

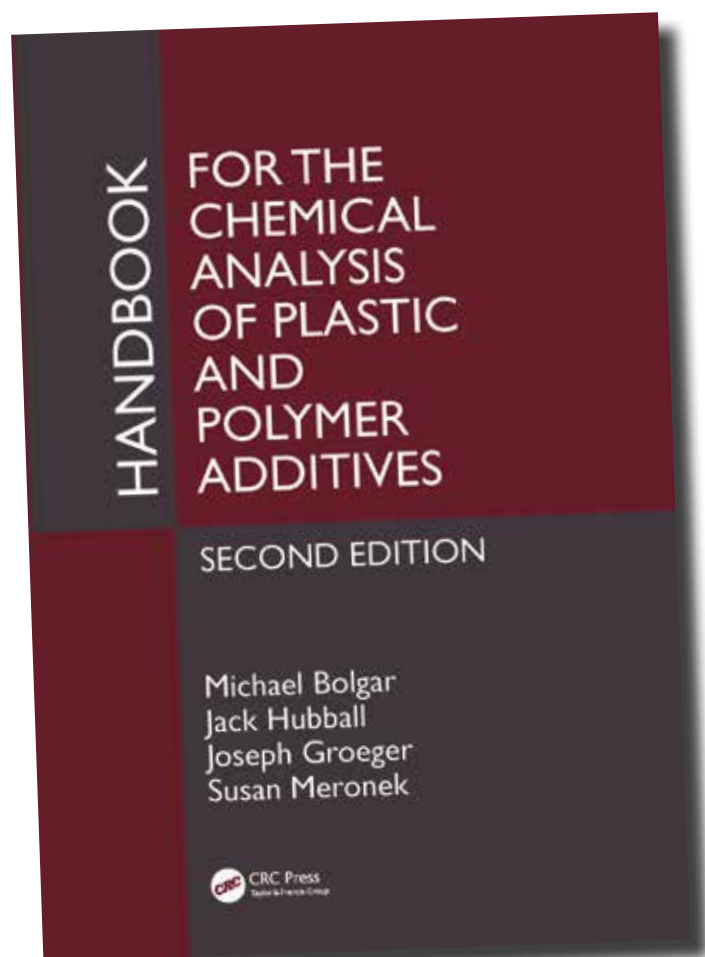
Plastic Additive Standards Guide



AccuStandard[®]

The perfect companion for your analysis!

This reference book contains the compounds in this catalog, with important reference data to aid in testing and compliance.



Each Compound has:

- **Chemical Information**
- Structure
- CAS Number (where applicable)
- RTECS Number (where available)
- Formula
- Molecular Weight
- IUPAC Name, other common names and some popular brand names
- **Physical Properties**
- Appearance
- Melting and Boiling Points
- Stability
- Solubilities in several common solvents
- **Other Important Information**
- Application
- Regulatory
- Environmental Impact
- Point of Release
- Toxicological Data
- **Analytical Data**
- Mass Spectrum with key Ions tabulated
- Chromatogram with conditions

As well as information to help with real world examples, tips for analysis in challenging matrices, and much, much more!

Handbook for the Chemical Analysis of Plastic and Polymer Additives, 2nd Ed.

The Second Edition of this handbook provides the necessary tools for chemists to obtain a more complete listing of additives present in a particular polymeric matrix. The 2015 edition features:

- Updated material to include the most recent additives available
- Contains actual analytical data for each chemical along with the description and methods used for obtaining the results
- Highlights the toxicological and environmental impact of each product
- Summarizes regulatory and health information in a convenient "one-step" format

With 50 additional compounds, this 2nd edition nearly doubles the number of additives in several categories including processing aids, anti-static compounds, mold release products, and blowing agents. It includes a listing that can be cross-referenced by trade name, chemical name, CAS number, and even key mass unit ions from the GC/MS run. Also includes new case studies related to "real-world" issues.

PolyAdd  Check™

Polymer Additive Reference Standards

74 New Plastic Additive Standards



Table of Contents

Introduction	
Accelerants	1
Antifoams	2
Antidegradants	2
Antioxidants	3-10
Antiozonates	11
Blowing Agents	12
Coupling Agents	12
Cross Linking Agents	13
Flame Retardants	14-16
Plasticizers	17-21
Bisphenol Analog Standard New	21
Processing Aids	22
Retarders	22-23
Stearates	23
UV Stabilizers	24-25
Vegetable Oils	25
Dyes & Breakdown Products	26
Deuterated Phthalates	27
Index	

AccuStandard has been serving the Analytical Community with high quality Chemical Reference Standards for over 25 years.

Today we are the largest independent manufacturer specializing exclusively in Chemical Reference Standards in the world. We achieved this distinction by concentrating on two goals: to have the widest range of Chemical Reference Standards (over 40,000 solutions and neat), and to have the most responsive customer service (same day shipment and knowledgeable assistance).

We also invite your suggestions for new products, special formulations and mixtures, and synthesis of new or rare compounds.

Introduction:

Plastics and other polymeric materials have become indispensable in our everyday lives. Although they offer many benefits, hazardous chemicals may be present in these materials. These hazardous materials can be introduced either intentionally as additives, or unintentionally as pollutants.

AccuStandard has collected or synthesized many of these polymer adjuncts and is pleased to present them in this newest unique catalog as certified reference standards for monitoring these chemicals.

The occurrence, toxicity and analytical methods used in the detection, monitoring (for both presence and levels) of these chemical classes and individual compounds within these classes are more thoroughly described in the book the "Handbook for the Chemical Analysis of Plastic and Polymer Additives" (published in 2007 by CRC Press). Both manufacturers and distributors of plastic and related polymeric materials will find the CRC book to be an authoritative source of information that compliments this catalog.

This catalog contains a comprehensive list of Certified Reference Materials for Additive Analysis available for analysis. Calibrating with certified standards adds an additional layer of confidence in the analysis that can aid in meeting regulations, protecting in challenges from governmental regulations, and providing protection from legal issues that could be raised by consumers of your products.

Below find a list of regulations that require analysis of many of these additives:

- EU Directive 2002/96/EC WEEE (Waste Electrical and Electronic Equipment) that establishes limits for the content of a product that must be recyclable or reusable.
- EU Directive 2003/11/EC ROHS (Restriction Of the use of certain Hazardous Substances) restricting the use of six toxins from most electronic and electrical equipment
- EU Directive 90/128/EC for monomers and additives for plastics intended for food contact
- EU Directive 2002/72/EC relating to plastic materials and articles intended to come in contact with foodstuffs
- EU Directive 2002/61/EC Aryl Amine Breakdown Products in Azo Dyes
- EU Directive 67/548/EEC Carcinogenic and Regulated Dyes
- FDA and The United States Code of Federal Regulations (CFR) – 21 CFR Parts 175-178 that regulate adhesives, components of coatings, paper and paperboard components, polymers and adjuvants and production aids.
- United States Environmental Protection Agency (USEPA) – Methods 606, 506-1 and 8061 regulating Phthalates and Adipates

Both the catalog and book are organized into classes by additive type. Manufacturers can easily find Standards that match their particular application and product formulation for the following product categories:

- Medical Devices
- Food Packaging
- Pharmaceutical Packaging
- Toys
- Wire and Cable
- etc.

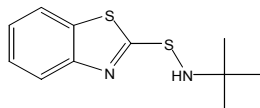
Plastic Additive Standards

Accelerants

Accelerators are additives that, as the name implies, accelerate or speed up the chemical reaction or the curing of the polymers into the final plastic. Accelerators are also sometimes called promoters. In rubbers, accelerators are used to increase the crosslinking reaction with sulfur in the vulcanization of rubber.

Accelerator BBTS

N-(1,1-dimethylethyl)-2-benzothiazolesulfenamide



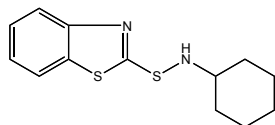
Akrochem Corporation

CAS 95-31-8 MF C₁₁H₁₄N₂S₂ MW 238.38

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AC-003S	1 mL
NEAT	PLAS-AC-003N	50 mg

Accelerator CBTS **NEW**

N-cyclohexyl-2-benzothiazole sulfenamide

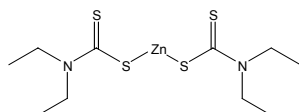


CAS 95-33-0 MF C₁₃H₁₆N₂S₂ MW 264.41

Matrix	Cat. No.	Unit
NEAT	PLAS-AC-007N	50 mg

Accelerator EZ & EZ-SP

Zinc diethyldithiocarbamate



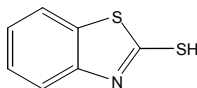
Akrochem Corporation

CAS 14324-55-1 MF C₁₀H₂₀N₂S₄ • Zn MW 361.93

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone 90:10	PLAS-AC-006S	1 mL
NEAT	PLAS-AC-006N	50 mg

Accelerator MBT, MBT/MG

2-Mercaptobenzothiazole



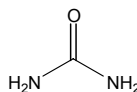
Akrochem Corporation

CAS 149-30-4 MF C₇H₅S₂N MW 167.25

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone 90:10	PLAS-AC-001S	1 mL
NEAT	PLAS-AC-001N	50 mg

Activator OT Urea

Urea



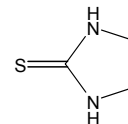
Akrochem Corporation

CAS 57-13-6 MF CH₄N₂O MW 60.07

Matrix	Cat. No.	Unit
1000 µg/mL in Acetone	PLAS-AC-005S-A	1 mL
NEAT	PLAS-AC-005N	50 mg

Akroform ETU-22 PM

Ethylene thiourea



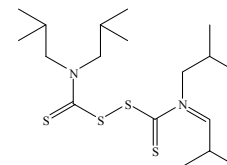
Akrochem Corporation

CAS 96-45-7 MF C₃H₆N₂S MW 102.11

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AC-002S	1 mL
NEAT	PLAS-AC-002N	50 mg

Cure-Rite® IBT

tetraisobutylthiuram disulfide



Noveon, Inc.

CAS 3064-73-1 MF C₁₈H₃₆N₂S₄ MW 408.76

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AC-004S	1 mL
NEAT	PLAS-AC-004N	50 mg

Property Key

CAS Chemical Abstract Service Number MF Molecular Formula MW Molecular Weight

Plastic Additive Standards

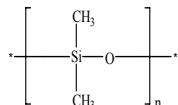
Antifoams

Antifoaming agents (sometimes called defoamers) act to stop foaming during processing. Foaming can cause both processing problems as well as weak spots in the final product.

Antifoaming agents typically work by reducing surface tension breaking up the foam. There are many different types of antifoaming agents such as silicones, polysiloxane oils, surfactants, or fatty acids.

SF100

Dimethyl silicone fluid



GE Silicons

CAS 9016-00-6 MF $(C_2H_6OSi)_n$ MW N/A

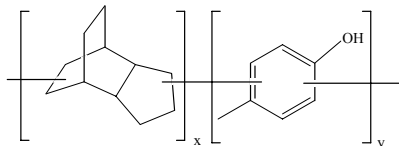
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AF-001S	1 mL
NEAT	PLAS-AF-001N	50 mg

Antidegradants

Antidegradants include a broad category of additives used in compounding to slow deterioration that can occur due to oxidation, ozone, light or any combination of these conditions. It is basically a generic term for additives that include antioxidants, antiozonants, and UV Stabilizers.

Akrochem Antiox 12

Butylated reaction product of p-cresol and dicyclopentadiene



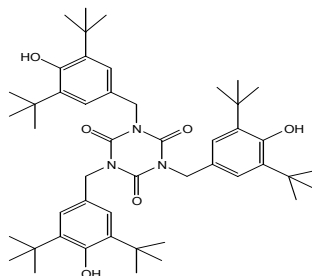
Goodyear Tire & Rubber Company

CAS 68610-51-5 MF $C_{11}H_{20}OH \cdot C_{12}H_{23}OH)_n C_4H_9$
MW 600-800

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone 80:20	PLAS-AD-001S	1 mL
NEAT	PLAS-AD-001N	50 mg

Ethanox® 314

1,3,5-Tris(3,5-di-tert-butyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione



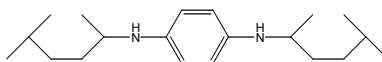
Akrochem Corporation

CAS 27676-62-6 MF $C_{48}H_{69}N_3O_6$ MW 784.08

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-084S	1 mL
NEAT	PLAS-AX-084N	50 mg

Santoflex® 77PD

N,N'-bis(1,4-Dimethylpentyl)-p-phenylenediamine



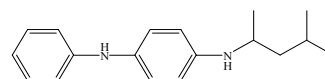
Flexsys

CAS 3081-14-9 MF $C_{20}H_{36}N_2$ MW 304.51

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AD-002S	1 mL
NEAT	PLAS-AD-002N	50 mg

Santoflex® IPPD

N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine



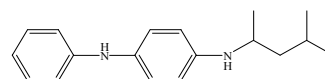
Flexsys

CAS 793-24-8 MF $C_{18}H_{24}N_2$ MW 268.40

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone 80:20	PLAS-AD-003S	1 mL
NEAT	PLAS-AD-003N	50 mg

Santoflex® 6PPD

N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine



Flexsys

CAS 793-24-8 MF $C_{18}H_{24}N_2$ MW 268.40

Matrix	Cat. No.	Unit
NEAT	PLAS-AD-004N	50 mg

Property Key

CAS	Chemical Abstract Service Number	MF	Molecular Formula
		MW	Molecular Weight

Plastic Additive Standards

Antioxidants

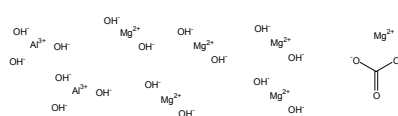
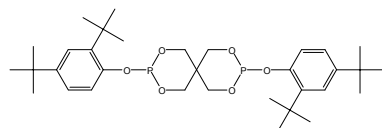
Oxidation during compounding or processing can cause problems such as: loss of strength, breakdown or discoloration. Oxidation can also occur in the final product causing discoloration, scratching, and loss of strength, flexibility, stiffness or gloss.

Antioxidants are used in most hydrocarbon polymers including polyethylene, polypropylene, polystyrene, and ABS.

Antioxidants work to slow down the oxidation cycle, usually by scavenging free radicals. Some types of antioxidants are: organophosphites, sterically hindered phenols, amines, and thioesters.

