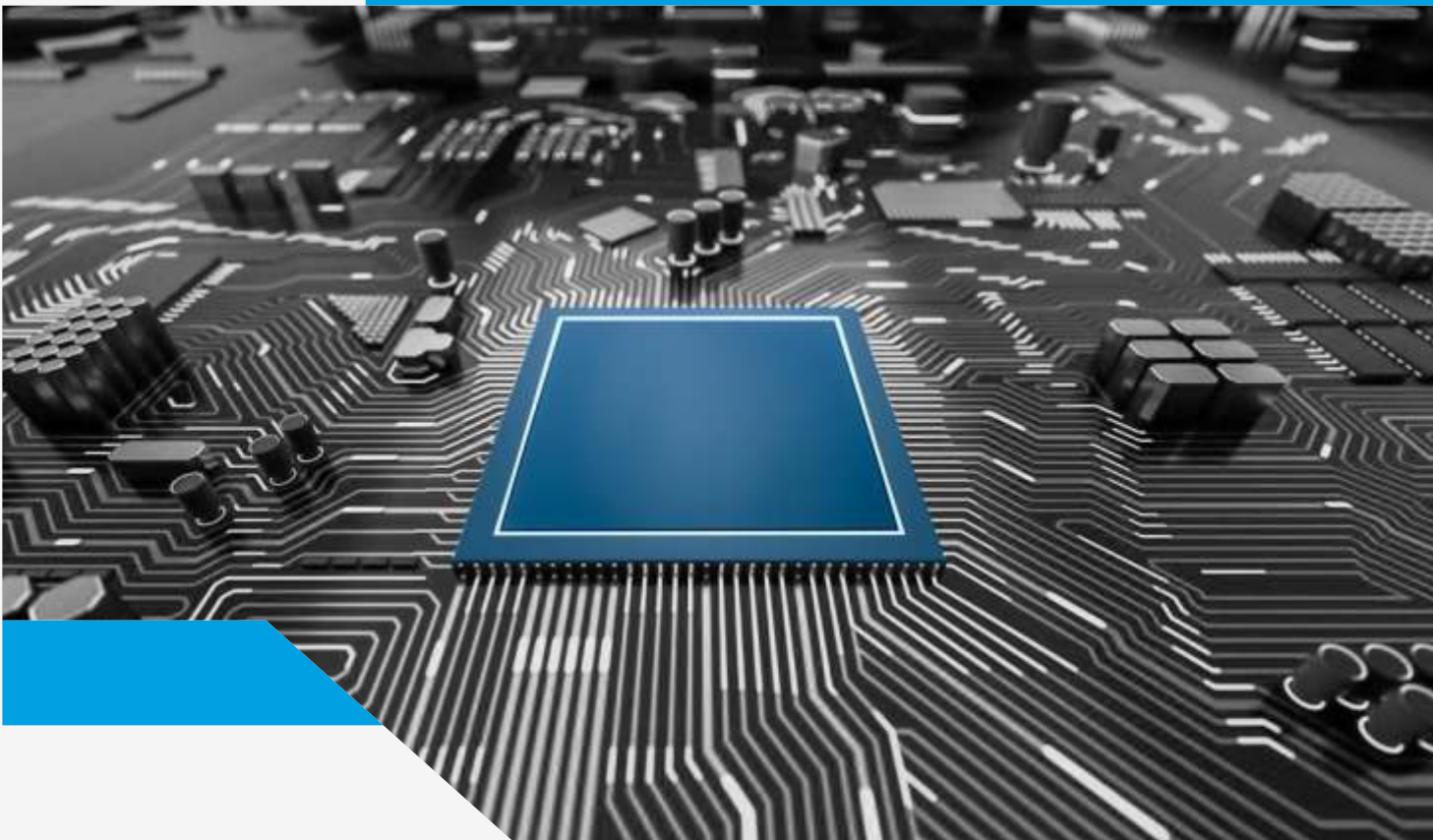
Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# ELECTRONIC INDUSTRY

PRODUCTS

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**SOPHISTICATED SPECIALITY CHEMICALS THAT  
ENHANCE THE TECHNOLOGY PERFORMANCE**



