



Regulatory Data Sheet

Copyright, 2023, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

This Regulatory Data Sheet is provided as a courtesy in response to a customer request.

Document Group: 34-8060-5
Issue Date: 07/20/23

Version Number: 14.00
Supersedes Date: 04/28/23

3M™ Advanced Polarizer Film - Quarter Wave Plate (APF-QWP)

3M
Display Materials and Systems Division
3M Center, St. Paul, MN 55144-1000, USA
1-888-3M HELPS (1-888-364-3577)

RDSs are available at www.3M.com

Regulations and Industry Standards

SDS (US OSHA)

This product is an article and therefore is not subject to the requirements of the US Occupational Safety and Health Administration's (OSHA) Hazardous Communications Standard 29 CFR 1910.1200(b)(6)(v) to provide a Safety Data Sheet (SDS).

California Proposition 65

This product is an industrial product manufactured outside of California. It has not been assessed for consumer sale or use. Contact the manufacturer if more information is needed for your use.

CONEG

This product complies with the US CONEG (Coalition of Northeastern Governors) Model Toxics in Packaging Legislation as there is no intentionally added lead, cadmium, hexavalent chromium or mercury, and the sum total concentration of these substances in the product does not exceed 100 ppm by weight.

Conflict Minerals

Conflict Minerals, which the U.S. Securities and Exchange Commission ("SEC") has defined as gold, columbite-tantalite (coltan), cassiterite, wolframite, or their derivatives (tin, tantalum, or tungsten), are not contained in or are not "necessary to the functionality or necessary to the production" of the above-listed product, as the term "necessary to the functionality or the production" is defined under the SEC's Conflict Minerals Rule. 77 Fed. Reg. 56274 (Sept. 12, 2012).

CPSIA 2008

A Certificate of General Conformity per the US Consumer Product Safety Act, 15 U.S.C. § 2063 (a)(1), as revised by section 102 of the 2008 US Consumer Product Safety Improvement Act, is not required for the requested product.

EU REACH

This product is an article, without intended release of a chemical substance, under the Regulation No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (refer to REACH, Article 3(3)). It is not a chemical preparation. Therefore, it is not subject to the (pre)-registration or the registration process. It does not require a safety data sheet.

EU REACH

This product, including any article that the product is composed of, does not contain at greater than 0.1% by weight a Substance of Very High Concern (SVHC) substance identified according to Article 59 of REACH. This declaration reflects the substances on the candidate SVHC list, effective June 2023.

EU RoHS

This product does not exceed the maximum concentration values (MCVs) set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as stated in Annex II to that directive. This means that each of the homogenous materials within this product does not exceed the following MCVs: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; and (b) 0.01% (by weight) for cadmium.

EU RoHS Phthalates

This product does not exceed the maximum concentration values (MCVs) for phthalates set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as amended by EU 2015/863, which applies to finished EEE after July 22, 2019 for Category 1-7, 10-11 products and after July 22, 2021 for Category 8 and 9 products. This means that each of the homogeneous materials within this product does not exceed the MCV of 0.1% (by weight) for each of the following phthalates: DEHP, BBP, DBP, and DIBP.

Halogens – IEC 61249-2-21

This product meets the non-halogenated permissible limits of the International Electrotechnical Commission (IEC) 61249-2-21 standard as having less than 900 ppm bromine, less than 900 ppm chlorine, and less than 1500 ppm total bromine and chlorine.

Stockholm Agreement

This product does not contain Persistent Organic Pollutants (POPs) at or above applicable thresholds per Annexes A, B, and C of the Stockholm Convention, May 2004 and subsequent amendments.

TSCA Section 6(h) PBT Chemicals

This product is not known to contain the five TSCA Section 6(h) Persistent, Bioaccumulative, and Toxic (PBT) Chemicals issued December 2020: Decabromodiphenyl Ether (Deca-BDE) (CAS 1163-19-5), 2,4,6-Tri-tert-butylphenol (CAS 732-26-3), Phenol, isopropylated phosphate (3:1) (PIP (3:1)) (CAS 68937-41-7), Hexachlorobutadiene (HCBT) (CAS 87-68-3), and Pentachlorothiophenol (PCTP) (CAS 133-49-3).