Alkanox® P27

bis(2,4-di-tert-butylphenyl)pentaerythritol diphosphate and magnesium aluminum hydroxy carbonate hydrate



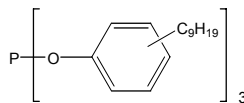
Chemtura Corporation

CAS 26741-53-7 / 11097-59-9 MF $C_{33}H_{50}O_6P_2 \cdot H_{16}Al_2Mg_6O_{19}$ MW N/A

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-032N	50 mg

Alkanox® TNPP

tris(mono-nonylphenyl) phosphite with up to 1% triisopropanol amine



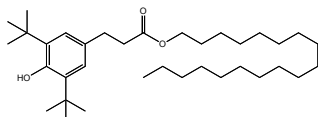
Chemtura Corporation

CAS 26523-78-4 MF $C_{45}H_{69}O_3P$ MW 689

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-077S	1 mL
NEAT	PLAS-AX-077N	50 mg

Alox® PP18 NEW

Octadecyl 3-(3,5-ditert-butyl-4-hydroxyphenyl)propanoate

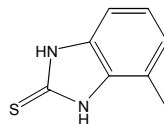


CAS 2082-79-3 MF $C_{35}H_{62}O_3$ MW 530.86

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-114N	50 mg

Antioxidant 60

2H-benzimidazole-2-thione, 1,3-di-hydro-4(or 5)-methyl



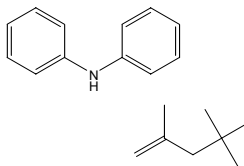
Akrochem Corporation

CAS 53988-10-6 MF $C_8H_8N_2S$ MW 164.23

Matrix	Cat. No.	Unit
1000 µg/mL in Methanol	PLAS-AX-019S-M	1 mL
NEAT	PLAS-AX-019N	50 mg

Antioxidant S

Benzenamine, N-phenyl, reaction products with 2,4,4-trimethylpentene



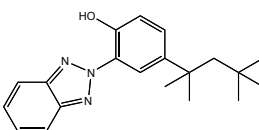
Akrochem Corporation

CAS 68411-46-1 MF $C_{12}H_{11}N \cdot C_8H_{16}$ MW 393.66

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-057S	1 mL
NEAT	PLAS-AX-057N	50 mg

2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol NEW

2-Hydroxy-5-tert-octylphenyl benzotriazole

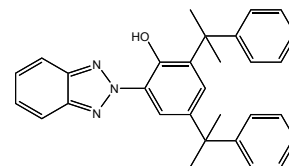


CAS 3147-75-9 MF $C_{20}H_{25}N_3O$ MW 323.43

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-094N	50 mg

BLS® 234 NEW

2-[2-Hydroxy-3,5-di-(1,1-dimethylbenzyl)]-2H-benzotriazole

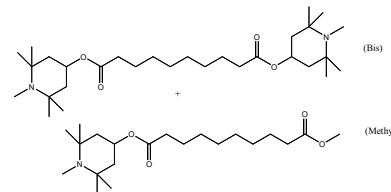


CAS 70321-86-7 MF $C_{30}H_{29}N_3O$ MW 447.57

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-088N	50 mg

BLS® 292 NEW

bis(1,2,2,6,6-pentamethyl-4-piperidiny)sebacate and Methyl(1,2,2,6,6-pentamethyl-4-piperidiny)sebacate

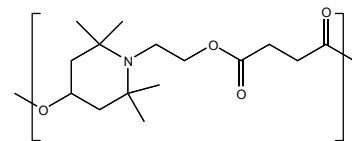


CAS 41556-26-7/8219-37-7 MF $C_{30}H_{56}N_2O_4 / C_{21}H_{39}NO_4$ MW 508.78/369.54

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-089N	50 mg

BLS® 1622 NEW

Dimethyl sebacate polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidine ethanol



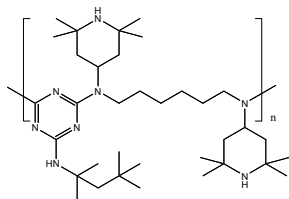
CAS 65447-77-0 MF $(C_{15}H_{25}NO_4)_n$ MW (283.35)_n

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-096N	50 mg

Antioxidants (continued)

BLS® 1944 NEW

Poly[[6-[(1,1,3,3-tetramethylbutyl)aminol]-s-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino] hexamethylene[(2,2,6,6-tetramethyl-4-piperidyl)imino]

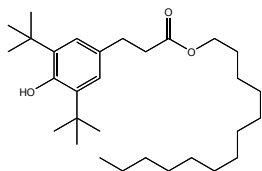


CAS 70624-18-9 MF $(C_{35}H_{66}N_8)_n$ MW (599.09)_n

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-090N	50 mg

BNX 1077 NEW

Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, isotridecyl ester

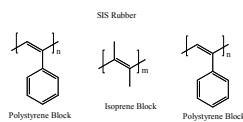
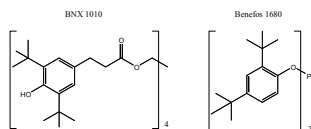


CAS 847488-62-4 MF $C_{30}H_{52}O_3$ MW 460.73

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-087N	50 mg

BNX 1225TPR NEW

Blend of BNX®1010, Benefos®1680 and SIS Block Copolymer

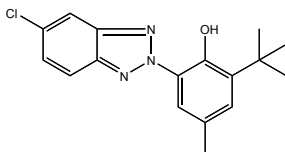


CAS 6683-19-8/31570-04-4/25038-32-8 MF N/A MW N/A

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-091N	50 mg

2-tert-Butyl-6-(5-chloro-2H-benzotriazol-2-yl)-4-methylphenol NEW

2-tert-butyl-6-(5-chlorobenzotriazol-2-yl)-4-methylphenol

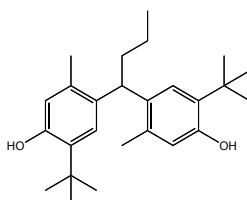


CAS 3896-11-5 MF $C_{17}H_{18}ClN_3O$ MW 315.80

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-093N	50 mg

4,4'-Butylidenebis(6-tert-butyl-m-cresol) NEW

6,6'-di-tert-butyl-4,4'-butylidene di-m-cresol

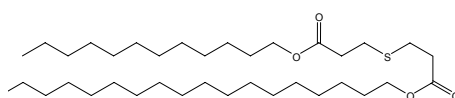


CAS 85-60-9 MF $C_{26}H_{38}O_2$ MW 382.58

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-105N	50 mg

Cyanox® 1212

lauryl stearylthiopropionate



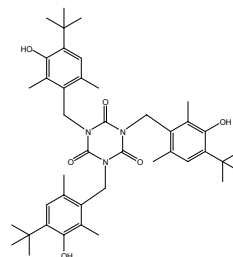
Cytec Technology

CAS 13103-52-1 MF $C_{36}H_{70}O_4S$ MW 599.00

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-047S	1 mL
NEAT	PLAS-AX-047N	50 mg

Cyanox® 1790

1,3,5-tris(4-tert-butyl-3-hydroxy-2,6-dimethylbenzyl)-1,3,5-triazine-2,4,6-(1h, 3h,5h)-trione



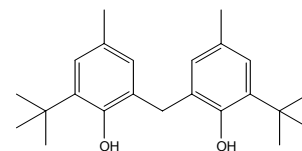
Cytec Technology

CAS 40601-76-1 MF $C_{42}H_{57}N_3O_6$ MW 699.92

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-005S	1 mL
NEAT	PLAS-AX-005N	50 mg

Cyanox® 2246

2,2'-methylene-bis-(4-methyl-6-tert-butyl-phenol)



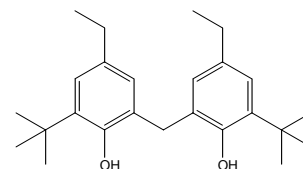
Cytec Technology

CAS 119-47-1 MF $C_{23}H_{32}O_2$ MW 340.55

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-013S	1 mL
NEAT	PLAS-AX-013N	50 mg

Cyanox® 425

2,2'-methylene-bis-(4-ethyl-6-tert-butyl-phenol)



Cytec Technology

CAS 88-24-4 MF $C_{25}H_{36}O_2$ MW 368.55

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-012S	1 mL
NEAT	PLAS-AX-012N	50 mg

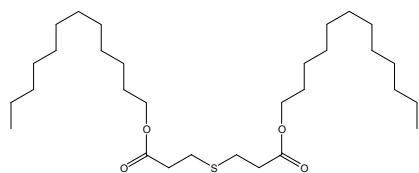
Property Key

CAS	Chemical Abstract Service Number	MF	Molecular Formula
		MW	Molecular Weight

Antioxidants (continued)

Cyanox® LTDP

dilaurylthiopropionate



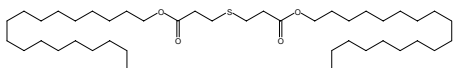
Cytec Technology

CAS 123-28-4 MF C₃₀H₅₈O₄S MW 514.85

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-041S	1 mL
NEAT	PLAS-AX-041N	50 mg

Cyanox® STDP

distearylthiopropionate

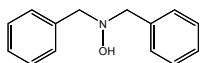


Cytec Technology

CAS 693-36-7 MF C₄₂H₈₂O₄S MW 683.3

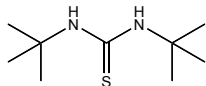
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-044S	1 mL
NEAT	PLAS-AX-044N	50 mg

Dibenzylhydroxylamine NEW

CAS 621-07-8 MF C₁₄H₁₅NO MW 213.28

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-092N	50 mg

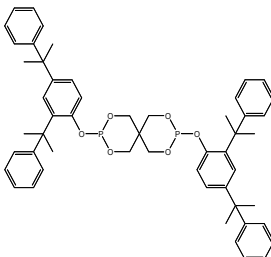
N,N'-Dibutylthiourea NEW

CAS 109-46-6 MF C₉H₂₀N₂S MW 188.33

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-102N	50 mg

3,9-bis(2,4-Dicumylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5,5]undecane NEW

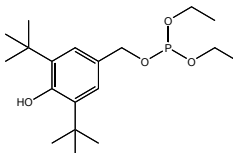
3,9-bis[2,4-bis(2-phenylpropan-2-yl)phenoxy]-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5,5]undecane

CAS 154862-43-8 MF C₅₃H₅₈O₆P₂ MW 852.97

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-111N	50 mg

Diethyl 3,5-Di-tert-butyl-4-hydroxybenzylphosphonate NEW

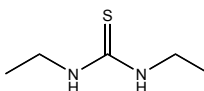
2,6-ditert-butyl-4-(diethoxyphosphorylmethyl)phenol

CAS 976-56-7 MF C₁₉H₃₃O₄P MW 356.44

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-110N	50 mg

N,N'-Diethylthiourea NEW

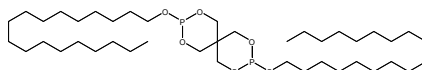
1,3-Diethyl-2-thiourea

CAS 105-55-5 MF C₅H₁₂N₂S MW 132.23

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-103N	50 mg

3,9-Bis(octadecyloxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane NEW

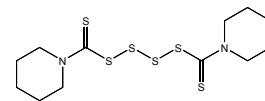
Distearyl pentaerythritol bis(phosphite)

CAS 3806-34-6 MF C₄₁H₈₂O₆P₂ MW 733.03

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-108N	50 mg

Dipentamethylenethiuram tetrasulfide NEW

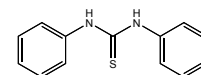
Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-

CAS 120-54-7 MF C₁₂H₂₀N₂S₆ MW 384.70

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-104N	50 mg

1,3-Diphenyl-2-thiourea NEW

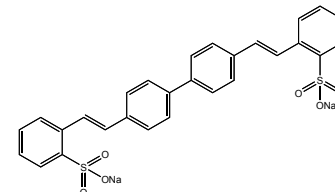
1,3-di(phenyl)thiourea

CAS 102-08-9 MF C₁₃H₁₂N₂S MW 228.31

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-100N	50 mg

Distyryl biphenyl NEW

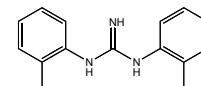
Disodium 4,4'-Bis(2-sulfonatostyryl)biphenyl

CAS 27344-41-8 MF C₂₈H₂₀Na₂O₆S₂ MW 562.57

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-099N	50 mg

1,3-Di-o-tolylguanidine NEW

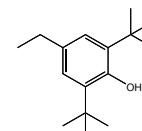
1,2-bis(2-methylphenyl)guanidine

CAS 97-39-2 MF C₁₅H₁₇N₃ MW 239.32

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-101N	50 mg

2,6-Di-tert-butyl-4-ethylphenol NEW

2,6-Bis(1,1-dimethylethyl)-4-ethylphenol

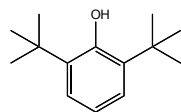
CAS 4130-42-1 MF C₁₆H₂₆O MW 234.38

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-107N	50 mg

Antioxidants (continued)

2,6-Di-tert-butylphenol **NEW**

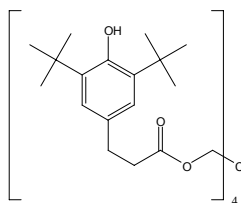
2,6-di-tert-butylphenol

CAS 128-39-2 MF C₁₄H₂₂O MW 206.32

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-112N	50 mg

Ethanox[®] 310

pentyritrithol tetrakis (3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)



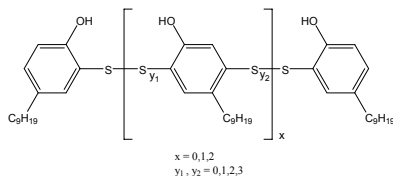
Albemarle Corporation

CAS 6683-19-8 MF C₇₃H₁₀₈O₁₂ MW 1177.65

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-086S	1 mL
NEAT	PLAS-AX-086N	50 mg

Ethanox[®] 323

nonylphenol disulfide oligomer



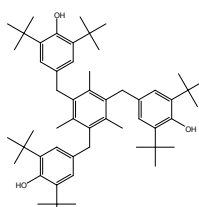
Albemarle Corporation

CAS MF MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-082S	1 mL
NEAT	PLAS-AX-082N	50 mg

Ethanox[®] 330

1,3,5-trimethyl-2,4,6-tris(3,5-di-tert-butyl-4-hydroxybenzyl) benzene



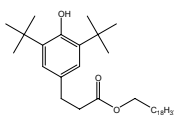
Albemarle Corporation

CAS 1709-70-2 MF C₅₄H₇₈O₃ MW 775.32

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-021S	1 mL
NEAT	PLAS-AX-021N	50 mg

Ethanox[®] 376

3,5-di-tert-butyl-4-hydroxyhydrocinnamic acid, octadecyl ester



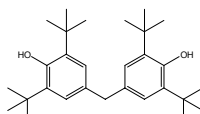
Albemarle Corporation

CAS 2082-79-3 MF C₃₅H₆₂O₃ MW 530.87

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-054S	1 mL
NEAT	PLAS-AX-054N	50 mg

Ethanox[®] 702

4,4'-methylene bis(2,6-di-tert-butylphenol)



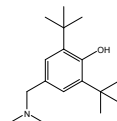
Albemarle Corporation

CAS 118-82-1 MF C₂₉H₄₄O₂ MW 424.66

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-025S	1 mL
NEAT	PLAS-AX-025N	50 mg

Ethanox[®] 703

2,6-di-tert-butyl-N,N-dimethylamino-p-cresol



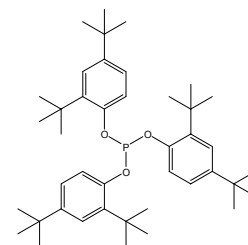
Albemarle Corporation

CAS 88-27-7 MF C₁₇H₂₉NO MW 263.42

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-085S	1 mL
NEAT	PLAS-AX-085N	50 mg

Ethaphos[®] 368

tris(2,4-di-tert-butylphenyl) phosphite



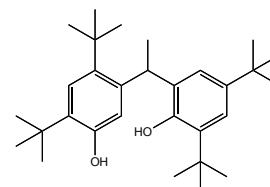
Albemarle Corporation

CAS 31570-04-4 MF C₄₂H₆₃O₃P MW 646.92

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-074S	1 mL
NEAT	PLAS-AX-074N	50 mg

2,2'-Ethylidene-bis(4,6-di-tert-butylphenol) **NEW**

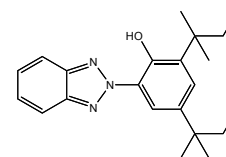
Phenol, 2,2'-ethylidenebis[4,6-bis(1,1-dimethylethyl)-

CAS 35958-30-6 MF C₃₀H₄₆O₂ MW 438.69

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-106N	50 mg

2-(2'-Hydroxy-3',5'-di-tert-amylphenyl) benzotriazole **NEW**

2-(benzotriazol-2-yl)-4,6-bis(2-methylbutan-2-yl) phenol

CAS 25973-55-1 MF C₂₂H₂₉N₃O MW 351.49

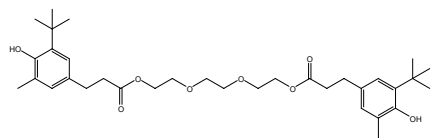
Matrix	Cat. No.	Unit
NEAT	PLAS-AX-095N	50 mg

Plastic Additive Standards

Antioxidants (continued)

Irganox® 245

triethyleneglycol bis[3-(3'-tert-butyl-4'-hydroxy-5'-methylphenol)propionate]