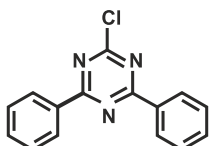
# TRIAZINE PRODUCTS ELECTRONIC INDUSTRY

## 01 STELLAR-2015 : 2-Chloro-4,6-bis(phenyl)-1,3,5-triazine

Product Code : **001325**  
 CAS No : **3842-55-5**  
 Molecular formula : **C<sub>15</sub>H<sub>10</sub>ClN<sub>3</sub>**  
 Molecular weight : **267.71**

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

Application : **Used in making organic  
 electroluminescent compound**



### Typical Properties

Physical Appearance : **White to Off-white powder**  
 Purity (HPLC) : **NLT 99%**  
 Solubility (2% W/V  
 PEG & Toluene) : **Clear to slight hazy solution**  
 Transmittance (%) 450nm : **NLT 75.0%**  
 Transmittance (%) 500nm : **NLT 80.0%**

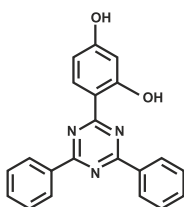
Annual Capacity : **120 MT**

## 02 STELLAR-2016 : 2-(2,4-Dihydroxyphenyl)-4,6-diphenyl-1,3,5-triazine

Product Code : **010645**  
 CAS No : **38369-95-8**  
 Molecular formula : **C<sub>21</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **341.36**

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

Application : **Used in longpass filter of  
 photovoltaic element such  
 as dye solar cell**



### Typical Properties

Physical Appearance : **White To Pale Yellow Powder**  
 Identification (HPLC) : **Identical**  
 Melting Point : **273.0 to 276.0°C**  
 Purity (HPLC) : **NLT 99.0%**  
 Volatiles : **NMT 0.50%**

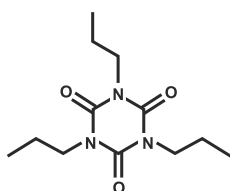
Annual Capacity : **50 MT**

## 03 STELLAR-2018 : 1,3,5-Tripropyl-1,3,5-triazinane-2,4,6-trione

Product Code : **010685**  
 CAS No : **4015-16-1**  
 Molecular formula : **C<sub>12</sub>H<sub>21</sub>N<sub>3</sub>O<sub>3</sub>**  
 Molecular weight : **255.32**

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

Application : **Display for next generation.  
 A high-sensitivity triazine product  
 used for a high-resolution structure**



### Typical Properties

Physical Appearance : **Yellow to Orange liquid**  
 Moisture Content (KF) : **NMT 0.50%**  
 Any Single Unknown  
 Impurity : **NMT 0.50%**  
 Purity (GC) : **NLT 99%**

Annual Capacity : **50 MT**

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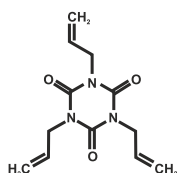
#### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced  
 by changing product mix.

# TRIAZINE PRODUCTS ELECTRONIC INDUSTRY

## 04 STELLAR-2034 : Triallyl Isocyanurate (TAIC)

Product Code : **010997**  
 CAS No : **1025-15-6**  
 Molecular formula : **C<sub>12</sub>H<sub>15</sub>N<sub>3</sub>O<sub>3</sub>**  
 Molecular weight : **249.27**



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

Application : **It is used in EVA (Ethylene Vinyl Acetate)  
 Film as sealing films for solar cell and  
 solar cell module encapsulation**

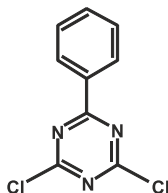
### Typical Properties

Physical Appearance : **Colorless to Light Yellow Low  
 Melting Solid to Clear Liquid**  
 Moisture Content : **NMT 0.5%**  
 Purity (GC) : **NLT 99%**  
 Solubility in Methanol : **Almost Transparent**

Annual Capacity : **200 MT**

## 05 STELLAR-2054 : 2,4-Dichloro-6-phenyl-1,3,5-triazine

Product Code : **010764**  
 CAS No : **1700-02-3**  
 Molecular formula : **C<sub>9</sub>H<sub>5</sub>Cl<sub>2</sub>N<sub>3</sub>**  
 Molecular weight : **226.06**



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

Application : **Agrochemical Intermediates,  
 Syntheses Materials Intermediates,  
 OLED intermediates, Intermediate of UV absorbers**