Chemicals and/or Compounds of Interest

[Phthalato(2-)]dioxotrilead (dibasic lead phthalate) (CAS 69011-06-9) : Not known to contain.

1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters : Not known to contain.

1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) (CAS 71888-89-6) : Not known to contain.

1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) (CAS 68515-42-4) : Not known to contain.

1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear (CAS 68515-50-4) : Not known to contain.

1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear (CAS 84777-06-0) : Not known to contain.

2-(2H-benzotriazol-2-yl)-6-(1-methyl-1-phenylethyl)-4-(1,1,3,3-tetramethylbutyl)phenol (CAS 73936-91-1) : Not known to contain.

2-(2'-Hydroxy-3',5'-di-tert-butylphenyl)benzotriazole (CAS 3846-71-7) : Not known to contain.

2-(3-Sec-butyl-2-hydroxy-5-tert-butylphenyl)benzotriazole (CAS 36437-37-3) : Not known to contain.

2-(5-Chloro-benzotriazol-2-yl)-4,6-bis(t-butyl)phenol (CAS 3864-99-1) : Not known to contain.

2,4,6-Tri-tert-butylphenol (CAS 732-26-3) : Not known to contain.

Alkylphenol (AP) : Not known to contain.

Alkylphenoethoxylates (APE) : Not known to contain.

Antimony and (Sb) Compounds : Contains. *Contains < 45 PPM Residual*

Arsenic and (As) Compounds : Not known to contain.

Asbestos : Not known to contain.

Azocolorants and Azodyes : Not known to contain.

Barium and (Ba) Compounds : Not known to contain.

Benzenamine, N-Phenyl-, Reaction Products with Styrene and 2,4,4-Trimethylpentene (BNST) (CAS 68921-45-9) : Not known to contain.

Beryllium and (Be) Compounds : Not known to contain.

Bismuth and (Bi) Compounds : Not known to contain.

Bisphenol A (BPA) (CAS 80-05-7) : Contains. *Contains < 20 PPM Residual*

Bisphenol S (BPS) (CAS 80-09-1) : Not known to contain.

Boron and (B) Compounds : Not known to contain.

Bromobenzylbromotoluene (CAS 99688-47-8) : Not known to contain.

Butyl Benzyl Phthalate (BBP) (CAS 85-68-7) : Not known to contain.

Cadmium and (Cd) Compounds : Not known to contain.

Chlorinated Paraffins, Long Chain : Not known to contain.

Chlorinated Paraffins, Short Chain : Not known to contain.

Chromium and (Cr) Compounds : Not known to contain.

Cobalt and (Co) Compounds : Contains. *Contains < 25 PPM Residual*

Copper and (Cu) Compounds : Not known to contain.

Cresol (CAS 1319-77-3) : Not known to contain.

Decabromodiphenyl ethane (DBDPE) (CAS 84852-53-9) : Not known to contain.

Di(2-Ethylhexyl) Phthalate (DEHP) (CAS 117-81-7) : Not known to contain.

Di(Methoxyethyl) Phthalate (DMEP) (CAS 117-82-8) : Not known to contain.

Dibutyl Phthalate (DBP) (CAS 84-74-2) : Not known to contain.

Dibutyl Tin Compounds : Not known to contain.

Dicyclohexyl phthalate (DCHP) (CAS 84-61-7) : Not known to contain.

Dihexyl phthalate (DNHP) (CAS 84-75-3) : Not known to contain.

Diisobutyl Phthalate (DIBP) (CAS 84-69-5) : Not known to contain.

Diisodecyl Phthalate (DIDP) : Not known to contain.

Diisohexyl phthalate (CAS 71850-09-4) : Not known to contain.

Diisononyl Phthalate (DINP) : Not known to contain.

Diisopentylphthalate (DIPP) (CAS 605-50-5) : Not known to contain.

Dimethyl Fumarate (DMF) (CAS 624-49-7) : Not known to contain.

Di-n-Octyl Phthalate (DNOP) (CAS 117-84-0) : Not known to contain.

Dioctyltin Compounds : Not known to contain.

Dioxins and Furans : Not known to contain.

Dipentyl phthalate (DPP) (CAS 131-18-0) : Not known to contain.