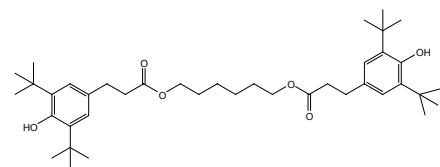
Ciba Specialty Chemicals

CAS 36443-68-2 MF C₃₄H₅₀O₈ MW 586.76

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-070S	1 mL
NEAT	PLAS-AX-070N	50 mg

Irganox® 259

hexamethylene bis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)



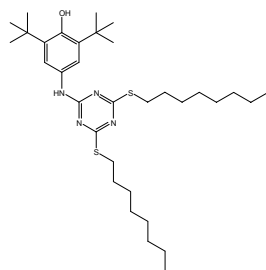
Ciba Specialty Chemicals

CAS 35074-77-2 MF C₄₀H₆₂O₆ MW 638.92

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-045S	1 mL
NEAT	PLAS-AX-045N	50 mg

Irganox® 565

2,4-bis(n-octylthio)-6-(4-hydroxy-3,5-di-tert-butylanilino)-1,3,5-triazine



Ciba Specialty Chemicals

CAS 991-84-4 MF C₃₃H₅₆N₄OS₂ MW 588.96

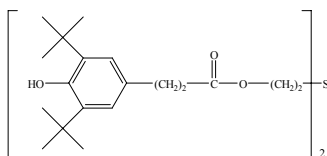
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-014S	1 mL
NEAT	PLAS-AX-014N	50 mg

Property Key

CAS	Chemical Abstract Service Number	MF	Molecular Formula
		MW	Molecular Weight

Irganox® 1035

thiodiethylene bis(3,5-di-tert-butyl-4-hydroxyhydrocinnamate)



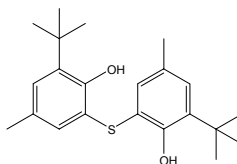
Ciba Specialty Chemicals

CAS 41484-35-9 MF C₃₈H₅₈O₆S MW 642.93

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-069S	1 mL
NEAT	PLAS-AX-069N	50 mg

Irganox® 1081

6,6'-di-tert-butyl-2,2'-thiodi-p-cresol



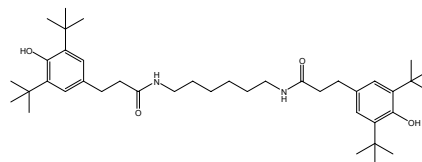
Ciba Specialty Chemicals

CAS 90-66-4 MF C₂₂H₃₀O₂S MW 358.54

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-080S	1 mL
NEAT	PLAS-AX-080N	50 mg

Irganox® 1098

N,N'-1,6-hexanedyl bis[3,5-bis(1,1-dimethylethyl)-4-hydroxy-benzenepropanamide]



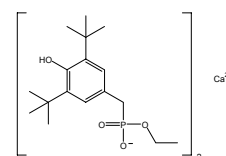
Ciba Specialty Chemicals

CAS 23128-74-7 MF C₄₀H₆₄N₂O₄ MW 636.95

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone 8:2	PLAS-AX-050S	1 mL
NEAT	PLAS-AX-050N	50 mg

Irganox® 1425 WL

ethyl 3,5-di-tert-butyl-4-hydroxybenzylphosphonate, calcium salt and polyethylene-wax mixture



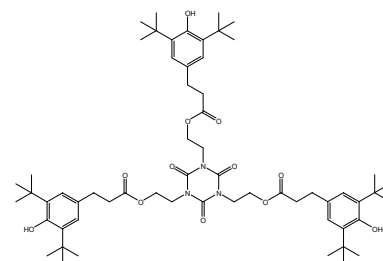
Ciba Specialty Chemicals

CAS 65140-91-2 / 9002-88-4 MF 2C₁₇H₂₉O₄P • Ca(C₂H₄)_x MW 695

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-079N	50 mg

Irganox® 3125

3,5-di-tert-butyl-4-hydroxyhydrocinnamic ester with 1,3,5-tris[2-hydroxyethyl]-s-triazine-2,4,6-[1H,3H,5H]-trione



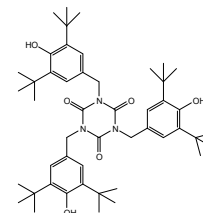
Ciba Specialty Chemicals

CAS 34137-09-2 MF C₆₀H₉₇N₃O₁₂ MW 1042.35

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone (95:5)	PLAS-AX-020S	1 mL
NEAT	PLAS-AX-020N	50 mg

Irganox® 3144 FF

1,3,5-Tris(3,5-di-tert-butyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione



Ciba Specialty Chemicals

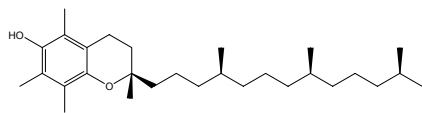
CAS 27676-62-6 MF C₄₈H₆₉N₃O₆ MW 784.08

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-078S	1 mL
NEAT	PLAS-AX-078N	50 mg

Antioxidants (continued)

Irganox® E 201

alpha-tocopherol



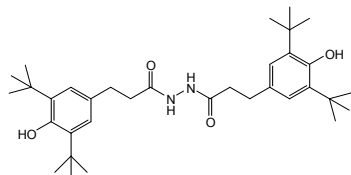
Ciba Specialty Chemicals

CAS 10191-41-0 MF C₂₉H₅₀O₂ MW 430.71

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-027S	1 mL
NEAT	PLAS-AX-027N	50 mg

Irganox® MD 1024

1,2-bis(3,5-di-tert-butyl-4-hydroxyhydrocinnamoyl)hydrazide



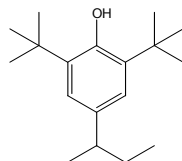
Ciba Specialty Chemicals

CAS 32687-78-8 MF C₃₄H₅₂N₂O₄ MW 552.79

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone 8:2	PLAS-AX-001S	1 mL
NEAT	PLAS-AX-001N	50 mg

Isonox® 132

2,6-di-tert-butyl-4-sec-butylphenol



SI Group Incorporated

CAS 17540-75-9 MF C₁₈H₃₀O MW 262.43

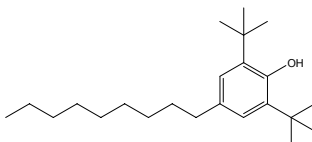
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-018S	1 mL
NEAT	PLAS-AX-018N	50 mg

Property Key

CAS	Chemical Abstract Service Number	MF	Molecular Formula	MW	Molecular Weight
-----	----------------------------------	----	-------------------	----	------------------

Isonox® 232

2,6-di-tert-butyl-4-nonylphenol



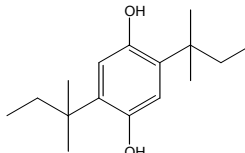
SI Group Incorporated

CAS 4306-88-1 MF C₂₃H₄₀O MW 262.43

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-063S	1 mL
NEAT	PLAS-AX-063N	50 mg

Lowinox® AH25

2,5-bis(1,1-dimethylpropyl)-1,4-benzenediol



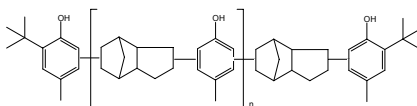
Chemtura Corporation

CAS 79-74-3 MF C₁₆H₂₆O₂ MW 250.38

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-016S	1 mL
NEAT	PLAS-AX-016N	50 mg

Lowinox® CPL

Polymeric sterically hindered phenol



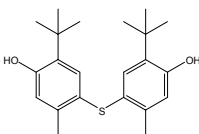
Chemtura Corporation

CAS 68610-51-5 MF MW 600-700

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-059S	1 mL
NEAT	PLAS-AX-059N	50 mg

Lowinox® TBM-6

4,4'-thiobis(2-tert-butyl-5-methylphenol)



Chemtura Corporation

CAS 96-69-5 MF C₂₂H₃₀O₂S MW 358.54

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone(9:1)	PLAS-AX-024S	1 mL
NEAT	PLAS-AX-024N	50 mg

Markstat® 60

Polyethylene glycol ether - contain < 20% sodium perchlorate

N/A

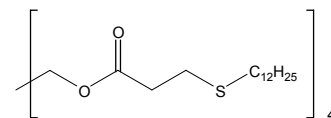
Chemtura Corporation

CAS N/A MF N/A MW N/A

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-028S	1 mL
NEAT	PLAS-AX-028N	50 mg

Naugard® 412S

beta-laurylthiopropionate



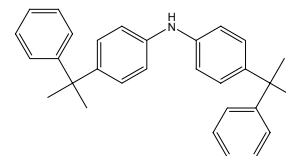
Chemtura Corporation

CAS 29598-76-3 MF C₆₅H₁₂₄O₈S₄ MW 1161.94

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-030S	1 mL
NEAT	PLAS-AX-030N	50 mg

Naugard® 445

4,4'-bis(alpha,alpha-dimethylbenzyl)diphenylamine



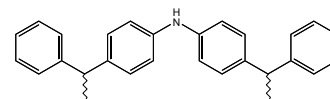
Chemtura Corporation

CAS 10081-67-1 MF C₃₀H₃₁N MW 405.57

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-022S	1 mL
NEAT	PLAS-AX-022N	50 mg

Naugard® 635 NEW

4-(1-phenylethyl)-N-[4-(1-phenylethyl)phenyl]aniline

CAS 68442-68-2 MF C₃₈H₂₇N MW 377.52

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-113N	50 mg

Plastic Additive Standards

Antioxidants (continued)

Naugard® 956

proprietary blend of primary and secondary antioxidants

N/A

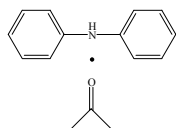
Chemtura Corporation

CAS MF MW

Matrix	Cat. No.	Unit
1000 µg/mL in Toluene	PLAS-AX-060S	1 mL
NEAT	PLAS-AX-060N	50 mg

Naugard® A

acetone diphenylamine condensation products



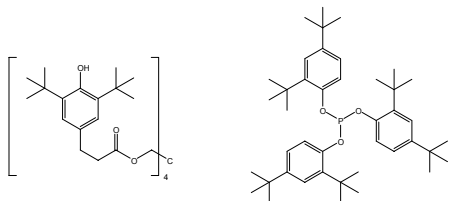
Chemtura Corporation

CAS 68412-48-6 MF C₁₂H₁₁N • C₃H₆O MW 227.31

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone (8:2)	PLAS-AX-026S	1 mL
NEAT	PLAS-AX-026N	50 mg

Naugard® B-25

1:1 blend of Naugard 10 & Naugard 424



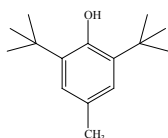
Chemtura Corporation

CAS 6683-19-8/31570-04-4 MF C₇₃H₁₀₈O₁₂ • C₄₂H₆₃O₃P MW 1177.65 / 646.92

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-061S	1 mL
NEAT	PLAS-AX-061N	50 mg

Naugard® BHT

2,6-di-tert-butyl-4-methylphenol



Chemtura Corporation

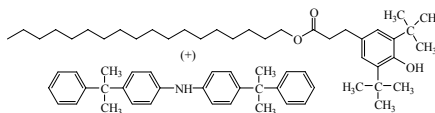
CAS 128-37-0 MF C₁₅H₂₄O MW 220.35

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-017S	1 mL
NEAT	PLAS-AX-017N	50 mg

www.bodanchimica.it

Naugard® HM-22

blend of phenolic primary and diphenylamine secondary antioxidants (Naugards 76 and 445)



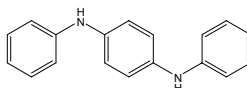
Chemtura Corporation

CAS 10081-67-1/2082-79-3 MF C₃₀H₃₁N / C₃₅H₆₂O₃ MW 405.57/530.86

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-033S	1 mL
NEAT	PLAS-AX-033N	50 mg

Naugard® J

N,N'-diphenyl-p-phenylenediamine



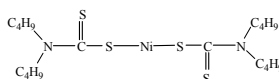
Chemtura Corporation

CAS 74-31-7 MF C₁₈H₁₆N₂ MW 260.36

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone(1:1)	PLAS-AX-048S	1 mL
NEAT	PLAS-AX-048N	50 mg

Naugard® NBC

nickel dibutyl dithiocarbamate



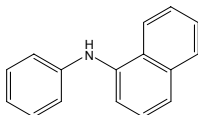
Chemtura Corporation

CAS 13927-77-0 MF C₁₈H₃₆N₂NiS₄ MW 467.45

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-051S	1 mL
NEAT	PLAS-AX-051N	50 mg

Naugard® PANA

N-phenyl-1-naphthylamine



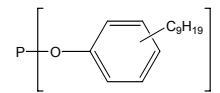
Chemtura Corporation

CAS 90-30-2 MF C₁₆H₁₃N MW 219.28

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-058S	1 mL
NEAT	PLAS-AX-058N	50 mg

Naugard® PHR

tris(mono-nonylphenyl) phosphite with up to 1% triisopropanol amine



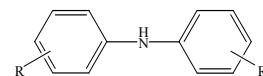
Chemtura Corporation

CAS 26523-78-4 MF C₄₅H₆₉O₃P MW 689.00

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-076S	1 mL
NEAT	PLAS-AX-076N	50 mg

Naugard® PS-30

Benzenamine, N-phenyl, reaction products with 2,4,4-trimethylpentene



Chemtura Corporation

CAS 68411-46-1 MF C₁₂H₁₁N • C₈H₁₆ MW N/A

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-038S	1 mL
NEAT	PLAS-AX-038N	50 mg

Naugard® PS-35

Butylated, octylated diphenylamine-2,6 di-tert-butyl-4-sec-butyl phenol

N/A

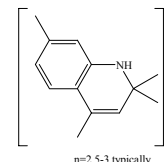
Chemtura Corporation

CAS N/A MF N/A MW N/A

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-046S	1 mL
NEAT	PLAS-AX-046N	50 mg

Naugard® Q Extra

1,2-dihydro-2,2,4-trimethylquinoline (polymerized)



Chemtura Corporation

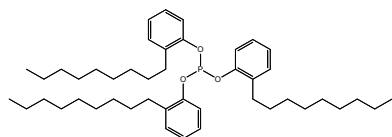
CAS 26780-96-1 MF (C₁₂H₁₅N)_n MW (173.25)_n

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-002S	1 mL
NEAT	PLAS-AX-002N	50 mg

Antioxidants (continued)

Naugard® RM-51

Tris(mono-nonylphenyl)phosphite, 2,2'-methylene bis(4-methylene bis(4-methyl-6-nonylphenol))



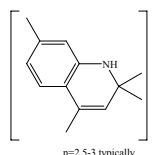
Chemtura Corporation

CAS 26523-78-4 MF C₄₅H₆₉C₃P MW 689.00

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-034S	1 mL
NEAT	PLAS-AX-034N	50 mg

Naugard® Super Q

1,2-dihydro-2,2,4-trimethylquinoline (polymerized)



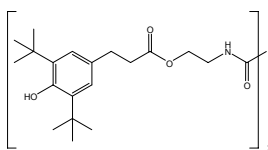
Chemtura Corporation

CAS 147-47-7 MF (C₁₂H₁₅N)_n MW (173.25)_n

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-003S	1 mL
NEAT	PLAS-AX-003N	50 mg

Naugard® XL-1

2,2'-oxamidobis[ethyl-3-(3,5-di-tert-butyl-4-hydroxy-phenyl)propionate]



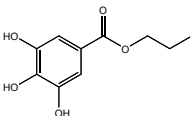
Chemtura Corporation

CAS 70331-94-1 MF C₄₀H₆₀N₂O₈ MW 697.00

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone 8:2	PLAS-AX-008S	1 mL
NEAT	PLAS-AX-008N	50 mg

Propyl gallate NEW

propyl 3,4,5-trihydroxybenzoate

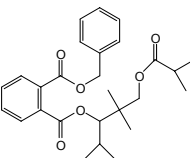


CAS 121-79-9 MF C₁₀H₁₂O₅ MW 212.20

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-109N	50 mg

Santicizer® 278

benzyl 3-isobutyroxy-1-isopropyl-2,2-dimethylpropyl phthalate



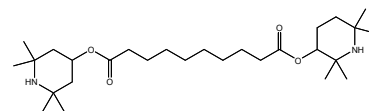
Chemtura Corporation

CAS 16883-83-3 MF C₂₇H₃₄O₆ MW 454.56

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-029S	1 mL
NEAT	PLAS-AX-029N	50 mg

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate NEW

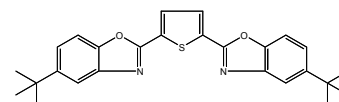
bis(2,2,6,6-tetramethylpiperidin-4-yl) decanedioate



CAS 52829-07-9 MF C₂₈H₅₂N₂O₄ MW 480.72

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-097N	50 mg

2,2'-(2,5-thiophenediyl)bis(5-tert-butylbenzoxazole) NEW

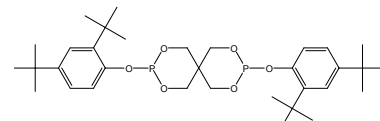


CAS 7128-64-5 MF C₂₆H₂₆N₂O₂S MW 430.56

Matrix	Cat. No.	Unit
NEAT	PLAS-AX-098N	50 mg

Ultrinox® 626

bis(2,4-di-tert-butylphenyl)pentaerythritol di-phosphite



Chemtura Corporation

CAS 26741-53-7 MF C₃₃H₅₀O₆P₂ MW 604.62

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AX-031S	1 mL
NEAT	PLAS-AX-031N	50 mg

Property Key

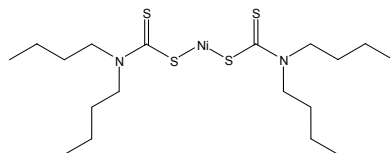
CAS Chemical Abstract Service Number MF Molecular Formula MW Molecular Weight

Antiozonants

Antiozonants are materials added to plastics to slow the deterioration of the finished product that occurs from exposure to ozone. Antiozonants typically work by migrating to the surface of the product and then create an ozone-impermeable barrier or skin on the surface.

