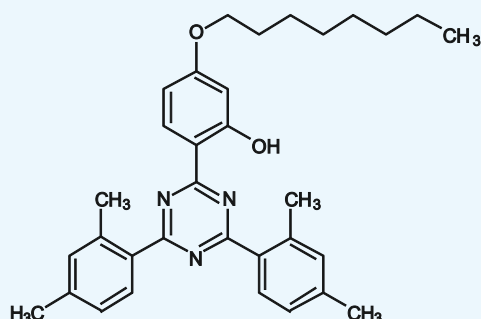


Sarex Overseas (A division of Saraf Chemicals Pvt. Ltd.)

Corporate Office: 501, Waterford, C Wing, C. D. Barfiwala Marg, Juhu Lane, Andheri (W), Mumbai - 400 058, India.
Phone: +91(22) 6128 5566 / 4218 4218, Fax: +91(22) 4218 4350.
Web: www.sarex.com • Email: fchem@sarex.com

APPOLO-1164

1. STRUCTURE



2. PRODUCT NAME & DETAILS

2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-n-octyloxyphenyl)-1,3,5-triazine (Appolo-1164)

Product Code	: 001305
CAS No.	: 2725-22-6
HS Code	: 2933.69.90
Molecular formula	: C ₃₃ H ₃₉ N ₃ O ₂
Molecular weight	: 509.68

3. REGULATORY INFORMATION

Chemical name	Common names and synonyms	CAS number	EC number
2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-n-octyloxyphenyl)-1,3,5-triazine	2,4-Bis(2,4-dimethylphenyl)-6-(2-hydroxy-4-n-octyloxyphenyl)-1,3,5-triazine	2725-22-6	412-440-4
European Inventory of Existing Commercial Chemical Substances (EINECS)		Not Listed	
EC Inventory		Listed	
United States Toxic Substances Control Act (TSCA) Inventory		Listed	
China Catalog of Hazardous chemicals 2015		Not Listed	
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)		Listed	
Korea Existing Chemicals List (KECL)		Listed	
Canadian Domestic Substance List (DSL)		Listed	
Canadian Non-Domestic Substance List (NDSL)		Not Listed	
Japanese Existing and New Chemical Substances Inventory (ENCS)		Listed	

4. SPECIFICATION

Physical Appearance	: Off White to Yellowish Powder
Identity HPLC	: Identical
Solubility (5% In Toluene)	: Clear Light Yellow Solution
Melting Point	: 90.0 to 92.0°C
Transmittance (%) 460 NM	: NLT 90.0%
Transmittance (%) 500 NM	: NLT 95.0%

Disclaimer

Typical properties should not be considered as specification.
Product covered by valid patents are not offered or supplied for commercial use. The Patent position should be verified by the customer.
Products will not be supplied to countries where they could be in conflict with existing patents.
Products currently covered by valid US patents are offered for R&D use in accordance with 35 USC 271 (e) (I)
Above information is given in good faith and without warranty.



Sarex Overseas (A division of Saraf Chemicals Pvt. Ltd.)

Corporate Office: 501, Waterford, C Wing, C. D. Barfiwala Marg, Juhu Lane, Andheri (W), Mumbai - 400 058, India.
Phone: +91(22) 6128 5566 / 4218 4218, Fax: +91(22) 4218 4350.
Web: www.sarex.com • Email: fchem@sarex.com