Diphenyldichloromethane (CAS 2051-90-3) : Not known to contain.

Dodecachlorodimethanodibenzocyclooctane and its syn- and anti-isomers (CAS 13560-89-9, 135821-03-3, 135821-74-8) : Not known to contain.

Flame Retardants (not PBB or PBDE) : Not known to contain.

Formaldehyde (CAS 50-00-0) : Not known to contain.

Gold and (Au) Compounds : Not known to contain.

Halogenated Compounds : Bromine, chlorine, fluorine, iodine or chemical compounds containing them are not intentionally added.

Halogenated diphenyl methanes : Not known to contain.

Halogenated Flame Retardants : Not known to contain.

Hexabromo Cyclo-Dodecane (HBCD) : Not known to contain.

Hexabromobenzene (CAS 87-82-1) : Not known to contain.

Hexachlorobenzene (CAS 118-74-1) : Not known to contain.

Hexachlorobutadiene (HCBd) (CAS 87-68-3) : Not known to contain.

Hexavalent Chromium and (Cr+6) Compounds : Not known to contain.

Indium and (In) Compounds : Not known to contain.

Lead and (Pb) Compounds : Not known to contain.

Magnesium and (Mg) Compounds : Not known to contain.

Manganese and (Mn) Compounds : Contains. *Contains < 20 PPM Residual*

Medium-chained chlorinated paraffins, C14-C17 (MCCP) : Not known to contain.

Mercury and (Hg) Compounds : Not known to contain.

Mica : Not known to contain.

Molybdenum and (Mo) Compounds : Not known to contain.

Musk Xylene (CAS 81-15-2) : Not known to contain.

Natural Rubber Latex : Not known to contain.

Nickel and (Ni) Compounds : Not known to contain.

N-pentyl-isopentyl phthalate (CAS 776297-69-9) : Not known to contain.

Ozone Depleting Chemicals (ODCs) : Not known to contain.

Palladium and (Pd) Compounds : Not known to contain.

Pentachlorophenol (87-86-5) : Not known to contain.

Pentachlorothiophenol (PCTP) (CAS 133-49-3) : Not known to contain.

Perchlorates : Not known to contain.

Phenol (CAS 108-95-2) : Not known to contain.

Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)- (CAS 25973-55-1) : Not known to contain.

Phenol, isopropylated phosphate (3:1) (PIP (3:1)) (CAS 68937-41-7) : Not known to contain.

Phosphorus and (P) Compounds : Contains. *Contains < 90 PPM Residual (The source of the Phosphorus is not elemental (including Red Phosphorus) nor added as a flame retardant)*

Polybrominated Biphenyls (PBB) : Not known to contain.

Polybrominated Diphenylethers (PBDE) : Not known to contain.

Polychlorinated Biphenyls (PCBs) : Not known to contain.

Polychlorinated Naphthalenes (PCNs) (>3 Chlorine Atoms) : Not known to contain.

Polychlorinated Terphenyls (PCTs) : Not known to contain.

Polycyclic Aromatic Hydrocarbons (PAHs) : Not known to contain.

Polyvinyl Chloride (PVC) : Not known to contain.

Radioactive Substance : Not known to contain.

Rare Earth Elements (REE) or Rare Earth Metals (REM) : Not known to contain.

Selenium and (Se) Compounds : Not known to contain.

Silver and (Ag) Compounds : Not known to contain.

Sulfur and (S) Compounds : Not known to contain.

Sulfur hexafluoride (SF6) (CAS 2551-62-4) : Not known to contain.

Tantalum and (Ta) Compounds : Not known to contain.

Tetrabromobisphenol A (TBBA) (CAS 79-94-7) : Not known to contain.

Tetrachlorobenzyltoluene (CAS 76253-60-6) : Not known to contain.

Thallium and (Tl) Compounds : Not known to contain.

Tin and (Sn) Compounds : Not known to contain.

Titanium and (Ti) Compounds : Not known to contain.

Toluene (CAS 108-88-3) : Not known to contain.

Tributyl Tin Compounds : Not known to contain.

Triphenyl Tin Compounds : Not known to contain.

Tris(1 chloro-2-propyl) phosphate (TCPP) (CAS 13674-84-5) : Not known to contain.