Akrochem® NIBUD

nickel dibutyl dithiocarbamate



Akrochem Corporation

CAS 13927-77-0 MF C₁₈H₃₆N₂NiS₄ MW 467.45

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-AZ-001S	1 mL
NEAT	PLAS-AZ-001N	50 mg

Akrowax™ 195 NEW

A highly refined petroleum wax which is comprised of long chain saturated hydrocarbon molecules

CAS 121-79-9 MF N/A MW N/A

Matrix	Cat. No.	Unit
NEAT	PLAS-AZ-002N	50 mg

PolyAdd  **Check™**

Polymer Additive Reference Standards

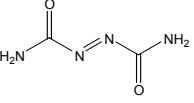
Plastic Additive Standards

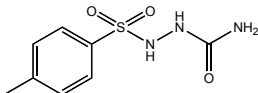
Blowing Agents

Blowing agents are sometimes also called chemical foaming agents. They are used to release gas into the plastic or resin. Blowing agents can be used to reduce weight, improve softness, provide insulation, add shock absorption properties or add resilience in the final product.

Chemical blowing agents (as opposed to physical blowing agents such as nitrogen gas) are principally organic chemicals that decompose at elevated temperatures to release a gas during decomposition that can add a cellular structure in the plastic.

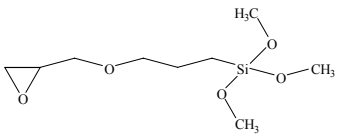
CPW-100		
chlorinated paraffin wax		
$\text{H}_3\text{C}-\left(\text{CHCl}\right)_n-\text{CH}_2-\text{CH}_3$		
Harwick Standard		
CAS 63449-39-8 MF Unspecified MW		
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-BA-001S	1 mL
NEAT	PLAS-BA-001N	50 mg

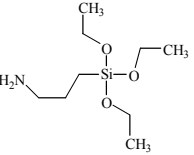
Celogen® AZ		
carbamoyliminourea		
		
Chemtura Corporation		
CAS 123-77-3 MF C ₂ H ₄ N ₄ O ₂ MW 116.08		
Matrix	Cat. No.	Unit
1000 µg/mL in DMSO	PLAS-BA-002-DMSO	1 mL
NEAT	PLAS-BA-002N	50 mg

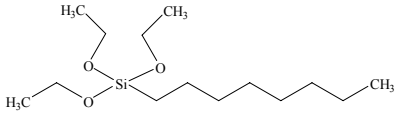
Celogen® RA NEW		
[(4-methylphenyl)sulfonylamino]urea		
		
CAS 10396-10-8 MF C ₈ H ₁₁ N ₃ O ₃ S MW 229.26		
Matrix	Cat. No.	Unit
NEAT	PLAS-BA-003N	50 mg

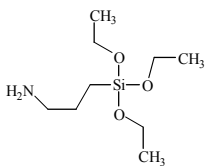
Coupling Agents

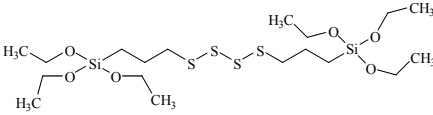
Coupling agents promote the physical or chemical interaction with the polymer.

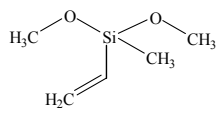
Silquest® A-187		
gamma-glycidoxypropyltrimethoxysilane		
		
Chemtura Corporation		
CAS 2530-83-8 MF C ₉ H ₂₀ O ₅ Si MW 236.38		
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CA-004S	1 mL
NEAT	PLAS-CA-004N	50 mg

Silquest® A-1102		
gamma-aminopropyltriethoxysilane (Tech grade)		
		
General Electric		
CAS 919-30-2 MF C ₉ H ₂₃ NO ₃ Si MW 221.37		
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CA-003S	1 mL
NEAT	PLAS-CA-003N	50 mg

Silquest® A-137		
octyltriethoxysilane		
		
General Electric		
CAS 2943-75-1 MF C ₁₄ H ₃₂ O ₃ Si MW 276.55		
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CA-005S	1 mL
NEAT	PLAS-CA-005N	50 mg

Silquest® A-1100		
gamma-aminopropyltriethoxysilane		
		
Chemtura Corporation		
CAS 919-30-2 MF C ₉ H ₂₃ NO ₃ Si MW 221.37		
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CA-002S	1 mL
NEAT	PLAS-CA-002N	50 mg

Silquest® A-1289		
bis-(triethoxysilylpropyl)tetrasulfane		
		
General Electric		
CAS 211519-85-6 MF C ₁₈ H ₄₂ O ₆ S ₄ Si ₂ MW 538.94		
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CA-001S	1 mL
NEAT	PLAS-CA-001N	50 mg

Silquest® A-2171		
vinylmethyltrimethoxysilane		
		
General Electric		
CAS 16753-62-1 MF C ₅ H ₁₂ O ₂ Si MW 132.24		
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CA-006S	1 mL
NEAT	PLAS-CA-006N	50 mg

Plastic Additive Standards

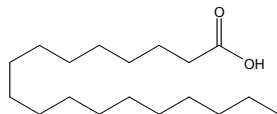
Cross-Linking Agents

Crosslinking is the polymerization reaction that branches out from the main molecular chain forming a network pattern of chemical bonds. Crosslinking agents enhance this crosslinking and bonding between polymer chains.

Crosslinking adds desirable properties such as: solidity, elasticity, impermeability to gases, and better electrical insulation. Crosslinking can also improve a rubber's resistance to chemicals, heat and abrasion.

F-300, F-1000, F-1500, F-2000, F-3000

stearic acid



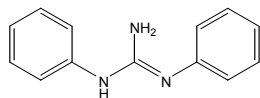
Harwick Standard

CAS 57-11-4 MF C₁₈H₃₆O₂ MW 284.48

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CL-006S	1 mL
NEAT	PLAS-CL-006N	50 mg

Perkacit® DPG

N,N'-diphenylguanidine



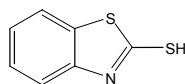
Akzo Nobel Chemicals B.V.

CAS 102-06-7 MF C₁₃H₁₃N₃ MW 211.27

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone(9:1)	PLAS-CL-004S	1 mL
NEAT	PLAS-CL-004N	50 mg

Perkacit® MBT

2-Mercaptobenzothiazole



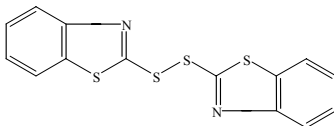
Akzo Nobel Chemicals B.V.

CAS 149-30-4 MF C₇H₅S₂N MW 167.25

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CL-002S	1 mL
NEAT	PLAS-CL-002N	50 mg

Perkacit® MBTS

2,2'-dithiobis(benzothiazole)



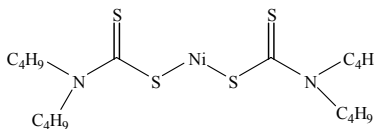
Akzo Nobel Chemicals B.V.

CAS 120-78-5 MF C₁₄H₈N₂S₄ MW 332.48

Matrix	Cat. No.	Unit
1000 µg/mL in Dichloromethane	PLAS-CL-001S-D	1 mL
NEAT	PLAS-CL-001N	50 mg

Perkacit® NDBC

nickel dibutyl dithiocarbamate



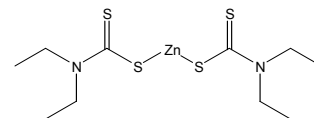
Akzo Nobel Chemicals B.V.

CAS 13927-77-0 MF C₁₈H₃₆N₂NiS₄ MW 467.45

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CL-005S	1 mL
NEAT	PLAS-CL-005N	50 mg

Perkacit® ZDEC

zinc diethyldithiocarbamate



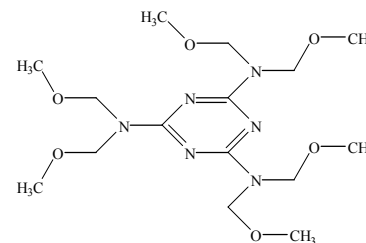
Akzo Nobel Chemicals B.V.

CAS 14324-55-1 MF C₁₀H₂₀N₂S₂Zn MW 361.9

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CL-007S	1 mL
NEAT	PLAS-CL-007N	50 mg

Resimene® 3520

hexamethoxy methyl melamine



Cytec Surface Specialties

CAS 3089-11-0 MF C₁₅H₃₀N₆O₆ MW 390.51

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-CL-003S	1 mL
NEAT	PLAS-CL-003N	50 mg

Property Key

CAS	Chemical Abstract Service Number	MF	Molecular Formula
		MW	Molecular Weight

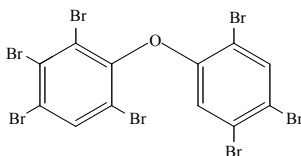
Flame Retardants

Flame retardants are added to inhibit ignition or the flammability of the end-use product. Flame retardants generally function by inhibiting the mechanisms of burning. Typical chemical elements found in compounds used as flame retardants are: aluminum, bromine, chlorine, fluorine and sulfur.

Brominated flame retardants commonly used in polystyrene, polyesters, polyolefins, polyamides, epoxies and ABS. Decabromodiphenyl oxide is the most frequently used brominated flame retardant. The bromodiphenyl ethers are the most highly regulated of these compounds, and AccuStandard offers the most complete line of individual congeners available anywhere.

Some of these flame retardants are not typically added to polymers in processing, but can be found in a polymer matrix from leaching out of the contents. The largest example of this type is the Aroclors, which can often be found in a plastic matrix from having been in contact with a fluid containing these materials.

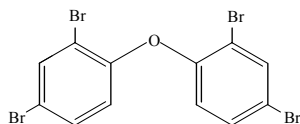
2,2',3,4,4',5',6-Heptabromodiphenyl ether



CAS 207122-16-5 MF C₁₂H₃Br₇O MW 722.48

Matrix	Cat. No.	Unit
50 µg/mL in Isooctane	BDE-183S	1 mL

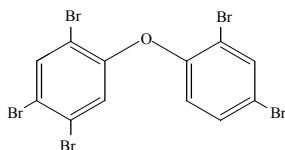
2,2',4,4'-Tetrabromodiphenyl ether



CAS 40088-47-9 MF C₁₂H₆Br₄O MW 485.82

Matrix	Cat. No.	Unit
50 µg/mL in Isooctane	BDE-047S	1 mL

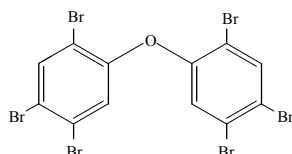
2,2',4,4',5-Pentabromodiphenyl ether



CAS 60348-60-9 MF C₁₂H₅Br₅O MW 564.69

Matrix	Cat. No.	Unit
50 µg/mL in Isooctane	BDE-099S	1 mL

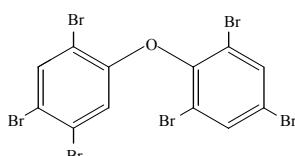
2,2',4,4',5,5'-Hexabromodiphenyl ether



CAS 36483-60-0 MF C₁₂H₄Br₆O MW 643.58

Matrix	Cat. No.	Unit
50 µg/mL in Isooctane	BDE-153S	1 mL

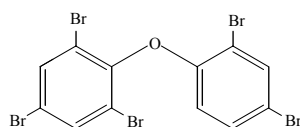
2,2',4,4',5,6'-Hexabromodiphenyl ether



CAS 207122-15-4 MF C₁₂H₄Br₆O MW 643.58

Matrix	Cat. No.	Unit
50 µg/mL in Isooctane	BDE-154S	1 mL

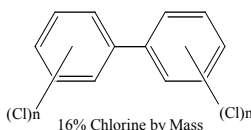
2,2',4,4',6-Pentabromodiphenyl ether



CAS 189084-64-8 MF C₁₂H₅Br₅O MW 564.69

Matrix	Cat. No.	Unit
50 µg/mL in Isooctane	BDE-100S	1 mL

Aroclor® 1016

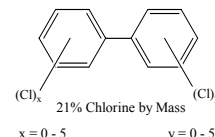


Monsanto

CAS 12674-11-2 MF Technical Mix MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-216S-H-10X	1 mL
NEAT	C-216N	100 mg

Aroclor® 1221

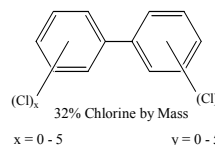


Monsanto

CAS 11104-28-2 MF Technical Mix MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-221S-H-10X	1 mL
NEAT	C-221N-50MG	50 mg

Aroclor® 1232

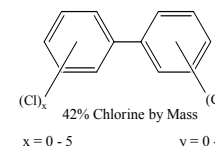


Monsanto

CAS 11141-16-5 MF Technical Mix MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-232S-H-10X	1 mL

Aroclor® 1242



Monsanto

CAS 53469-21-9 MF Technical Mix MW

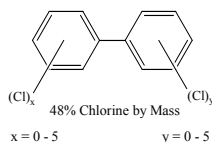
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-242S-H-10X	1 mL
NEAT	C-242N-50MG	50 mg

Property Key

CAS	Chemical Abstract Service Number	MF	Molecular Formula
		MW	Molecular Weight

Flame Retardants (continued)

Aroclor® 1248

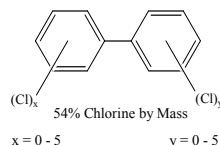


Monsanto

CAS 12672-29-6 MF Technical Mix MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-248S-H-10X	1 mL
NEAT	C-248N-50MG	50 mg

Aroclor® 1254



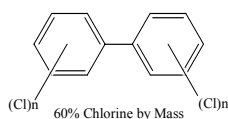
Monsanto

CAS 11097-69-1 MF Technical Mix MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-254S-H-10X	1 mL
NEAT	C-254N-50MG	50 mg