### Typical Properties

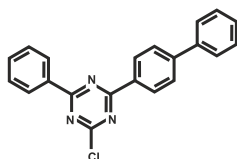
Physical Appearance : **Off white powder**  
 Melting Point : **119-123 °C**  
 Purity (HPLC) : **Min 99%**  
 Volatiles : **Max 0.5%**

Annual Capacity : **50 MT**

## 06 STELLAR-2019 : 2-(Biphenyl-4-yl)-4-chloro-6-phenyl-1,3,5-triazine

**Under Development**

Product Code : **010697**  
 CAS No : **1472062-94-4**  
 Molecular formula : **C<sub>21</sub>H<sub>14</sub>ClN<sub>3</sub>**  
 Molecular weight : **343.81**



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

Application : **It is use in Organic light emitting diode**

### Typical Properties

Physical Appearance : **White to Almost white  
 powder to crystal**  
 Purity (HPLC) : **Min. 99.0 %**  
 Melting point : **163.0 to 167.0 °C**  
 Loss on drying : **NMT 1%**

Annual Capacity : **5 MT**

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#### Annual Capacity

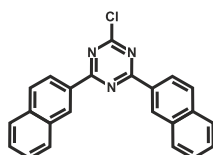
Annual capacity mentioned is indicative and can be enhanced  
 by changing product mix.

# TRIAZINE PRODUCTS ELECTRONIC INDUSTRY

## 07 STELLAR-2024 : 2-Chloro-4,6-di(naphthalen-2-yl)-1,3,5-triazine

Under Development

Product Code : **010819**  
 CAS No : **1247124-77-1**  
 Molecular formula : **C<sub>23</sub>H<sub>14</sub>ClN<sub>3</sub>**  
 Molecular weight : **367.83**



### Typical Properties

Physical Appearance : **Off-White to white powder**  
 Purity : **NLT 99%**  
 Volatiles : **NMT 0.50%**

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

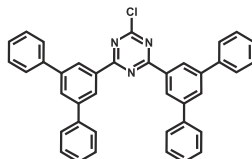
Application : **It is use as Organic Light emitting  
 diode (OLED) intermediate**

Annual Capacity : **50 MT**

## 08 STELLAR-2025 : 2-Chloro-4,6-bis[1,1':3',1''terphenyl-5'-yl]-1,3,5-triazine

Under Development

Product Code : **010820**  
 CAS No : **1205748-51-1**  
 Molecular formula : **C<sub>39</sub>H<sub>26</sub>ClN<sub>3</sub>**  
 Molecular weight : **572.10**



### Typical Properties

Physical Appearance : **White to off-white powder**  
 Purity : **NLT 99%**  
 Volatiles : **NMT 0.50%**

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

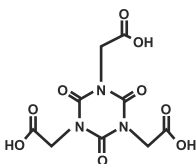
Application : **It is use as Organic Light emitting  
 diode (OLED) intermediate**

Annual Capacity : **50 MT**

## 09 STELLAR-2032 : Tris (carboxy methyl) isocyanurate

Under Development

Product Code : **010985**  
 CAS No : **1968-52-1**  
 Molecular formula : **C<sub>3</sub>H<sub>3</sub>N<sub>3</sub>O<sub>6</sub>**  
 Molecular weight : **303.18**



### Typical Properties

Physical Appearance : **Off White To Yellowish  
 Powder Or Granules**  
 Melting Point : **264-266 °C**  
 Purity : **NLT 99%**

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

Application : **It is used as Curing accelerator in  
 Liquid crystal sealant to improve  
 the low temperature curability.**

Annual Capacity : **5 MT**

#### Disclaimer

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#### Annual Capacity

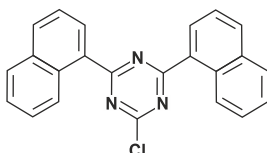
Annual capacity mentioned is indicative and can be enhanced  
 by changing product mix.

