

SPHERILEX[®] DP-0110

TABLE OF CONTENTS

| | |
|--|----------|
| Global Chemical Inventories | 1 |
| Australia | 1 |
| Canada | 1 |
| China | 1 |
| Eurasian Economic Union | 1 |
| European Union | 1 |
| Japan | 1 |
| New Zealand | 1 |
| Philippines | 1 |
| South Korea | 2 |
| Switzerland | 2 |
| Taiwan | 2 |
| Turkey | 2 |
| United Kingdom | 2 |
| USA | 2 |
| Vietnam | 2 |
| Country Product Registers | 3 |
| Scandinavian Product Register | 3 |
| Spanish Poison Center (INTCF) | 3 |
| Food Contact Status | 3 |
| Ecolabel Status | 3 |
| Further regulatory Information referring to final materials or articles | 4 |
| DIN EN 71-3 : 2021 (Safety of Toys: Migration of certain elements) | 4 |
| US ASTM - F 693 (Safety of Toys) | 4 |

| | |
|--|-----------|
| Maine CHCC (Safety of Toys) | 4 |
| Oregon CHCC (Safety of Toys) | 4 |
| Vermont CHCC (Safety of Toys) | 4 |
| Washington State CHCC (Safety of Toys) | 4 |
| Directive 2011/65/EC (RoHS) amended through Directive (EU) 2015/863 | 4 |
| Council Directive 94/62/EC (packaging and packaging waste) | 4 |
| Coalition of North Eastern Governors (CONEG) | 5 |
| China GB/T39498-2020 (Guidelines for Controlling the Use of Key Chemical Substances in Consumer Products) | 5 |
| California Proposition 65 | 5 |
| CERCLA | 5 |
| SARA 311/312/313 | 5 |
| Additional information | 6 |
| Biocides Content | 6 |
| SVHC substances | 6 |
| Volatile Organic Compounds (VOC) / Semi-Volatile Organic Compounds (SVOC) | 6 |
| Diverse substances | 7 |
| Further information | 13 |
| Other regulations | 13 |

GLOBAL CHEMICAL INVENTORIES

Last revision for this chapter was on 2023-01-05

The below country inventory information results from a set of confidential data. If required, necessary data can be made available to the country authorities directly.

Australia

All components are listed on AICC.

Canada

All components are listed on DSL.

China

All components are listed on IECSC.

Eurasian Economic Union

The relevant components were reported to the inventory of chemicals and mixtures of the Eurasian Economic Union. (EAEU inventory).

European Union

All components are listed on EINECS or ELINCS.

The REACh-relevant substance(s) are registered.

In order to avoid any conflicts with REACh, please make sure that you will be supplied in the future with material manufactured within the European Economic Area (EEA) or imported into the EEA by Evonik Operations GmbH in close cooperation with your European Evonik Operations supplier contact. In case you purchase this product from outside of EEA and plan to import this to EEA, please be aware of your duties according to REACh regulation.

Japan

All components are listed on ENCS (MITI) or exempted.

New Zealand

All components are listed on NZIoC and/or are exempted from registration (non hazardous).

Philippines

All components are listed on PICCS.

South Korea

All components are listed on ECL.

Switzerland

All relevant substances are registered under REACH in EEA, thus the product does not contain new substances according to ChemO SR 813.11.

Taiwan

All components are listed on TCSI.

Turkey

All relevant components are pre-registered in KKDIK.

In case of intended import into Turkey, please ask for OR coverage.

United Kingdom

The Downstream User Import Notification (DUIN) of the relevant substances is completed.

Please note, that it is only possible for GB-based companies that were downstream users or distributors in the 2 years before the end of the Transition Period (1st January 2019 - 31st December 2020) to take advantage of the DUIN process (Article 127E).

USA

All components are listed and have been notified as being "Active" under the requirements of the TSCA Inventory Reset.

Vietnam

All components are approved for NCI inventory.

COUNTRY PRODUCT REGISTERS

Last revision for this chapter was on 2023-01-05

Scandinavian Product Register

For registration request please contact us.

Spanish Poison Center (INTCF)

For registration request please contact us.

FOOD CONTACT STATUS

The business line Coating Additives of Evonik has prioritized certain products for food contact applications. Statements of those specified products which have been evaluated and offer food contact compliances are available in a separate document on our website.

ECOLABEL STATUS

The business line Coating Additives of Evonik has prioritized certain products for ecolabel applications. Statements of those specified products which have been evaluated and offer ecolabel compliances are available in a separate document on our website.

FURTHER REGULATORY INFORMATION REFERRING TO FINAL MATERIALS OR ARTICLES

Last revision for this chapter was on 2023-01-05

DIN EN 71-3 : 2021 (Safety of Toys: Migration of certain elements)

We do not expect the presence of substances mentioned in DIN EN 71-3: 2021 in amounts exceeding the respective limits within SPHERILEX® DP-0110.

US ASTM - F 693 (Safety of Toys)

We do not expect the presence of substances mentioned in US ASTM - F 693 in amounts exceeding the respective limits within SPHERILEX® DP-0110.