Aroclor® 1260

Monsanto



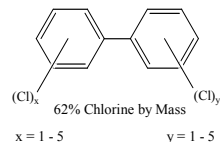
Monsanto

CAS 11096-82-5 MF Technical Mix MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-260S-H-10X	1 mL
NEAT	C-260N-50MG	50 mg

Aroclor® 1262

Monsanto

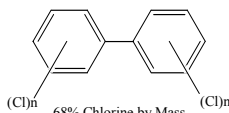


Monsanto

CAS 37324-23-5 MF Technical Mix MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-262S-H-10X	1 mL
NEAT	C-262N-50MG	50 mg

Aroclor® 1268

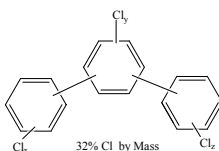


Monsanto

CAS 11100-14-4 MF Technical Mix MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	C-268S-H-10X	1 mL

Aroclor® 5432

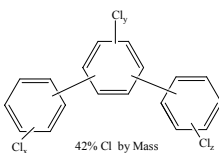


Monsanto

CAS 63496-31-1 MF Technical Mix MW

Matrix	Cat. No.	Unit
35 µg/mL in Toluene	T-432S	1 mL

Aroclor® 5442

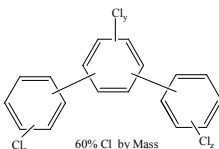


Monsanto

CAS 12642-23-8 MF Technical Mix MW

Matrix	Cat. No.	Unit
35 µg/mL in Toluene	T-442S	1 mL

Aroclor® 5460

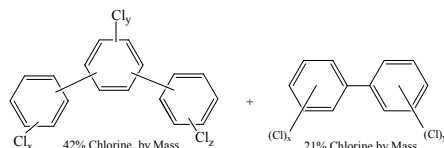


Monsanto

CAS 11126-42-4 MF Technical Mix MW

Matrix	Cat. No.	Unit
35 µg/mL in Toluene	T-460S	1 mL

Aroclor® 6050

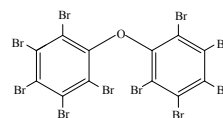


Monsanto

CAS MF Technical Mix MW

Matrix	Cat. No.	Unit
35 µg/mL in Toluene	T-6050S	1 mL

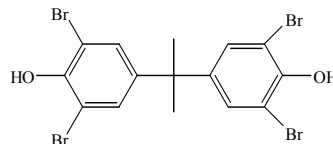
Decabromodiphenyl ether

CAS 1163-19-5 MF C₁₂Br₁₀O MW 959.22

Matrix	Cat. No.	Unit
50 µg/mL in Isooctane	BDE-209S	1 mL

Firemaster BP4A

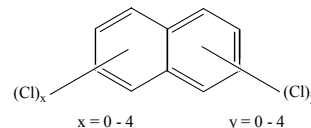
4,4'-(1-methylethylidene) bis(2,6-dibromophenol)

CAS 79-94-7 MF C₁₅H₁₂Br₄O₂ MW 543.91

Matrix	Cat. No.	Unit
100 µg/mL in Toluene	FRS-006S	1 mL
Neat	FRS-006N	10 mg

Halowax 1000

Polychlorinated naphthalene



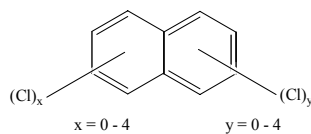
CAS 58718-66-4 MF Technical Mix MW

Matrix	Cat. No.	Unit
100 µg/mL in MeOH	N-1000S	1 mL

Plastic Additive Standards

Flame Retardants (continued)

Halowax 1013

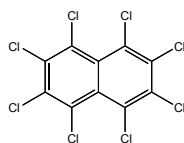


CAS 1321-64-8 MF Technical Mix MW

Matrix	Cat. No.	Unit
100 µg/mL in MeOH	N-1013S	1 mL

Halowax 1051

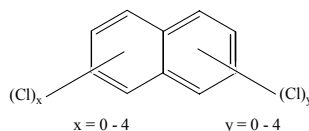
Octachloronaphthalene



CAS 2234-13-1 MF C₁₀Cl₈ MW 403.73

Matrix	Cat. No.	Unit
100 µg/mL in MeOH	N-1051S	1 mL

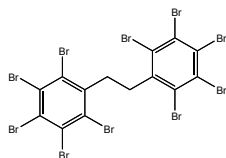
Halowax 1099



CAS 39450-05-0 MF Technical Mix MW

Matrix	Cat. No.	Unit
100 µg/mL in MeOH	N-1099S	1 mL

Saytex® 8010 NEW

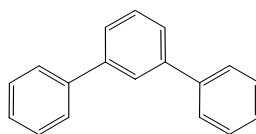


CAS 84852-53-9 MF C₁₄H₄Br₁₀ MW 971.22

Matrix	Cat. No.	Unit
NEAT	PLAS-FR-001N	50 mg

m-Terphenyl

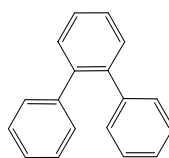
1,3-diphenylbenzene



CAS 92-06-8 MF C₆H₅C₆H₄C₆H₅ MW 230.32

Matrix	Cat. No.	Unit
NEAT	T-002N	100 mg

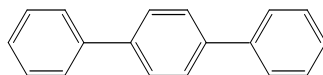
o-Terphenyl



CAS 84-15-1 MF C₆H₅C₆H₄C₆H₅ MW 230.32

Matrix	Cat. No.	Unit
NEAT	T-001N	100 mg

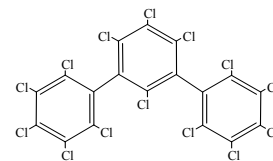
p-Terphenyl



CAS 92-94-4 MF C₁₈H₁₄ MW 230.32

Matrix	Cat. No.	Unit
NEAT	T-003N	100 mg

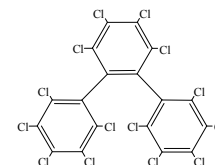
Tetradecachloro-m-terphenyl



CAS 42429-88-9 MF C₁₈Cl₁₄ MW 712.48

Matrix	Cat. No.	Unit
35 µg/mL in Toluene	T-005S	1 mL

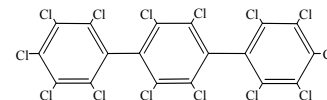
Tetradecachloro-o-terphenyl



CAS MF C₁₈Cl₁₄ MW 712.48

Matrix	Cat. No.	Unit
35 µg/mL in Toluene	T-004S	1 mL

Tetradecachloro-p-terphenyl



CAS MF C₁₈Cl₁₄ MW 712.48

Matrix	Cat. No.	Unit
100 µg/mL in MeOH	T-006S	1 mL

Property Key

CAS	Chemical Abstract Service Number	MF	Molecular Formula
		MW	Molecular Weight

Plastic Additive Standards

Plasticizers

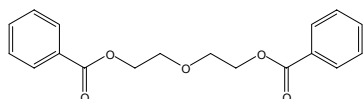
A plasticizer is a compound added to a material, usually a plastic, to make it flexible, resilient and easier to handle. Plasticizers are major components in plastics that determine the physical properties of polymer products.

Plasticizers are generally medium to high molecular weight esters of aliphatic or aromatic carboxylic acids, or sometimes of phosphoric acid. The phosphate esters are often also used for their flame retardant properties. Adipates and phthalates are also very common, but are becoming more highly regulated due to concern that they could act as endocrine disruptors.

The USEPA regulates many Phthalates and Adipates by Methods 606, 506-1 and 8061.

Benzoflex® 2-45

diethylene glycol, dibenzoate



Velsicol Chemical

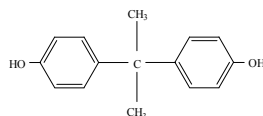
CAS 120-55-8 MF C₁₈H₁₈O₅ MW 314.33

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-015S	1 mL
NEAT	PLAS-PL-015N	50 mg

See page 21 for all
Bisphenol Analog Standards

Bisphenol A (BPA)

4,4'-dihydroxy-2,2-diphenylpropane

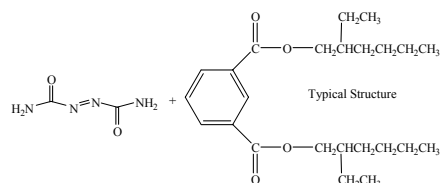


CAS 80-05-7 MF C₁₅H₁₆O₂ MW 228.29

Matrix	Cat. No.	Unit
1000 µg/mL in Methanol	M-1626-01S	1 mL

Celogen® SD-125

50% azodicarbonamide in a phthalate plasticizer



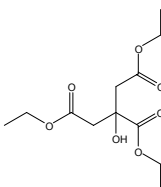
Chemtura Corporation

CAS N/A MF N/A MW N/A

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-009S	1 mL
NEAT	PLAS-PL-009N	50 mg

Citroflex 2

2-hydroxy-1,2,3-propanetricarboxylic acid, triethyl ester



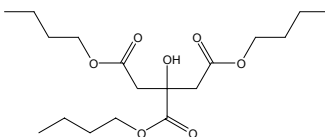
Morflex, Inc.

CAS 77-93-0 MF C₁₂H₂₀O₇ MW 276.32

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-028S	1 mL
NEAT	PLAS-PL-028N	50 mg

Citroflex 4

2-hydroxy-1,2,3-propanetricarboxylic acid, tributyl ester



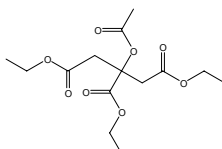
Morflex, Inc.

CAS 77-94-1 MF C₁₈H₃₂O₇ MW 360.45

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-030S	1 mL
NEAT	PLAS-PL-030N	50 mg

Citroflex A-2

2-(acetyloxy)-1,2,3-propanetricarboxylic acid, triethyl ester



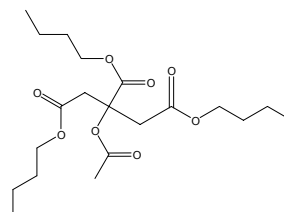
Morflex, Inc.

CAS 77-89-4 MF C₁₄H₂₂O₈ MW 318.32

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-001S	1 mL
NEAT	PLAS-PL-001N	50 mg

Citroflex A-4

2-Acetoxy-1,2,3-propanetricarboxylic acid, tributyl ester



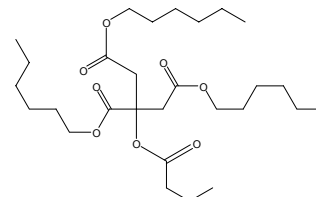
Morflex, Inc.

CAS 77-90-7 MF C₂₀H₃₄O₈ MW 402.54

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-002S	1 mL
NEAT	PLAS-PL-002N	50 mg

Citroflex B-6

n-butyltri-n-hexyl citrate



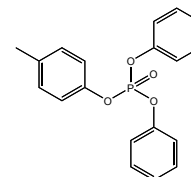
Morflex, Inc.

CAS 82469-79-2 MF C₂₈H₅₀O₈ MW 514.7

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-025S	1 mL
NEAT	PLAS-PL-025N	50 mg

Cresyl diphenyl phosphate NEW

(4-methylphenyl) diphenyl phosphate

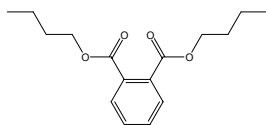


CAS 26444-49-5 MF C₁₉H₁₇O₄P MW 340.31

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-059N	50 mg

Plasticizers (continued)

Dibutyl phthalate



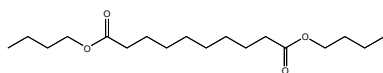
Houghton Chemical

CAS 84-74-2 MF C₁₆H₂₂O₄ MW 278.34

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-013S	1 mL
NEAT	PLAS-PL-013N	50 mg

Dibutyl sebacate NEW

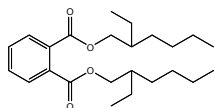
Dibutyl decanedioate

CAS 109-43-3 MF C₁₈H₃₄O₄ MW 314.46

Matrix	Cat. No.	Unit
Neat	PLAS-PL-062N	50 mg

Diisooctyl phthalate NEW

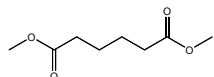
bis(6-methylheptyl) benzene-1,2-dicarboxylate

CAS 27554-26-3 MF C₂₄H₃₈O₄ MW 390.56

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-071N	50 mg

Dimethyl adipate NEW

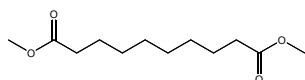
Dimethyl hexanedioate

CAS 627-93-0 MF C₈H₁₄O₄ MW 174.19

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-070N	50 mg

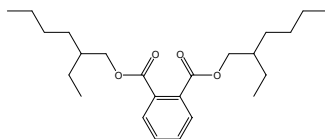
Dimethyl sebacate NEW

Dimethyl decanedioate

CAS 106-79-6 MF C₁₂H₂₂O₄ MW 230.30

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-061N	50 mg

Diocetyl phthalate (DOP)



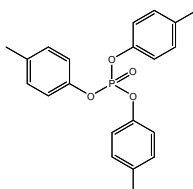
Houghton Chemical

CAS 117-81-7 MF C₂₄H₃₈O₄ MW 390.56

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-019S	1 mL
NEAT	PLAS-PL-019N	50 mg

Disflamoll® TKP NEW

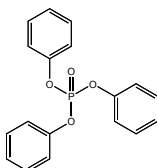
Tricresyl phosphate

CAS 1330-78-5 MF C₂₁H₂₁O₄P MW 368.36

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-053N	50 mg

Disflamoll TP NEW

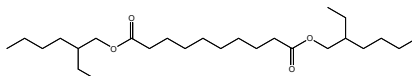
Triphenyl phosphate

CAS 115-86-6 MF C₁₈H₁₅O₄P MW 326.28

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-069N	50 mg

2-Ethylhexyl sebacate NEW

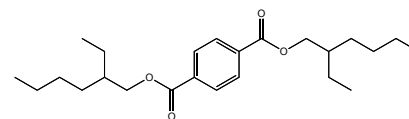
bis(2-ethylhexyl) decanedioate

CAS 122-62-3 MF C₂₆H₅₀O₄ MW 426.67

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-064N	50 mg

Bis(2-Ethylhexyl) terephthalate NEW

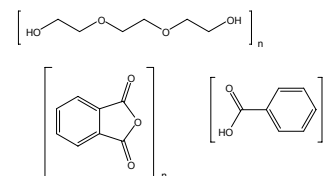
bis(2-ethylhexyl) benzene-1,4-dicarboxylate

CAS 6422-86-2 MF C₂₄H₃₈O₄ MW 390.56

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-065N	50 mg

Hercoflex® 900

1,3-Isobenzofurandione, polymer with 2,2'-(1,2-ethanediylbis(oxy))bis(ethanol), benzoate



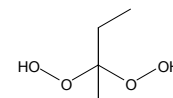
Hercules Incorporated

CAS 68186-30-1 MF (C₈H₄O₃)_n (C₆H₁₄O₄)_n (C₇H₆O₂)_n MW N/A

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-038S	1 mL
NEAT	PLAS-PL-038N	50 mg

Hi-Point PD-1

methyl ethyl ketone peroxide (CAS 1338-23-4) solution



Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-024S	1 mL
NEAT	PLAS-PL-024N	50 mg

Property Key

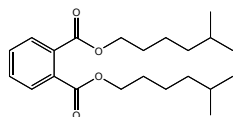
CAS	Chemical Abstract Service Number	MF	Molecular Formula
		MW	Molecular Weight

Plastic Additive Standards

Plasticizers (continued)

Jayflex® 77

diisooheptyl phthalate



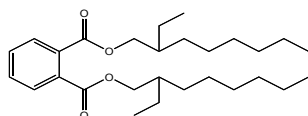
ExxonMobil Corporation

CAS 71888-89-6 MF C₂₂H₃₄O₄ MW 362.50

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-017S	1 mL
NEAT	PLAS-PL-017N	50 mg