# TRIAZINE PRODUCTS ELECTRONIC INDUSTRY

## 10 STELLAR-2042 : 2-Chloro-4,6-di-1-naphthalenyl-1,3,5-triazine

Under Development

Product Code : **011170**  
CAS No : **78941-32-9**  
Molecular formula : **C<sub>23</sub>H<sub>14</sub>ClN<sub>3</sub>**  
Molecular weight : **367.83**



### Typical Properties

Physical Appearance : **White to Orange Powder**  
Purity (HPLC) : **NLT 99.0%**  
Melting Point : **148-150°C**

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

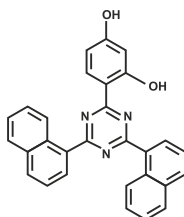
Application : **It can be used as intermediate in layer of light emitting device. Used as UV absorber in The pressure-sensitive adhesive sheet**

Annual Capacity : **25 MT**

## 11 STELLAR-2043 : Bis- $\alpha$ -naphthyl(2,4-dihydroxyphenyl)-1,3,5-triazine

Under Development

Product Code : **011171**  
CAS No : **518045-48-2**  
Molecular formula : **C<sub>29</sub>H<sub>19</sub>N<sub>3</sub>O<sub>2</sub>**  
Molecular weight : **441.48**



### Typical Properties

Physical Appearance : **Yellow Powder**  
Purity (HPLC) : **NLT 99%**

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

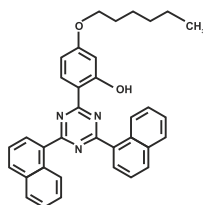
Application : **The Compound and its Derivatives are Suitable for Stabilizing Organic Material, Especially Plastics Materials, Surface-coatings, Cosmetic Preparations, Sun Protection Agents or Photog. Material, against Damage by Light, Oxygen and/or Heat**

Annual Capacity : **50 MT**

## 12 STELLAR-2044 : Bis- $\alpha$ -naphthyl(2-hydroxy-4-n-hexyloxyphenyl)-1,3,5-triazine

Under Development

Product Code : **011167**  
CAS No : **518045-49-3**  
Molecular formula : **C<sub>35</sub>H<sub>31</sub>N<sub>3</sub>O<sub>2</sub>**  
Molecular weight : **525.64**



### Typical Properties

Physical Appearance : **Yellow Powder**  
Purity (HPLC) : **NLT 99.0%**

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

Application : **The Compounds are Suitable for Stabilizing Organic Material, Especially Plastics Materials, Surface-coatings, Cosmetic Preparations, Sun Protection Agents or Photog. Material, against Damage by Light, Oxygen and/or Heat**

Annual Capacity : **25 MT**

#### Disclaimer

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#### Annual Capacity

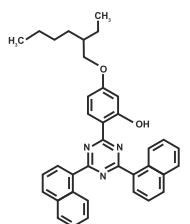
Annual capacity mentioned is indicative and can be enhanced by changing product mix.



# TRIAZINE PRODUCTS ELECTRONIC INDUSTRY

## 13 STELLAR-2045 : 2-(4,6-Di-1-naphthalenyl-1,3,5-triazin-2-yl)-5-[(2-ethylhexyl)oxy]phenol

Product Code : **011168**  
 CAS No : **518045-50-6**  
 Molecular formula : **C<sub>37</sub>H<sub>35</sub>N<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **553.69**



### Typical Properties

Physical Appearance : **Yellow Powder**  
 Purity (HPLC) : **NLT 99.0%**

**Under Development**

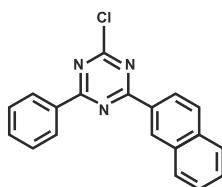
Safety & Transit hazards : **Non Hazardous Substance**

Application : **As Stabilizer in plastics Materials, Surface-coatings, Cosmetic Preparations, Sun Protection Agents or Photog. Material, against Damage by Light, Oxygen and / or Heat**

Annual Capacity : **25 MT**

## 14 STELLAR-2046 : 2-Chloro-4-(naphthalen-2-yl)-6-phenyl-1,3,5-triazine

Product Code : **011331**  
 CAS No : **1342819-12-8**  
 Molecular formula : **C<sub>19</sub>H<sub>12</sub>ClN<sub>3</sub>**  
 Molecular weight : **317.77**



### Typical Properties

Physical Appearance : **White To Light Yellow Powder To Crystal**  
 Purity (HPLC) : **NLT 99%**  
 Melting Point : **171.0 to 175.0 °C**

**Under Development**

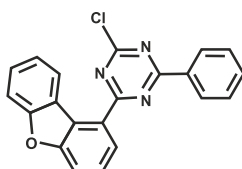
Safety & Transit hazards : **Non Hazardous Substance**