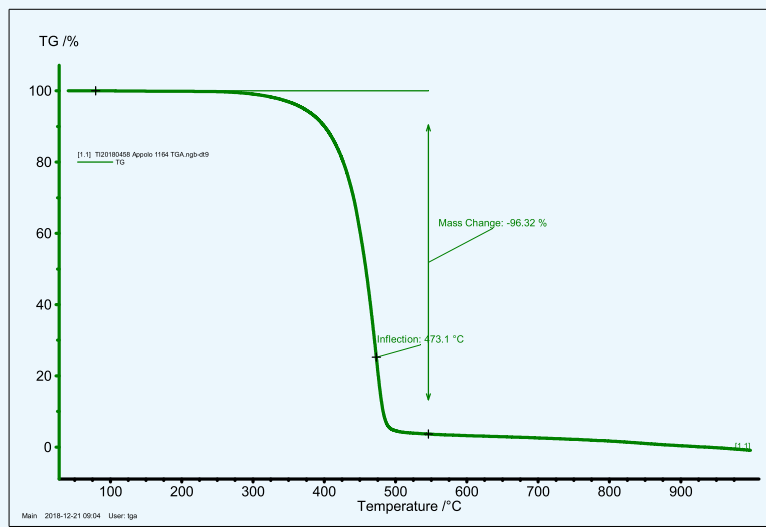
APPOLO-1164

4. SPECIFICATION

Volatiles	: NMT 0.50%
Purity By HPLC	: NLT 99.0%

5. ANGLE OF REPOSE : 48.6°

6. TGA CURVE

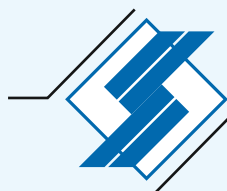


7. APPLICATION

- UV Absorber 1164 is widely used as a light stabilizer (UV-absorber) for all kinds of polymers.
- Polymers are predominantly polyolefins, styrenics, ABS, polyamides, polyesters and polyacrylates. Can also be used in PVC, PUR, rubbers, a.o.
- It shows excellent compatibility with other stabilizer chemistries.
- Used in products to protect them from long-term degradation from the effects of UV exposure.
- Minimal color contribution.
- It also show low interaction with metals. UV 1164 has a very low volatility.
- **Main applications are:** Greenhouse films, Industrial films, PP and PE thick cross sections articles used in construction. Polyethylene sheets used for agriculture / Greenhouse films. It easily substitutes all benzotriazole and benzophenone based UV absorbers.

Disclaimer

Typical properties should not be considered as specification.
Product covered by valid patents are not offered or supplied for commercial use. The Patent position should be verified by the customer.
Products will not be supplied to countries where they could be in conflict with existing patents.
Products currently covered by valid US patents are offered for R&D use in accordance with 35 USC 271 (e) (I)
Above information is given in good faith and without warranty.

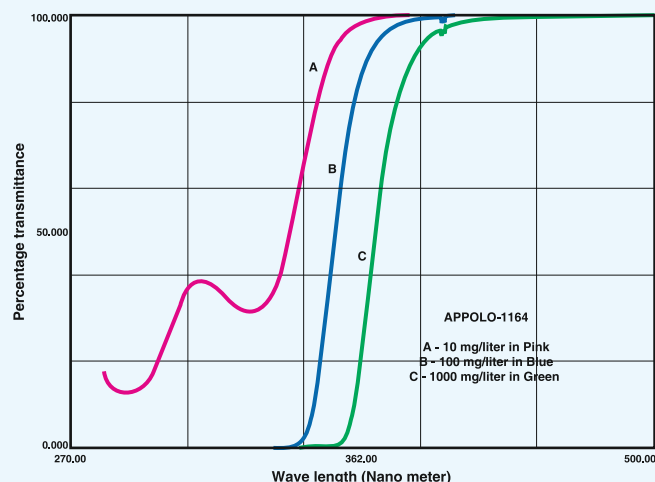


Sarex Overseas (A division of Saraf Chemicals Pvt. Ltd.)

Corporate Office: 501, Waterford, C Wing, C. D. Barfiwala Marg, Juhu Lane, Andheri (W), Mumbai - 400 058, India.
Phone: +91(22) 6128 5566 / 4218 4218, Fax: +91(22) 4218 4350.
Web: www.sarex.com • Email: fchem@sarex.com

APPOLO-1164

8. APPOLO-1164 : SPECTRAL TRANSMISSION



9. FOOD APPROVAL STATUS (FOR PLASTIC COMING IN CONTACT WITH FOOD) CAS NO.2725-22-6 HAS USA (FDA), EUROPE, JAPAN APPROVAL.