Jayflex® DIDP

diisodecyl phthalate



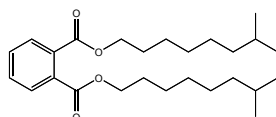
ExxonMobil Corporation

CAS 68515-49-1 MF C₂₈H₄₆O₄ MW 446.66

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-016S	1 mL
NEAT	PLAS-PL-016N	50 mg

Jayflex® DINP

diisononyl phthalate



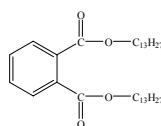
ExxonMobil Corporation

CAS 68515-48-0 MF C₂₆H₄₂O₄ MW 418.61

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-018S	1 mL
NEAT	PLAS-PL-018N	50 mg

Jayflex® DTDP

ditridecyl phthalate



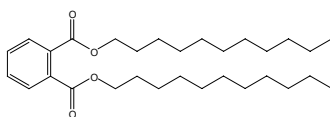
ExxonMobil Corporation

CAS 68515-47-9 MF C₃₄H₅₈O₄ MW 530.82

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-020S	1 mL
NEAT	PLAS-PL-020N	50 mg

Jayflex® L11P-E

diundecyl phthalate



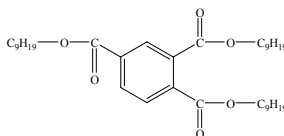
ExxonMobil Corporation

CAS 3648-20-2 MF C₃₀H₅₀O₄ MW 474.72

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-021S	1 mL
NEAT	PLAS-PL-021N	50 mg

Jayflex® TINTM

triisononyl trimellitate



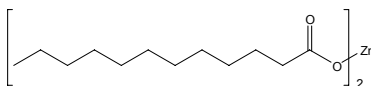
ExxonMobil Corporation

CAS 53894-23-8 MF C₃₆H₆₀O₆ MW 588.96

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-029S	1 mL
NEAT	PLAS-PL-029N	50 mg

Laurex®

zinc salt of lauric and related fatty acids



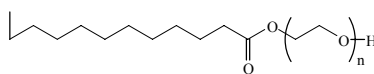
Chemtura Corporation

CAS MF C₂₄H₄₆O₄Zn MW 464.01

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-032S	1 mL
NEAT	PLAS-PL-032N	50 mg

Markstat® 51

poly(ethylene glycol) monolaurate



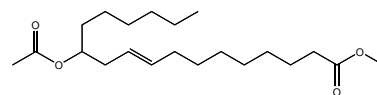
Chemtura Corporation

CAS 9004-81-3 MF (C₂H₄O)_nC₁₂H₂₄O₂ MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-003S	1 mL
NEAT	PLAS-PL-003N	50 mg

Methyl O-Acetylricinoleate NEW

Methyl (Z)-12-acetyloxyoctadec-9-enoate

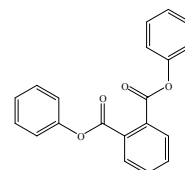


CAS 140-03-4 MF C₂₁H₃₈O₄ MW 354.52

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-063N	50 mg

Morfex® 150

dicyclohexyl phthalate



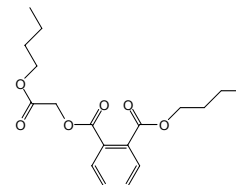
Morfex, Inc.

CAS 84-61-7 MF C₂₀H₂₆O₄ MW 330.46

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-014S	1 mL
NEAT	PLAS-PL-014N	50 mg

Morfex® 190

butylphthalyl butyl glycolate



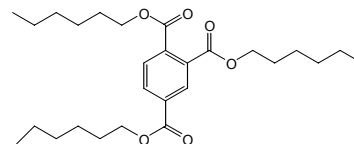
Morfex, Inc.

CAS 85-70-1 MF C₁₈H₂₄O₆ MW 336.38

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-008S	1 mL
NEAT	PLAS-PL-008N	50 mg

Morfex® 560

tri-n-hexyl trimellitate



Morfex, Inc.

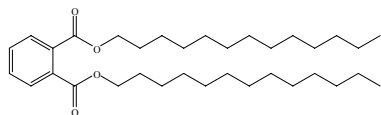
CAS 1528-49-0 MF C₂₇H₄₂O₆ MW 462.62

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-031S	1 mL
NEAT	PLAS-PL-031N	50 mg

Plasticizers (continued)

Morflex® x-1125

1,2-benzenedicarboxylic acid, ditridecyl ester



Morfex, Inc.

CAS 119-06-2 MF C₃₄H₅₈O₄ MW 530.83

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-033S	1 mL
NEAT	PLAS-PL-033N	50 mg

Paraplex® G-30

proprietary dibasic acid polyester mixture

N/A

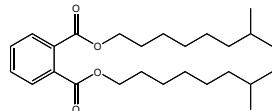
CPH Innovations

CAS MF MW

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-027S	1 mL
NEAT	PLAS-PL-027N	50 mg

Plasthall® DNP plasticizer NEW

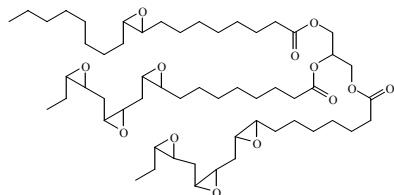
Diisononyl phthalate

CAS 28553-12-0 MF C₂₆H₄₂O₄ MW 418.61

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-072N	50 mg

Plasthall® ESO

epoxidized soybean oil



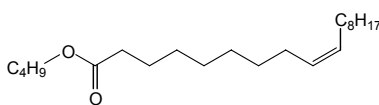
CPH Innovations

CAS 8013-07-8 MF N/A MW N/A

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-035N	50 mg

Polycizer® butyl oleate

butyl oleate



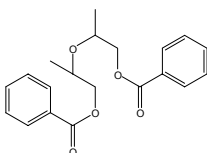
Harwick Chemical

CAS 142-77-8 MF C₂₂H₄₂O₂ MW 338.57

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-007S	1 mL
NEAT	PLAS-PL-007N	50 mg

Polycizer® DP 500

Dipropylene glycol dibenzoate



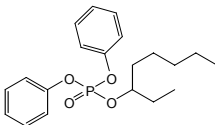
Harwick Chemical

CAS 27138-31-4 MF C₂₀H₂₂O₅ MW 342.39

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-011S	1 mL
NEAT	PLAS-PL-011N	50 mg

Santicizer® 141

2-Ethylhexyldiphenyl phosphate



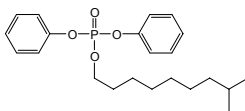
Solutia Inc.

CAS 1241-94-7 MF C₂₀H₂₇O₄P MW 362.4

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-026S	1 mL
NEAT	PLAS-PL-026N	50 mg

Santicizer® 148

Mixture: isodecylidiphenyl phosphate (80-90%) / diisodecyl phenyl phosphate / triphenyl phosphate



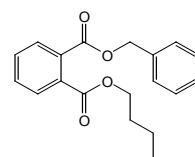
Solutia Inc.

CAS 29761-21-5 MF C₂₂H₃₁O₄P MW 390.46

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-022S	1 mL
NEAT	PLAS-PL-022N	50 mg

Santicizer® 160

benzyl butyl phthalate



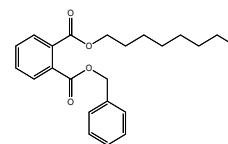
Solutia Inc.

CAS 85-68-7 MF C₁₉H₂₀O₄ MW 312.37

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-004S	1 mL
NEAT	PLAS-PL-004N	50 mg

Santicizer® 261

benzyl octyl phthalate



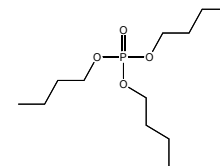
Solutia Inc.

CAS 68519-40-2 MF C₂₃H₂₈O₄ MW 368.47

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PL-005S	1 mL
NEAT	PLAS-PL-005N	50 mg

Tributylphosphate NEW

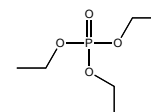
Tributyl phosphate

CAS 126-73-8 MF C₁₂H₂₇O₄P MW 266.31

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-068N	50 mg

Triethylphosphate NEW

Triethyl phosphate

CAS 78-40-0 MF C₆H₁₅O₄P MW 182.15

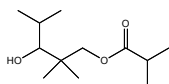
Matrix	Cat. No.	Unit
NEAT	PLAS-PL-067N	50 mg

Plastic Additive Standards

Plasticizers (continued)

2,2,4-Trimethyl-1,3-pentanediol-isobutyrate **NEW**

(3-hydroxy-2,2,4-trimethylpentyl) 2-methylpropanoate

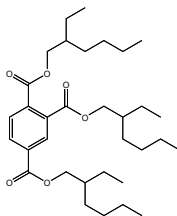


CAS 25265-77-4 MF C₁₂H₂₄O₃ MW 216.32

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-066N	50 mg

Trimellitate **NEW**

1,2,4-Benzenetricarboxylic acid, tris(2-ethylhexyl) ester



CAS 3319-31-1 MF C₃₃H₅₄O₆ MW 546.78

Matrix	Cat. No.	Unit
NEAT	PLAS-PL-060N	50 mg

Vinsol® powder

N/A

Hercules Incorporated

CAS 8050-09-7

Matrix	Cat. No.	Unit
1000 µg/mL in CH ₂ Cl ₂	PLAS-PL-037S-D	1 mL
NEAT	PLAS-PL-037N	50 mg

Vinsol® resin

gum rosin

N/A

Hercules Incorporated

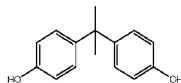
CAS 8050-09-7

Matrix	Cat. No.	Unit
1000 µg/mL in CH ₂ Cl ₂	PLAS-PL-036S-D	1 mL
NEAT	PLAS-PL-036N	50 mg

Bisphenol Analog Standards **NEW**

Bisphenols are endocrine disrupters that exhibit hormone-like properties. This raises concerns about their use in polycarbonate based household products as well as medical devices.

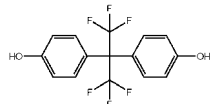
Bisphenol A (BPA)



CAS 80-05-7 MF C₁₅H₁₆O₂ MW 228.29

Matrix	Cat. No.	Unit
NEAT	BPA-A-N	50 mg
10 mg/mL in MeOH	BPA-A-S	1 mL

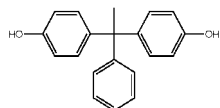
Bisphenol AF



CAS 1478-61-1 MF C₁₅H₁₀F₆O₂ MW 336.23

Matrix	Cat. No.	Unit
NEAT	BPA-AF-N	50 mg
10 mg/mL in MeOH	BPA-AF-S	1 mL

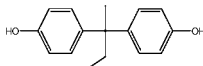
Bisphenol AP



CAS 1571-75-1 MF C₂₀H₁₈O₂ MW 290.36

Matrix	Cat. No.	Unit
NEAT	BPA-AP-N	50 mg
10 mg/mL in MeOH	BPA-AP-S	1 mL

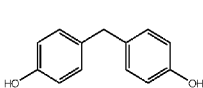
Bisphenol B



CAS 77-40-7 MF C₁₆H₁₈O₂ MW 242.31

Matrix	Cat. No.	Unit
NEAT	BPA-B-N-10MG	10 mg
10 mg/mL in MeOH	BPA-B-S	1 mL

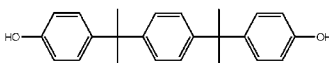
Bisphenol F



CAS N/A MF C₁₃H₁₂O₂ MW 200.23

Matrix	Cat. No.	Unit
NEAT	BPA-F-N-10MG	10 mg
10 mg/mL in MeOH	BPA-F-S	1 mL

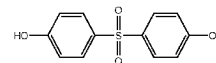
Bisphenol P



CAS N/A MF C₂₄H₂₆O₂ MW 346.46

Matrix	Cat. No.	Unit
NEAT	BPA-P-N	50 mg
10 mg/mL in MeOH	BPA-P-S	1 mL

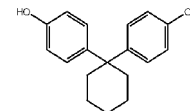
Bisphenol S



CAS N/A MF C₁₂H₁₀O₄S MW 250.27

Matrix	Cat. No.	Unit
NEAT	BPA-S-N	50 mg
10 mg/mL in MeOH	BPA-S-S	1 mL

Bisphenol Z



CAS N/A MF C₁₈H₂₀O₂ MW 268.35

Matrix	Cat. No.	Unit
NEAT	BPA-Z-N	50 mg
10 mg/mL in MeOH	BPA-Z-S	1 mL

Plastic Additive Standards

Processing Aids

Processing aids are compounding materials that improve the processing of polymers by: creating better dispersion of dry materials, increasing extrusion rates, reducing powder consumption during mixing, promoting compound fusion, adding lubrication, improving knitting and creating a smoother surface on calendered and extruded products.

Akrochem® Ceresin Wax **NEW**

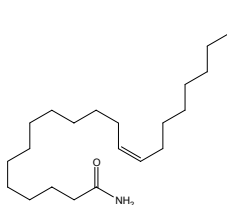
A complex combination of hydrocarbons produced by the purification of Ozocerite with Sulfuric acid and filtration through bone black to form waxy cakes

CAS 8001-75-0 MF N/A MW N/A

Matrix	Cat. No.	Unit
NEAT	PLAS-PA-002N	50 mg

Kemamide® E ultra

Erucamide



Chemtura Corporation.

CAS 112-84-5 MF C₂₂H₄₃NO MW 337.58

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-PA-001S	1 mL
NEAT	PLAS-PA-001N	50 mg

Retarders

Retarders are used to delay the onset of crosslinking and can be used to allow for longer processing times. They are also used to reduce scorching.

Akrochem® Retarder BAX **NEW**

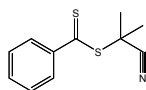
N/A

CAS 65-85-0 MF MW

Matrix	Cat. No.	Unit
NEAT	PLAS-RT-011N	50 mg

2-Cyano-2-propyl benzodithioate **NEW**

Benzenecarbodithioic acid, 1-cyano-1-methylethyl ester

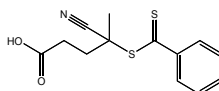


CAS 201611-85-0 MF C₁₁H₁₁NS₂ MW 221.34

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone(1:1)	PLAS-RT-002S	1 mL
NEAT	PLAS-RT-002N	50 mg

4-Cyano-4-(phenylcarbonothioylthio)pentanoic acid **NEW**

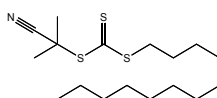
Pentanoic acid, 4-cyano-4-[(phenylthioxomethyl)thio]-



CAS 201611-92-9 MF C₁₃H₁₃NO₂S₂ MW 279.38

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-RT-003S	1 mL
NEAT	PLAS-RT-003N	50 mg

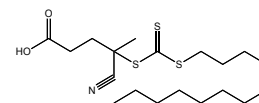
2-Cyano-2-propyl dodecyl trithiocarbonate **NEW**



CAS 870196-83-1 MF C₁₇H₃₁NS₃ MW 345.63

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-RT-004S	1 mL
NEAT	PLAS-RT-004N	50 mg

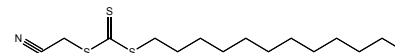
4-Cyano-4-[(dodecylsulfanylthiocarbonyl)sulfanyl]pentanoic acid **NEW**



CAS 870196-80-8 MF C₁₉H₃₃NO₂S₃ MW 403.67

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-RT-005S	1 mL
NEAT	PLAS-RT-005N	50 mg

Cyanomethyl dodecyl trithiocarbonate **NEW**



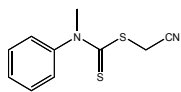
CAS 796045-97-1 MF C₁₅H₂₇NS₃ MW 317.58

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-RT-006S	1 mL
NEAT	PLAS-RT-006N	50 mg

Plastic Additive Standards

Retarders (continued)

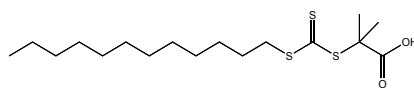
Cyanomethyl methyl(phenyl)carbamo-dithioate **NEW**



CAS 76926-16-4 MF C₁₀H₁₀N₂S₂ MW 222.33

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-RT-009S	1 mL
NEAT	PLAS-RT-009N	50 mg

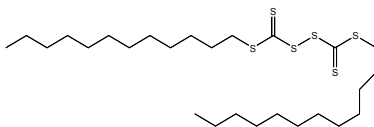
2-(Dodecylthiocarbonothioylthio)-2-methylpropionic acid **NEW**



CAS 461642-78-4 MF C₁₇H₃₂O₂S₃ MW 364.63

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-RT-010S	1 mL
NEAT	PLAS-RT-010N	50 mg

Bis(dodecylsulfanylthiocarbonyl) disulfide **NEW**

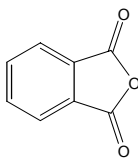


CAS 870532-86-8 MF C₂₆H₅₀S₆ MW 555.07

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-RT-008S	1 mL
NEAT	PLAS-PL-008N	50 mg

Retarder AK

phthalic anhydride

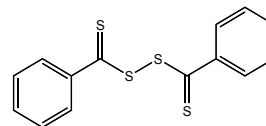


Akrochem Corporation.