Application : **It is use as Organic Light emitting diode (OLED) intermediate**

Annual Capacity : **10 MT**

## 15 STELLAR-2047 : 2-Chloro-4-(dibenzo(b,d)furan-1-yl)-6-phenyl-1,3,5-triazine

Product Code : **011334**  
 CAS No : **1883265-32-4**  
 Molecular formula : **C<sub>21</sub>H<sub>12</sub>ClN<sub>3</sub>O**  
 Molecular weight : **357.79**



### Typical Properties

Physical Appearance : **White To Off White Powder**  
 Purity (HPLC) : **NLT 99%**  
 Melting Point : **152.0 to 156.0 °C**

**Under Development**

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

Application : **It is use as Organic Light emitting diode (OLED) intermediate**

Annual Capacity : **8 MT**

#### Disclaimer

Typical properties should not be considered as specification.  
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#### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced by changing product mix.

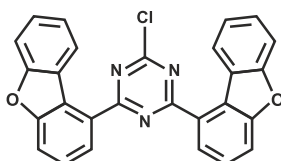
# TRIAZINE PRODUCTS

## ELECTRONIC INDUSTRY

### 16 STELLAR-2048 : 2-Chloro-4,6-bis(1-dibenzofuranyl)1,3,5-triazine

Under Development

Product Code : **011329**  
 CAS No : **2392930-05-9**  
 Molecular formula : **C<sub>27</sub>H<sub>14</sub>ClN<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **447.87**



#### Typical Properties

Physical Appearance : **White To Off White Powder**  
 Purity (HPLC) : **NLT 99%**

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

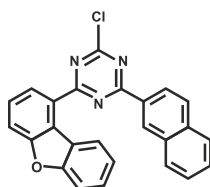
Application : **It is use as Organic Light emitting diode (OLED) intermediate**

Annual Capacity : **10 MT**

### 17 STELLAR-2049 : 2-Chloro-4-(dibenzofuran-1-yl)-6-(naphthalen-2-yl)-1,3,5-triazine

Under Development

Product Code : **011330**  
 CAS No : **2418528-30-8**  
 Molecular formula : **C<sub>25</sub>H<sub>14</sub>ClN<sub>3</sub>O**  
 Molecular weight : **407.85**



#### Typical Properties

Physical Appearance : **White To Off White Powder**  
 Purity (HPLC) : **NLT 99%**

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

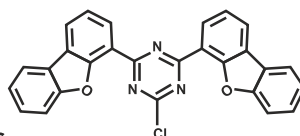
Application : **It is use as Organic Light emitting diode (OLED) intermediate**

Annual Capacity : **12 MT**

### 18 STELLAR-2050 : 2-Chloro-4,6-bis(dibenzo[b,d]furan-4-yl)-1,3,5-triazine

Under Development

Product Code : **011333**  
 CAS No : **1699739-83-7**  
 Molecular formula : **C<sub>27</sub>H<sub>14</sub>ClN<sub>3</sub>O<sub>2</sub>**  
 Molecular weight : **447.87**



#### Typical Properties

Physical Appearance : **White to Off White Powder**  
 Purity (HPLC) : **NLT 99%**

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

Application : **It is use as Organic Light emitting diode (OLED) intermediate**

Annual Capacity : **10 MT**

#### Disclaimer

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#### Annual Capacity

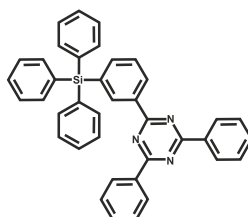
Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# TRIAZINE PRODUCTS ELECTRONIC INDUSTRY

## 19 STELLAR-2051 : 2,4-Diphenyl-6-(3-(triphenylsilyl)phenyl)-1,3,5-triazine

Under Development

Product Code : **011337**  
 CAS No : **2254737-32-9**  
 Molecular formula : **C<sub>39</sub>H<sub>29</sub>N<sub>3</sub>Si**  
 Molecular weight : **567.75**



### Typical Properties

Physical Appearance : **White to Off White Powder**  
 Purity (HPLC) : **NLT 99%**

