

<b>POLYMER</b>	<b>ANTIOXIDANT PRIMARY</b>
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<b>AO 1076</b>	<b>Technical Datasheet</b>
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**Product Information:** POLYMER ADD-AO 1076 is sterically hindered phenolic antioxidant. It is highly efficient, non discolouring stabilizer for organic substrates such as plastics, synthetic fibers, elastomers, adhesives, waxes, oils and fats. It protects these substrates against thermo-oxidative degradation. This antioxidant also provides good compatibility with resins and excellent extraction resistance.

Chemical Name	AO 1076		
Grade Name	AO 1076		
CAS No.	2082-79-3		
EINECS No.	218-216-0		
Molecular Formula	C35H62O3		
Synonyms	<ul style="list-style-type: none"> <li>Octadecyl-3-(3, 5-di-tert-butyl-4-hydroxyphenyl) Propionate</li> </ul>		
<b>TEST</b>	<b>SPECIFICATION</b>	<b>METHOD</b>	
Appearance	Form: Fine granules / powder Colour: White	Visual	
Purity	98 % Min.	By HPLC	
Melting Range	49 - 55 °C	Melting point apparatus (open capillary tube method)	
Volatile Content	0.5 % Max.	Oven drying	
Ash Content	0.5 % Max.	Open crucible	
Specific Gravity	1.02 g/cm3	Pycnometer	
Solubility at 20 °C	Solvent	Solubility ( gm/100ml )	Visual
	Acetone	19	
	Chloroform	57	
	Cyclohexane	40	
	Ethanol	1.5	
	Ethyl Acetate	38	
	Methanol	0.69	
	n-Hexane	32	
	Toluene	50	
	Water	< 0.01	

**Product Applications:**

1. POLYMER ADD-AO 1076 is applied in polyolefins such as polyethylene, polypropylene and polybutene as well as in other polymers such as engineering plastics, styrene homo- and copolymers, polyurethanes, elastomers, adhesives and other organic substrates.
2. It is high molecular weight phenolic antioxidant. It provides excellent stabilization in other polymers such as styrenics rubber modified styrenics including ABS, SAN and segmented block copolymers, saturated and unsaturated elastomers, PVC, urethane and acrylic coatings, adhesives and Petroleum products.
3. It is used in combinations with other secondary antioxidants to provide enhanced performance.

## Product Benefits:

1. POLYMER ADD-AO 1076 has good compatibility with most substrates, low volatility and high resistance to extraction.
2. It is easily incorporated by melting techniques due to its low melting point.
3. It is non-staining and non-discolouring.

**Product Dosage:** We strongly recommend testing of your own system under the actual conditions of processing and end-use prior to full scale testing. Exact loading must be determined by compositions of the specific polymer systems. In general the dosage recommended for long-term thermal stability in polymers is 500 – 2000 ppm. However individual dosage information is as follows.

Polymer Details	Suggested dosage
Acrylonitrile-butadiene-styrene copolymers ( ABS)	0.5 % Max.
Chlorinated isobutylene isoprene	0.025 % Max.
Ethylene-vinyl acetate copolymers	0.1 % Max.
Hot melt adhesives	0.2 - 1% Max.
Nitrile rubber-modified acrylonitrile-methyl acrylate copolymers	0.2 % Max.
Olefin Polymers	0.1 - 0.4 % Max.
Polycarbonate resins	0.1 % Max.
Polystyrene and rubber-modified polystyrene	0.25 % Max.
Rigid polyvinyl chloride	0.2 % Max.
Rubber articles	0.5 % Max.
Semi-rigid and rigid acrylic and modified acrylic plastics	0.01 - 0.25 % Max.
Styrene homo- and copolymers	0.3 % Max.
Synthetic tackifier resins	0.1 - 0.5%. Max.
Vinylidene chloride homopolymers and/or vinylidene chloride copolymers	0.2 % Max.
Semi-rigid and rigid vinyl chloride plastics modified with methacrylate butadiene-styrene copolymers	0.05 % Max.

## Product Handling & safety:

Please refer to our product MSDS for specific instructions on handling this product.



**Product Registration:** POLYMER ADD-AO 1076 is approved for use in food contact polymer as per the following chapter headings.

Title: 21 - Food And Drugs

Chapter: I - Food And Drug Administration, Department Of Health And Human Services

Subchapter: B - Food For Human Consumption

Part: 178 - Indirect Food Additives: Adjuvants, Production Aids, And Sanitizers

Subpart: C- Antioxidants And Stabilizers

Section: 178.2010 - Antioxidants And /Or Stabilizers For Polymers

## Product Disclaimer

**Important :** This statement supersedes any Buyers documents. Seller makes no representation, Warranty, Express or Implied, Including of Merchantability of Fitness for a particular use, or purpose.

No statement herein is to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seler be liable for incidental, consequential or indirect damanges for alleges negligence breach of warranty, strict liability, and tort or contact rising in connectoin with product(s). Buyers sole remedy and Sellers sole Liability for any claims shall be buyers purchase price. Data and results are based on controlled or lab work and must be confirmed by the buyer by testing for its indented conditions of use.

This product is not been tested for, and is therefore not recommended for, use for which prolonged contact with mucous membranes, abraded skin, or blood is intended, or fur use for which implantation within human body is intended.