CAS 85-44-9 MF C₈H₄O₃ MW 148.12

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane:Acetone(60:40)	PLAS-RT-001S	1 mL
NEAT	PLAS-RT-001N	50 mg

Bis(thiobenzoyl) disulfide **NEW**



CAS 5873-93-8 MF C₁₄H₁₀S₄ MW 306.49

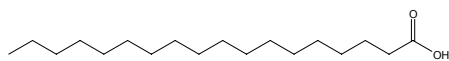
Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-RT-007S	1 mL
NEAT	PLAS-RT-007N	50 mg

Stearates

Stearic acid and the metallic salts of this acid are used for many different applications depending on the polymer system. Stearates can act as lubricants, acid scavengers, anti-tack compounds, vulcanization promoter/accelerator, or a mold release agent.

Stearic Acid RG (rubber grade)

stearic acid



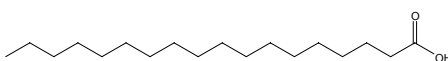
Akrochem Corporation.

CAS 57-11-4 MF C₁₈H₃₆O₂ MW 284.48

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-ST-001S	1 mL
NEAT	PLAS-ST-001N	50 mg

Stearic Acid TP

stearic acid



Akrochem Corporation.

CAS 57-11-4 MF C₁₈H₃₆O₂ MW 284.48

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-ST-002S	1 mL
NEAT	PLAS-ST-002N	50 mg

Property Key

CAS Chemical Abstract Service Number MF Molecular Formula MW Molecular Weight

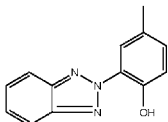
Plastic Additive Standards

UV Stabilizers

UV stabilizers, or light absorbers, act to protect the plastic against UV or sunlight damage such as discoloration, cracking, brittleness, or other loss of desirable physical properties.

Typical UV Stabilizers are benzophenones, hindered amines, and benzotriazole. Also used, but not as effective, are salicylate esters, cyanoacrylates and bezilidenes.

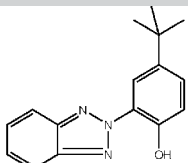
2-(2-Hydroxy-5-methylphenyl)benzotriazole **NEW**



CAS 2440-22-4 MF C₁₃H₁₁N₃O MW 225.25

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-006S-CN	1 mL
NEAT	PLAS-UV-006N	50 mg

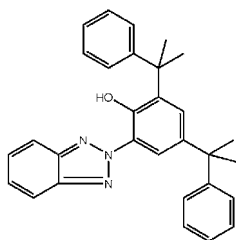
2-(5-tert-Butyl-2-hydroxyphenyl)benzotriazole **NEW**



CAS 3147-76-0 MF C₁₆H₁₇N₃O MW 267.33

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-007S-CN	1 mL
NEAT	PLAS-UV-007N	50 mg

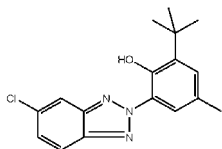
2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol **NEW**



CAS 70321-86-7 MF C₃₀H₂₉N₃O MW 447.57

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-008S-CN	1 mL
NEAT	PLAS-UV-008N	50 mg

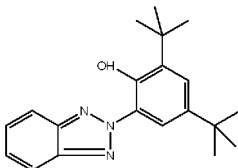
2-tert-Butyl-6(5-chloro-2H-benzotriazol-2-yl)-4-methylphenol **NEW**



CAS 3896-11-5 MF C₁₇H₁₈ClN₃O MW 315.80

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-009S-CN	1 mL
NEAT	PLAS-UV-009N	50 mg

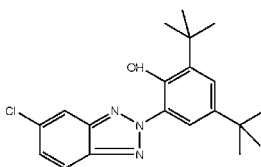
2-(3,5-Di-tert-butyl-2-hydroxyphenyl)2H-benzotriazole **NEW**



CAS 3846-71-7 MF C₂₀H₂₅N₃O MW 323.43

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-010S-CN	1 mL
NEAT	PLAS-UV-010N	50 mg

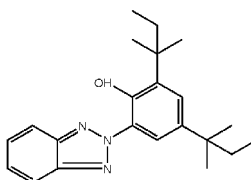
2,4-Di-tert-butyl-6-(5-chloro-2H-benzotriazol-2-yl)phenol **NEW**



CAS 3864-99-1 MF C₂₀H₂₄ClN₃O MW 357.88

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-011S-CN	1 mL
NEAT	PLAS-UV-011N	50 mg

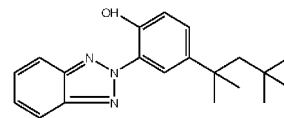
2-(2H-Benzotriazol-2-yl)-4,6-di-tert-pentylphenol **NEW**



CAS 25973-55-1 MF C₂₂H₂₉N₃O MW 351.49

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-012S-CN	1 mL
NEAT	PLAS-UV-012N	50 mg

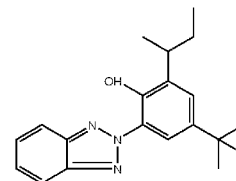
2-(2-Hydroxy-5-tert-octylphenyl)benzotriazole **NEW**



CAS 3147-75-9 MF C₂₀H₂₅N₃O MW 323.43

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-013S-CN	1 mL
NEAT	PLAS-UV-013N	50 mg

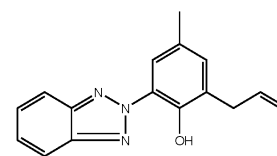
2-(3-sec-Butyl-5-tert-butyl-2-hydroxyphenyl)benzotriazole **NEW**



CAS 36437-37-3 MF C₂₀H₂₅N₃O MW 323.43

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-014S-CN	1 mL
NEAT	PLAS-UV-014N	50 mg

2-(2H-Benzotriazol-2-yl)-4-methyl-6-(2-propenyl)phenol **NEW**



CAS 2170-39-0 MF C₁₆H₁₅N₃O MW 265.31

Matrix	Cat. No.	Unit
1000 µg/mL in AcCN	PLAS-UV-015S-CN	1 mL
NEAT	PLAS-UV-015N	50 mg

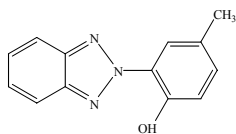
UV Stabilizer Set		10 x 1 mL
Solutions		
PLAS-UV-STAB-SET	PLAS-UV -006S-CN to 015S-CN	

Plastic Additive Standards

UV Stabilizers (continued)

Tinuvin® PED

2-(2-Hydroxy-5-methylphenyl)benzotriazole



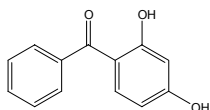
Ciba Specialty Chemicals

CAS 2440-22-4 MF C₁₃H₁₁N₃O MW 225.27

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-UV-005S	1 mL
NEAT	PLAS-UV-005N	50 mg

Uvinul® 3000

2,4-dihydroxybenzophenone



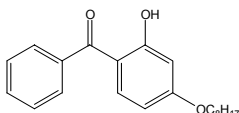
BASF Corporation

CAS 131-56-6 MF C₁₃H₁₀O₃ MW 214.22

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-UV-001S	1 mL
NEAT	PLAS-UV-001N	50 mg

Uvinul® 3008

2-hydroxy-4-octyloxybenzophenone



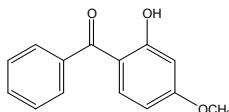
BASF Corporation

CAS 1843-05-6 MF C₂₁H₂₆O₃ MW 326.43

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-UV-002S	1 mL
NEAT	PLAS-UV-002N	50 mg

Uvinul® 3040

2-hydroxy-4-methoxybenzophenone



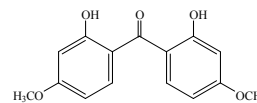
BASF Corporation

CAS 131-57-7 MF C₁₄H₁₂O₃ MW 228.26

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-UV-003S	1 mL
NEAT	PLAS-UV-003N	50 mg

Uvinul® 3049

2,2-dihydroxy-4,4-dimethoxybenzophenone



BASF Corporation

CAS 131-54-4 MF C₁₅H₁₄O₅ MW 274

Matrix	Cat. No.	Unit
1000 µg/mL in Hexane	PLAS-UV-004S	1 mL
NEAT	PLAS-UV-004N	50 mg

Vegetable Oils

Vegetable oils, typically the epoxide or the ester of the parent oil, are used as plasticizers. They offer the advantage of not only providing flexibility in the final plastic, but also add heat and light stabilizing advantages without the requirements for additional additives. Vegetable oil plasticizers are generally less toxic than their petrochemical counterparts, this makes them very attractive for certain applications like food or toys.

Some of their disadvantages are that they may not mix properly at higher concentrations, may cause brittleness in some applications, and often are only suitable as secondary plasticizers.

Akrofax™ A

vulcanized vegetable oil

N/A

Akrochem Corporation.

CAS MF MW

Matrix	Cat. No.	Unit
NEAT	PLAS-VA-001N	50 mg

Akrofax™ B

vulcanized vegetable oil

N/A

Akrochem Corporation.

CAS MF MW

Matrix	Cat. No.	Unit
NEAT	PLAS-VA-002N	50 mg

Plastic Additive Standards

Dyes and Breakdown Products

Dyes and colorant products are one of the largest categories of plastic additives and are also used in textiles, leather goods, food and personal care products. They are used for both aesthetic purposes and to alter physical properties of the product, such as to repel light. Many dyes and their breakdown products have been determined to have both adverse health properties and adverse environmental properties, and as such, are being increasingly regulated. EU Directives 67/548/EEC and 2002/61/EC and 76/768/EEC are the most far-reaching regulations for this class of compounds.

Dye Standards - EU Directive 67/548/EEC

Criterion #22 Regulated Dyes - Carcinogenic

Each in 100 µg/mL in MeOH	Cat. No.	Unit
Disperse Blue 1	DYE-001S	1 mL
Disperse Orange 11	DYE-002S	1 mL
Disperse Yellow 3	DYE-003S	1 mL
Basic Violet 14	DYE-012S	1 mL
Direct Black 38	DYE-013S	1 mL
Direct Blue 6	DYE-014S	1 mL

Criterion #23 Regulated Dye - Disperse dyes, Sensitizing

Each in 100 µg/mL in MeOH	Cat. No.	Unit
Disperse Blue 3	DYE-004S	1 mL
Disperse Orange 1	DYE-005S	1 mL
Disperse Orange 3	DYE-006S	1 mL
Disperse Red 1	DYE-007S	1 mL
Disperse Yellow 9	DYE-008S	1 mL
Disperse Blue 35	DYE-009S	1 mL
Disperse Blue 124	DYE-010S	1 mL
Disperse Orange 37	DYE-011S	1 mL
Disperse Blue 7	DYE-015S	1 mL
Disperse Blue 26	DYE-016S	1 mL
Disperse Blue 102	DYE-017S	1 mL
Disperse Red 11	DYE-018S	1 mL
Disperse Red 17	DYE-019S	1 mL

Aryl Amine Breakdown Products in Azo Dyes - EU Directive 2002/61/EC

Individual Aryl Amine Standards

Analyte	100 µg/mL in AcCN in 1 mL	1000 µg/mL in AcCN in 1 mL	10 µg/mL in Ethyl acetate in 10 mL
o-Aminoazotoluene (01)	RAC-01	RAC-01-10X	RAC-01-EA-0.1X-10ML
4-Aminobiphenyl (02)	RAC-02	RAC-02-10X	RAC-02-EA-0.1X-10ML
2-Amino-4-nitrotoluene (03)	RAC-03	RAC-03-10X	RAC-03-EA-0.1X-10ML
Benzidine (04)	RAC-04	RAC-04-10X	RAC-04-EA-0.1X-10ML
4-Chloroaniline (05)	RAC-05	RAC-05-10X	RAC-05-EA-0.1X-10ML
4-Chloro-o-toluidine (06)	RAC-06	RAC-06-10X	RAC-06-EA-0.1X-10ML
p-Cresidine (07)	RAC-07	RAC-07-10X	RAC-07-EA-0.1X-10ML
2,4-Diaminoanisole* (08)	RAC-08	RAC-08-10X	RAC-08-EA-0.1X-10ML
4,4'-Diaminodiphenylmethane (09)	RAC-09	RAC-09-10X	RAC-09-EA-0.1X-10ML
2,4-Diaminotoluene (10)	RAC-10	RAC-10-10X	RAC-10-EA-0.1X-10ML
3,3'-Dichlorobenzidine (11)	RAC-11	RAC-11-10X	RAC-11-EA-0.1X-10ML
3,3'-Dimethoxybenzidine (12)	RAC-12	RAC-12-10X	RAC-12-EA-0.1X-10ML
3,3'-Dimethylbenzidine (13)	RAC-13	RAC-13-10X	RAC-13-EA-0.1X-10ML
3,3'-Dimethyl-4,4'-diaminodiphenylmethane (14)	RAC-14	RAC-14-10X	RAC-14-EA-0.1X-10ML
4,4'-Methylenebis(2-chloroaniline) (15)	RAC-15	RAC-15-10X	RAC-15-EA-0.1X-10ML
2-Naphthylamine (16)	RAC-16	RAC-16-10X	RAC-16-EA-0.1X-10ML
4,4'-Oxydianiline (17)	RAC-17	RAC-17-10X	RAC-17-EA-0.1X-10ML
4,4'-Thiodianiline (18)	RAC-18	RAC-18-10X	RAC-18-EA-0.1X-10ML
o-Toluidine (19)	RAC-19	RAC-19-10X	RAC-19-EA-0.1X-10ML
2,4,5-Trimethylaniline (20)	RAC-20	RAC-20-10X	RAC-20-EA-0.1X-10ML
p-Aminoazobenzene (21)	RAC-21	RAC-21-10X	RAC-21-EA-0.1X-10ML
2-Aminobiphenyl (22)	RAC-22	RAC-22-10X	RAC-22-EA-0.1X-10ML
o-Anisidine (23)	RAC-23	RAC-23-10X	RAC-23-EA-0.1X-10ML
3-Chloro-o-toluidine (24)	RAC-24	RAC-24-10X	RAC-24-EA-0.1X-10ML

RAC-R1-SET

100 µg/mL

24 x 1 mL (Set includes the above ampules) In Acetonitrile

* In the form of the Sulfate hydrate 171 µg/mL in Pyridine (100 µg/mL as the base)

RAC-R1-10X-SET

1000 µg/mL in AcCN

24 x 1 mL (Set includes the above ampules) In Acetonitrile

* In the form of the Sulfate hydrate 1,710 µg/mL in Pyridine (1000 µg/mL as the base)

Carcinogenic Aryl Amine Mix

AE-00049-R1

10 µg/mL in Ethyl acetate

1 x 1 mL

23 comps.