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

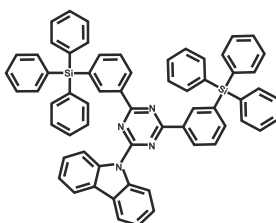
Application : **It is use as Organic Light emitting  
 diode (OLED) intermediate**

Annual Capacity : **20 MT**

## 20 STELLAR-2052 : 9-[4,6-Bis[3-(triphenylsilyl)phenyl]-1,3,5-triazin-2-yl]-9h-carbazole

Under Development

Product Code : **011366**  
 CAS No : **2422045-57-4**  
 Molecular formula : **C<sub>63</sub>H<sub>46</sub>N<sub>4</sub>Si<sub>2</sub>**  
 Molecular weight : **915.24**



### Typical Properties

Physical Appearance : **White to Off White Powder**  
 Purity (HPLC) : **NLT 99%**

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

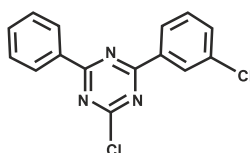
Application : **It is use as Organic Light emitting  
 diode (OLED) intermediate**

Annual Capacity : **15 MT**

## 21 STELLAR-2053 : 2-Chloro-4-(3-chloro-phenyl)-6-phenyl-[1,3,5]triazine

Under Development

Product Code : **011332**  
 CAS No : **2125473-29-0**  
 Molecular formula : **C<sub>15</sub>H<sub>9</sub>Cl<sub>2</sub>N<sub>3</sub>**  
 Molecular weight : **302.16**



### Typical Properties

Physical Appearance : **White to Off White Powder**  
 Purity (HPLC) : **NLT 99%**

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

Application : **It is use as Organic Light emitting  
 diode (OLED) intermediate**

Annual Capacity : **10 MT**

### Disclaimer

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### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced  
 by changing product mix.

# AGROCHEMICALS INDUSTRY

PRODUCTS

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GROWING STRONGER



# TRIAZINE PRODUCTS

## AGROCHEMICALS INDUSTRY

### 01 APPOLO-577 : 2,4-Bis(trichloromethyl)-6-methyl-1,3,5-triazine

Product Code : **001329**

CAS No : **949-42-8**

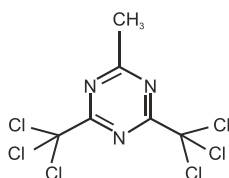
Molecular formula : **C<sub>6</sub>H<sub>3</sub>Cl<sub>6</sub>N<sub>3</sub>**