I. In USA according to FDA 21 CFR part section 178.2010

- A.** At levels not to exceed 0.3 percent by weight of olefin polymers complying with 177.1520(c) of this chapter in contact with food types I, II, IV-B, VI, VII-B, and VIII described in 176.170(c) of this chapter, table 1, under conditions of use D through G as described in 176.170(c), table 2, of this chapter.
- B.** At levels not to exceed 0.1 percent by weight of polypropylene complying with 177.1520(c) of this chapter, items 1.1a, 1.2, and 1.3 in contact with food under conditions of use A through H as described in 176.170(c), table 2, of this chapter.
- C.** At levels not to exceed 0.04 percent by weight of polyethylene and olefin copolymers complying with 177.1520(c) of this chapter, items 2.1, 2.2, 2.3, 3.1a, 3.1b, 3.1c, 3.2a, and 3.2b having a minimum density of 0.94 gram per cubic centimeter, in contact with food under conditions of use A through H as described in 176.170, table 2, of this chapter provided that the finished articles used in contact with fatty food types III, IV-A, V, VII-A, and IX as described in table 1 of 176.170(c) of this chapter hold a minimum of 2 gallons (7.6 liters) of food.
- D.** At levels not to exceed 0.4 percent by weight of ethylene copolymers complying with 177.1520(c) of this chapter, items 3.1a, 3.1b, 3.1c, 3.2a, and 3.2b, having a density of less than 0.94 gram per cubic centimeter, in contact with food under conditions of use B through H, as described in 176.170(c), table 2, of this chapter provided that the finished articles used in contact with fatty food types III, IV-A, V, VII-A, and IX hold a minimum of 5 gallons (18.9 liters) of food.
- E.** At levels not to exceed 0.04 percent by weight of polyethylene having a density of less than 0.94 gram per cubic centimeter, and olefin polymers complying with 177.1520(c) of this chapter, items 2.1, 2.2, 2.3, 3.3a, 3.3b, 3.4, 3.5, 3.6, 4, 5, and 6, in contact with food under conditions of use D through G as described in 176.170(c) of this chapter, table 2, provided that the finished articles used in contact with fatty food types III, IV-A, V, VII-A, and IX hold a minimum of 5 gallons (18.9 liters) of food.

Disclaimer

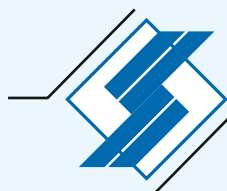
Typical properties should not be considered as specification.

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

Products will not be supplied to countries where they could be in conflict with existing patents.

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

Above information is given in good faith and without warranty.



Sarex Overseas (A division of Saraf Chemicals Pvt. Ltd.)

Corporate Office: 501, Waterford, C Wing, C. D. Barfiwala Marg, Juhu Lane, Andheri (W), Mumbai - 400 058, India.
Phone: +91(22) 6128 5566 / 4218 4218, Fax: +91(22) 4218 4350.
Web: www.sarex.com • Email: fchem@sarex.com

APPOLO-1164

9. FOOD APPROVAL STATUS (FOR PLASTIC COMING IN CONTACT WITH FOOD) CAS NO.2725-22-6 HAS USA (FDA), EUROPE, JAPAN APPROVAL.

II. Europe Approval

A. Appolo-1164 with CAS no. 2725-22-6 is registered under Ref. no. 38885 and has a SML=5 mg/kg.

III. Food Contact Positive Lists of substances allowed for use in food contact materials (FCMs) by Japan's Ministry of Health, Labour and Welfare (MHLW) issued on April 28th, 2020 and effective on June 1st, 2020

Appolo-1164 with CAS No 2725-22-6 is listed in Positive List of Additives, coatings etc. (Table 2) with below information on the restriction of use by synthetic resin category under Ref. no 315 & Sr. No. 1185.

Use Limit by Synthetic Resin Group 2, Group 3, Group 5, Group 6 with each 0.3%

- A. Not allowed to be used in the parts coming into contact with fat/oil and fatty/oily food.
- B. Not allowed to be used in the parts coming into contact with food at over 100°C.

10. HAZARD CLASSIFICATION : Non Hazardous material.



Irritant

11. ANNUAL CAPACITY : 250 MT.

12. STORAGE CONDITION : Stored in closed container at ambient temperature. Avoid direct sunlight.

13. PACKING DETAILS : Corrugated Boxes (7 Ply)

Net Quantity per Box = 15 Kgs
Inner Packing double plastic liner inside
Boxes can be placed on wooden pallet (ISPM 15) in 4tier
9 Boxes in one tier x 4 tier = 36 Boxes
Total quantity per pallet = 36 X 15kg = 540 Kgs
540 kgs X 4 pallets = 2160 kgs

14. SHELF LIFE : 3 years.

Disclaimer

Typical properties should not be considered as specification.
Product covered by valid patents are not offered or supplied for commercial use. The Patent position should be verified by the customer.
Products will not be supplied to countries where they could be in conflict with existing patents.
Products currently covered by valid US patents are offered for R&D use in accordance with 35 USC 271 (e) (I)
Above information is given in good faith and without warranty.