AE-00049-SET

Contains AE-00049-R1 (23 comps. Mix) plus

RAC-08 (2,4-Diaminoanisole) listed on the left

AE-00049-R1-10ML

10 µg/mL in Ethyl acetate

1 x 10 mL

23 comps.

o-Aminoazotoluene (01)
4-Aminobiphenyl (02)
2-Amino-4-nitrotoluene (03)
Benzidine (04)
4-Chloroaniline (05)
4-Chloro-o-toluidine (06)
p-Cresidine (07)
4,4'-Diaminodiphenylmethane (09)
2,4-Diaminotoluene (10)
3,3'-Dichlorobenzidine (11)
3,3'-Dimethoxybenzidine (12)
3,3'-Dimethylbenzidine (13)
3,3'-Dimethyl-4,4'-diaminodiphenylmethane (14)
4,4'-Methylenebis(2-chloroaniline) (15)
2-Naphthylamine (16)
4,4'-Oxydianiline (17)
4,4'-Thiodianiline (18)
o-Toluidine (19)
2,4,5-Trimethylaniline (20)
p-Aminoazobenzene (21)
2-Aminobiphenyl (22)
o-Anisidine (23)
3-Chloro-o-toluidine (24)

Internal Standards

RAC-IS

1000 µg/mL in AcCN

1 x 1 mL

RAC-IS-EA

1000 µg/mL in Ethyl acetate

1 x 1 mL

3,3',5,5'-Tetramethylbenzidine

Deuterated Phthalates

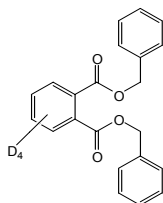
These deuterated compounds can be used as internal standards for method development for determining phthalates in environmental or other types of samples.

Deuterated Phthalate Solution Set PHTH-D4S-SET 11 x 1 mL
Deuterated Phthalate Neat Set PHTH-D4N-SET 11 x 5 mg

Set include 11 Deuterated Phthalates listed below and next page.

Other compounds are available. Contact our Technical Service Department if you require additional deuterated or other labeled compounds.

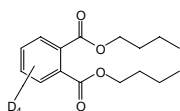
Dibenzylphthalate-d₄



CAS MF C₆D₄(COOCH₂C₆H₅)₂ MW 350.41

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-001S	1 mL
NEAT	PHTH-D4-001N	5 mg

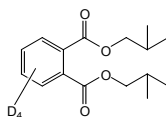
Di-n-butyl phthalate-d₄



CAS 93952-11-5 MF C₆D₄(COOCH₂CH₂CH₂CH₃)₂ MW 282.37

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-002S	1 mL
NEAT	PHTH-D4-002N	5 mg

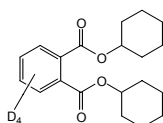
Di-iso-butyl phthalate-3,4,5,6-d₄



CAS 358730-88-8 MF C₆D₄[COOCH₂CH(CH₃)₂]₂ MW 326.43

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-003S	1 mL
Neat	PHTH-D4-003N	5 mg

Diethyl phthalate-3,4,5,6-d₄

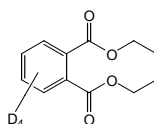


CAS 358731-25-6 MF C₆D₄(COOC₂H₅)₂ MW 334.45

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-004S	1 mL
NEAT	PHTH-D4-004N	5 mg

www.bodanchemica.it

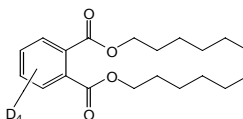
Diethyl phthalate-3,4,5,6-d₄



CAS 93952-12-6 MF C₆D₄(COOCH₂CH₃)₂ MW 226.26

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-005S	1 mL
NEAT	PHTH-D4-005N	5 mg

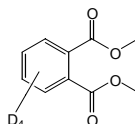
Di-n-hexyl phthalate-3,4,5,6-d₄



CAS N/A MF C₆D₄[COO(CH₂)₅CH₃]₂ MW 338.48

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-006S	1 mL
NEAT	PHTH-D4-006N	5 mg

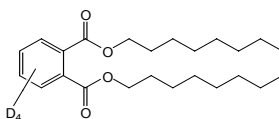
Di-n-hexyl phthalate-3,4,5,6-d₄



CAS 93951-89-4 MF C₆D₄(COOCH₃)₂ MW 198.21

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-007S	1 mL
NEAT	PHTH-D4-007N	5 mg

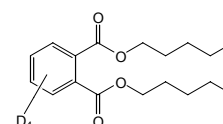
Di-n-octyl phthalate-3,4,5,6-d₄



CAS 93952-13-7 MF C₆D₄[COO(CH₂)₇CH₃]₂ MW 394.59

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-008S	1 mL
NEAT	PHTH-D4-008N	5 mg

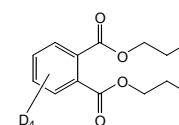
Di-n-pentyl phthalate-3,4,5,6-d₄



CAS 358730-89-9 MF C₆D₄[COO(CH₂)₄CH₃]₂ MW 310.43

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-009S	1 mL
NEAT	PHTH-D4-009N	5 mg

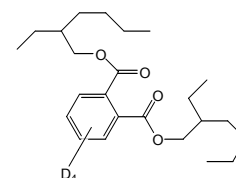
Di-n-propyl phthalate-3,4,5,6-d₄



CAS 358731-29-0 MF C₆D₄(COOCH₂CH₂CH₃)₂ MW 254.32

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-010S	1 mL
NEAT	PHTH-D4-010N	5 mg

Bis(2-ethylhexyl) phthalate-3,4,5,6-d₄



CAS 93951-87-2 MF D₄[COOCH₂CH(CH₂CH₃)(CH₂)₃CH₃]₂ MW 394.59

Matrix	Cat. No.	Unit
1000 µg/mL in MeOH	PHTH-D4-011S	1 mL
NEAT	PHTH-D4-011N	5 mg

Property Key

CAS Chemical Abstract Service Number **MF** Molecular Formula
MW Molecular Weight

Plastic Additive Index

- A**
- Accelerator BBTS 1
 - Accelerator CBTS 1
 - Accelerator EZ & EZ-SP 1
 - Accelerator MBT, MBT/MG 1
 - Activator OT Urea 1
 - Akrochem Antiox 12 2
 - Akrochem® Ceresin Wax 22
 - Akrochem® NIBUD 11
 - Akrochem® Retarder BAX 22
 - Akrofax™ A 25
 - Akrofax™ B 25
 - Akroform ETU-22 PM 1
 - Akrowax™ 195 11
 - Alkanox® P27 3
 - Alkanox® TNPP 3
 - Alox® PP18 3
 - Antioxidant 60 3
 - Antioxidant S 3
 - Aroclor® 1016 14
 - Aroclor® 1221 14
 - Aroclor® 1232 14
 - Aroclor® 1242 14
 - Aroclor® 1248 15
 - Aroclor® 1254 15
 - Aroclor® 1260 15
 - Aroclor® 1262 15
 - Aroclor® 1268 15
 - Aroclor® 5432 15
 - Aroclor® 5442 15
 - Aroclor® 5460 15
 - Aroclor® 6050 15
- B**
- Benzoflex® 2-45 17
 - Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 10
 - Bis(2-ethylhexyl) phthalate-3,4,5,6-d4 27
 - Bis(2-Ethylhexyl) terephthalate 18
 - Bis(dodecylsulfanylthiocarbonyl) disulfide 23
 - Bisphenol A (BPA) 17, 21
 - Bisphenol AF 21
 - Bisphenol AP 21
 - Bisphenol B 21
 - Bisphenol F 21
 - Bisphenol P 21
 - Bisphenol S 21
 - Bisphenol Z 21
 - Bis(thiobenzoyl) disulfide 23
 - BLS® 234 3
 - BLS® 292 3
 - BLS® 1622 3
 - BLS® 1944 4
 - BNX 1077 4
 - BNX 1225 4
- C**
- Celogen® AZ 12
 - Celogen® RA 12
 - Celogen® SD-125 17
 - Citroflex 2 17
 - Citroflex 4 17
 - Citroflex A-2 17
 - Citroflex A-4 17
 - Citroflex B-6 17
 - CPW-100 12
- D**
- Cresyl diphenyl phosphate 17
 - Cure-Rite® IBT 1
 - Cyanomethyl dodecyl trithiocarbonate 22
 - Cyanomethyl methyl(phenyl)carbomodithioate 23
 - Cyanox® 425 4
 - Cyanox® 1212 4
 - Cyanox® 1790 4
 - Cyanox® 2246 4
 - Cyanox® LTDP 5
 - Cyanox® STDP 5
- D**
- Decabromodiphenyl ether 15
 - Dibenzylhydroxylamine 5
 - Dibenzylphthalate-d4 27
 - Dibutyl phthalate 18
 - Dibutyl sebacate 18
 - Diethyl 3,5-Di-tert-butyl-4-hydroxybenzylphosphonate 5
 - Diethyl phthalate-3,4,5,6-d4 27
 - Di-iso-butyl phthalate-3,4,5,6-d4 27
 - Diisooctyl phthalate 18
 - Dimethyl adipate 18
 - Dimethyl sebacate 18
 - Di-n-butyl phthalate-d4 27
 - Di-n-hexyl phthalate-3,4,5,6-d4 27
 - Di-n-octyl phthalate-3,4,5,6-d4 27
 - Di-n-pentyl phthalate-3,4,5,6-d4 27
 - Di-n-propyl phthalate-3,4,5,6-d4 27
 - Diocetyl phthalate 18
 - Dipentamethylenethiuram 5
 - Disflamoll® TKP 18
 - Disflamoll TP 18
 - Distyryl biphenyl 5
- E**
- Ethanox® 310 6
 - Ethanox® 314 2
 - Ethanox® 323 6
 - Ethanox® 330 6
 - Ethanox® 376 6
 - Ethanox® 702 6
 - Ethanox® 703 6
 - Ethaphos® 368 6
- F**
- F-300, F-1000, F-1500, F-2000, F-3000 13
 - Firemaster BP4A 15
- H**
- Halowax 1000 15
 - Halowax 1013 16
 - Halowax 1051 16
 - Halowax 1099 16
 - Hercoflex® 900 18
 - Hi-Point PD-1 18
- I**
- Irganox® 245 7
 - Irganox® 259 7
 - Irganox® 565 7
 - Irganox® 1035 7
- J**
- Jayflex® 77 19
 - Jayflex® DIDP 19
 - Jayflex® DINP 19
 - Jayflex® DTDP 19
 - Jayflex® L11P-E 19
 - Jayflex® TINTM 19
- K**
- Kemamide® E ultra 22
- L**
- Laurex® 19
 - Lowinox® AH25 8
 - Lowinox® CPL 8
 - Lowinox® TBM-6 8
- M**
- Markstat® 51 19
 - Markstat® 60 8
 - Methyl O-Acetylricinoleate 19
 - Morflex® 150 19
 - Morflex® 190 19
 - Morflex® 560 19
 - Morflex® x-1125 20
 - m-Terphenyl 16
- N**
- Naugard® 412S 8
 - Naugard® 445 8
 - Naugard® 635 8
 - Naugard® 956 9
 - Naugard® A 9
 - Naugard® B-25 9
 - Naugard® BHT 9
 - Naugard® HM-22 9
 - Naugard® J 9
 - Naugard® NBC 9
 - Naugard® PANA 9
 - Naugard® PHR 9
 - Naugard® PS-30 9
 - Naugard® PS-35 9
 - Naugard® Q Extra 9
 - Naugard® RM-51 10
 - Naugard® Super Q 10
 - Naugard® XL-1 10
 - N,N'-Dibutylthiourea 5
 - N,N'-Diethylthiourea 5
- O**
- O,O'-Diocetadecylpentaerythritol 5
 - o-Terphenyl 16
- O**
- Irganox® 1081 7
 - Irganox® 1098 7
 - Irganox® 1425 WL 7
 - Irganox® 3125 7
 - Irganox® 3144 FF 7
 - Irganox® E 201 8
 - Irganox® MD 1024 8
 - Isonox® 132 8
 - Isonox® 232 8

Plastic Additive Index

P	Numbers
Paraplex® G-30 20	1,3-Di-o-tolylguanidine 5
Perkacit® DPG 13	1,3-Diphenyl-2-thiourea 5
Perkacit® MBT 13	2,2'-(2,5-thiophenediyl)bis(5-tert-butylbenzoxazole) 10
Perkacit® MBTS 13	2,2',3,4,4',5',6-Heptabromodiphenyl ether 14
Perkacit® NDBC 13	2,2',4,4',5,5'-Hexabromodiphenyl ether 14
Perkacit® ZDEC 13	2,2',4,4',5,6'-Hexabromodiphenyl ether 14
Plasthall® DINP plasticizer 20	2,2',4,4',5-Pentabromodiphenyl ether 14
Plasthall® ESO 20	2,2',4,4',6-Pentabromodiphenyl ether 14
Polycizer® butyl oleate 20	2,2',4,4'-Tetrabromodiphenyl ether 14
Polycizer® DP 500 20	2,2,4-Trimethyl-1,3-pentanediol-isobutyrate 21
Propyl gallate 10	2,2'-Ethylidene-bis(4,6-di-tert-butylphenol) 6
p-Terphenyl 16	2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol 3
	2-(2'-Hydroxy-3',5'-di-tert-amylphenyl) benzotriazole 6
R	2,6-Di-tert-butyl-4-ethylphenol 5
Resimene® 3520 13	2,6-Di-tert-butylphenol 6
Retarder AK 23	2-Cyano-2-propyl benzodithioate 22
	2-Cyano-2-propyl dodecyl trithiocarbonate 22
S	2-(Dodecylthiocarbonothioylthio)-2-methylpropionic acid 23
Santicizer® 141 20	2-Ethylhexyl sebacate 18
Santicizer® 148 20	2-tert-Butyl-6-(5-chloro-2H-benzotriazol-2-yl)-4-methylphenol 4
Santicizer® 160 20	4,4'-Butylidenebis(6-tert-butyl-m-cresol) 4
Santicizer® 261 20	4-Cyano-4-[(dodecylsulfanylthiocarbonyl)sulfanyl]pentanoic acid 22
Santicizer® 278 10	4-Cyano-4-(phenylcarbonothioylthio)pentanoic acid 22
Santoflex® 6PPD 2	
Santoflex® 77PD 2	
Saytex® 8010 16	
SF100 2	
Silquest® A-137 12	
Silquest® A-187 12	
Silquest® A-1100 12	
Silquest® A-1102 12	
Silquest® A-1289 12	
Silquest® A-2171 12	
Stearic Acid RG (rubber grade) 23	
Stearic Acid TP 23	
T	
Tetradecachloro-m-terphenyl 16	
Tetradecachloro-o-terphenyl 16	
Tetradecachloro-p-terphenyl 16	
Tinuvin® PED 25	
Tributylphosphate 20	
Triethylphosphate 20	
Trimellitate 21	
U	
Ultranox® 626 10	
Uvinul® 3000 25	
Uvinul® 3008 25	
Uvinul® 3040 25	
Uvinul® 3049 25	
V	
Vinsol® powder 21	
Vinsol® resin 21	

Notes

Contact / Order Information

For ordering information contact your AccuStandard Distributor

Visit our website www.accustandard.com

Liability:

- Products listed in this catalog are for research use only.
- No warranty for any particular application is expressed or implied.
- Due to the products hazardous nature, they should be handled by trained personnel.
- AccuStandard's liability will be limited to, replacement of product or refund of purchase price.
- Notice of claims must be made within thirty (30) days from the date of delivery.



AccuStandard.com

✓ **Over 40,000 Standards, just a click away**
(over 10,000 listed and over 30,000 formulated custom standards)

✓ **Online MSDSs, COAs & EPA Methods**
(available as downloads in PDF format, to view or print at your convenience)



AccuStandard[®]

ISO Guide 34 ■ ISO/IEC 17025 ■ ISO 9001

www.AccuStandard.com