Tris(1,3 dichloro-2-propyl) phosphate (TDCPP) (CAS 13674-87-8) : Not known to contain.

Tris(1-aziridinyl)phosphine oxide (TAPO) (CAS 545-55-1) : Not known to contain.

Tungsten and (W) Compounds : Not known to contain.

Vanadium and (V) Compounds : Not known to contain.

Zinc and (Zn) Compounds : Contains. *Contains < 35 PPM Residual*

Per- and Polyfluoroalkyl Substances (PFAS)

PFAS refers to a broad range of thousands of materials with varying properties and characteristics, which may include high resistance to oil, water, temperature, chemicals, and fire, which makes certain PFAS critical to the functioning of many modern products.

Chlorofluorocarbons (CFCs) : Not intentionally added.

Hydrochlorofluorocarbons (HCFCs) : Not intentionally added.

Long-chain perfluoroalkyl carboxylate LCPFCA (C9-C21) : Not intentionally added.

Per- and polyfluoroalkyl substances (PFAS) : Not intentionally added. *Contains PFBS salt (CAS # 29420-49-3) at <0.001% (10 PPM). Please contact 3M for additional information.*

Perfluorohexane sulfonate (PFHxS) : Not intentionally added.

Perfluorohexanoic acid (PFHxA) (CAS 307-24-4) : Not intentionally added.

Perfluorooctanesulfonic Acid (PFOS) (CAS 1763-23-1) : Not intentionally added.

Perfluorooctanoic Acid (PFOA) (CAS 335-67-1) : Not intentionally added.

Definitions

Note: all Definitions take Disclaimers into account and apply to the “Chemicals and/or Compounds of Interest” and/or “Per and poly-fluoroalkyl Substances (PFAS)” sections only

Terms	Definitions
Contains*	Present based on composition information disclosed by 3M suppliers, analytical testing, or both.
Not known to contain*	1. Analytical measurement for presence is not currently available; 2. If measurement is possible, a) The material has not been identified or disclosed to 3M and b) The material has not been specifically quantified or detected; OR c) Based on information from raw material suppliers, possible presence as an impurity or by-product at or below regulatory thresholds (e.g., 0.1 or 0.01 %)
Intentionally added**	Desired in the final product to provide a specific characteristic, appearance, or quality and/or to perform a specific function.
Not intentionally added**	By-product(s), impurity(ies) and/or unintended artifact(s) resulting from the formulation and/or manufacture of a material.
By-product***	A chemical substance produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance or mixture.
Impurity***	A chemical substance which is unintentionally present with another chemical substance (e.g., residuals, catalysts, process solvents).

**Terms apply to the Chemicals and/or Compounds of Interest Section only (if section is present)*

***Terms apply to the PFAS Section only (if section is present)*

****Terms apply to both the Chemicals and/or Compounds of Interest and PFAS Sections (if section(s) are present)*

Disclaimers: The information provided in this document related to material content represents 3M's knowledge and belief, which may be based in whole or in part on information provided by suppliers to 3M. This is intended to answer commonly asked questions about 3M products and is not intended to be a comprehensive listing of all substances that may be of interest or that may be regulated in this or other 3M products, nor is it intended to be a comprehensive summary of any and all regulations that may apply to this product. Where substances are listed, their listing does not infer or constitute a judgment as to their safety, environmental or health impacts. Information is supplied upon the condition that the persons receiving the same will make their own determination as to its suitability for their purposes prior to use. Customers are encouraged to consult with legal and regulatory experts to determine applicable regulations in light of intended use of the product.

Limitation of Remedies and Liability: In the event any Product is proven not to conform with the information in this document, then to the extent permitted by law, 3M's entire liability and Buyer's exclusive remedy, will be at 3M's option either: (i) replacement of Product with a conforming product, or (ii) refund of the purchase price paid by Buyer for each non-conforming Product, within a reasonable time after written notification of said non-conformance and return of said Product to 3M. 3M shall not under any circumstances be liable for direct, incidental, special, or consequential damages (including but not limited to loss of profits, revenue, or business) related to or arising out of this certification, including, the use, misuse or inability to use the Product. Unless stated otherwise in writing, the foregoing language cannot be waived, modified, or supplemented in any manner whatsoever.