Molecular weight : **329.81**

Safety &

Transit hazards : **Non Hazardous Substance**

Application : **Used in agrochemicals industries**



#### Typical Properties

Physical Appearance : **Off white powder**

Melting Point : **94-98°C**

Purity (GC) : **NLT 97%**

Moisture (KF) : **NMT 0.5%**

Annual Capacity : **30 MT**



#### Disclaimer

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#### Annual Capacity

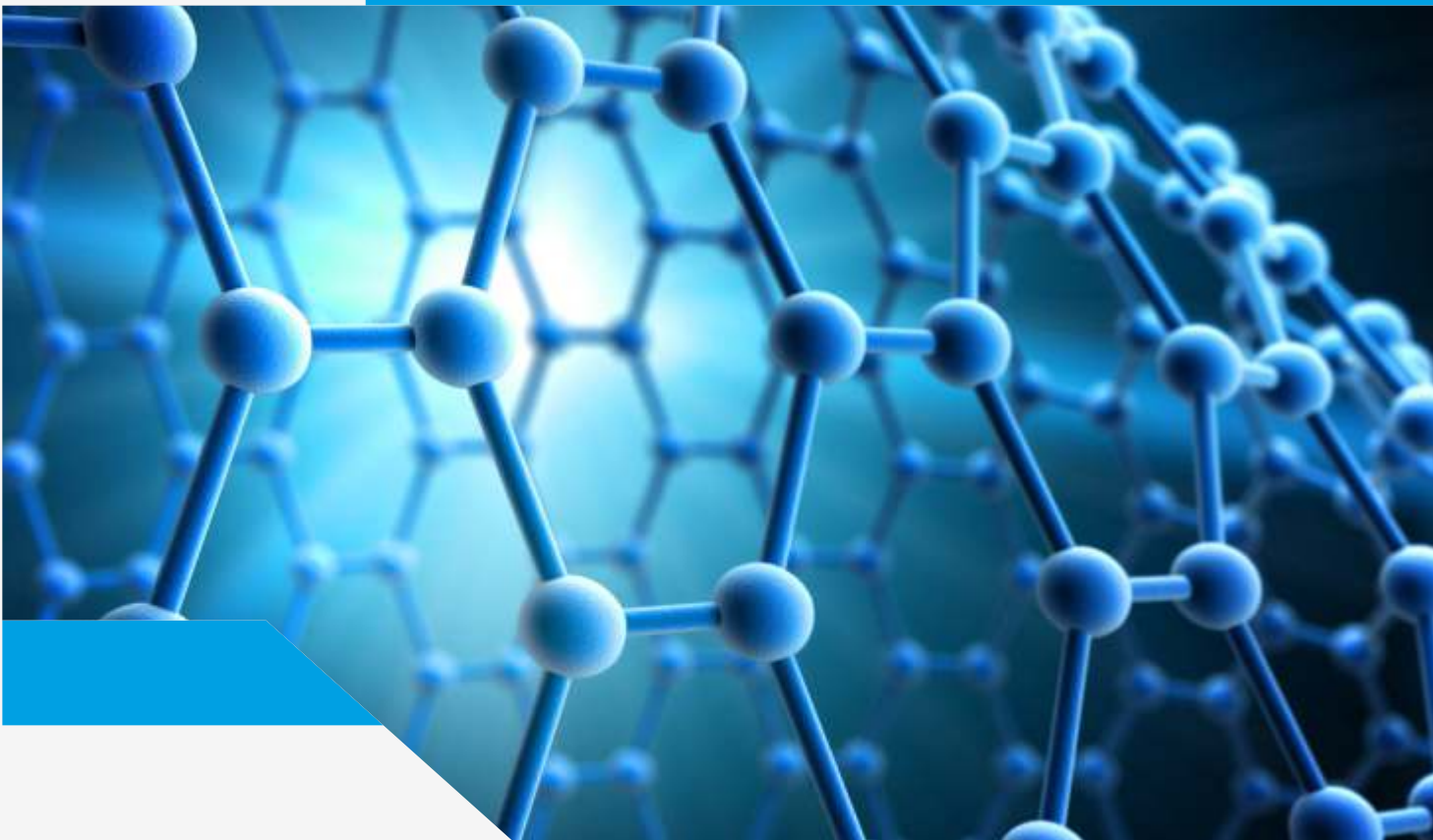
Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# OTHERS INDUSTRY

PRODUCTS

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FUELING INNOVATION ACROSS INDUSTRIES,  
FROM AGRICULTURE TO CONSTRUCTION  
AND BEYOND



# TRIAZINE PRODUCTS OTHERS

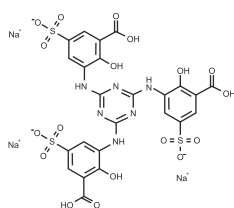
01

## APPOLO-30 CH : Trisodium,3-[[4,6-bis(3-carboxy-2-hydroxy-5-sulfonatoanilino)-1,3,5-triazin-2-yl]amino]-5-carboxy-4-hydroxybenzenesulfonate

Product Code : **010593**  
 CAS No : **79135-90-3**  
 Molecular formula : **C<sub>24</sub>H<sub>15</sub>N<sub>6</sub>Na<sub>3</sub>O<sub>18</sub>S<sub>3</sub>**  
 Molecular weight : **840.56**

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

Application : **Used for the manufacture of: fabricated metal products, electrical, electronic and optical equipment, machinery and vehicles and furniture**



### Typical Properties

Physical Appearance : **Light brown powder**  
 Form : **Solid powder**

**Under Development**

Annual Capacity : **50 MT**



#### Disclaimer

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#### Annual Capacity

Annual capacity mentioned is indicative and can be enhanced by changing product mix.

# THANK YOU

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## CERTIFICATES OF ACCREDITATION



ISO  
45001:2018



ISO  
14001:2015



ISO  
9001:2015



TWO STAR  
EXPORT HOUSE



ECOVADIS  
GOLD STAR



UN GLOBAL  
COMPACT

Name: TP01  
Version: 0003  
Date: 04.04.24



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