Maine CHCC (Safety of Toys)

We do not expect the presence of substances mentioned in Maine CHCC in amounts exceeding the respective limits within SPHERILEX® DP-0110.

Oregon CHCC (Safety of Toys)

We do not expect the presence of substances mentioned in Oregon CHCC in amounts exceeding the respective limits within SPHERILEX® DP-0110.

Vermont CHCC (Safety of Toys)

We do not expect the presence of substances mentioned in Vermont CHCC in amounts exceeding the respective limits within SPHERILEX® DP-0110.

Washington State CHCC (Safety of Toys)

We do not expect the presence of substances mentioned in Washington State CHCC in amounts exceeding the respective limits within SPHERILEX® DP-0110.

Directive 2011/65/EC (RoHS) amended through Directive (EU) 2015/863

We do not expect the presence of substances mentioned in Directive 2011/65/EC amended through Directive (EU) 2015/863 in amounts exceeding the respective limits within this product.

Council Directive 94/62/EC (packaging and packaging waste)

We do not expect the presence of substances mentioned in Council Directive 94/62/EC in amounts exceeding the respective limits within this product.

Coalition of North Eastern Governors (CONEG)

We do not expect the presence of substances mentioned in CONEG in amounts exceeding the respective limits within this product.

China GB/T39498-2020 (Guidelines for Controlling the Use of Key Chemical Substances in Consumer Products)

We do not expect the presence of substances mentioned in CHINA GB/T39498-2020 in amounts exceeding the respective limits within this product. Please be aware that CHINA GB/T39498-2020 sets limits for substances for the finished article.

California Proposition 65

For information regarding the above mentioned regulation please refer to the US-MSDS under point 15.

CERCLA

For information regarding the above mentioned regulation please refer to the US-MSDS under point 15.

SARA 311/312/313

For information regarding the above mentioned regulation please refer to the US-MSDS under point 15.

ADDITIONAL INFORMATION

Biocides Content

Last revision for this chapter was on 2023-01-05

Herewith we confirm that we do not use biocides for SPHERILEX® DP-0110 preservation.

SVHC substances

We as a supplier of chemical substances or mixtures thereof are obliged to provide our customers with a Safety Data Sheet which includes information, if the product contains dangerous substances in reportable amounts according to EU regulations.

ECHA (European Chemicals Agency) regularly updates its Candidate List of Substances of Very High Concern for Authorization. For information regarding hazardous components of products supplied to you, please refer to our newest EU Safety Data Sheet which will be updated according to the legal obligations.

Volatile Organic Compounds (VOC) / Semi-Volatile Organic Compounds (SVOC)

VOC (volatile organic compounds) - content

Last revision for this chapter was on 2023-01-05

Determination via theoretical calculation: not expected

SVOC (semi-volatile organic compounds) - content

Determination via theoretical calculation: not expected

Diverse substances

Last revision for this chapter was on 2023-01-05

Unless other stated under "Remarks" we do not expect the presence of the following substances within SPHERILEX® DP-0110.

If desired substance is not found by name search by substance's CAS #. Use Ctrl + F to search document.

ACRYLATES

| Substance | Remarks |
|---|---------|
| BDDA (1,4-Butanediol diacrylate) (CAS# 1070-70-8) | |
| DEGDA (Diethylene glycol diacrylate) (CAS# 4074-88-8) | |
| DPGDA (Dipropylene glycol diacrylate) (CAS# 57472-68-1) | |
| 2-EHA (2-Ethyl hexyl acrylate) (CAS# 103-11-7) | |
| HDDA (1,6-Hexanediol diacrylate) (CAS# 13048-33-4) | |
| IDA (Isodecyl acrylate) (CAS# 1330-61-6) | |
| ODA (Octyl acrylate) (CAS# 2499-59-4) | |
| PETA (Mixtures of pentaerythritol tri and tetra-acrylates) (CAS# 3524-68-3) | |
| Phenyl acrylate (CAS# 937-41-7) | |
| Phenoxyethyl acrylate (CAS# 48145-04-6) | |
| TEGDA (Tetraethylene glycol diacrylate) (CAS# 17831-71-9) | |
| TMPTA (Trimethylol propane triacrylate) (CAS# 15625-89-5) | |

AROMATIC SUBSTANCES

(Please also refer to the section halogenated aromatic substances and flame retardants)

| Substance | Remarks |
|--|---------|
| Monocyclic aromatic substances | |
| - 1,2,4-Trimethylbenzene (CAS# 95-63-6) | |
| - Alkylphenols (e. g. o-Nonylphenol, o-Phenylphenol) | |
| - Alkylphenol ethoxylates (APEO) | |
| - Benzene (CAS# 71-43-2) | |
| - BHA (Butylated hydroxyanisol) (CAS# 25013-16-5) | |
| - BHT (Butylated hydroxytoluene) (CAS# 128-37-0) | |
| - Ethylbenzene (CAS# 100-41-4) | |
| - Phenol (CAS# 108-95-2) | |
| - Primary aromatic amines | |
| - Styrene (CAS# 100-42-5) | |
| - Tris (nonylphenyl) phosphite (TNPP) (CAS# 26523-78-4) | |
| - Toluene (CAS# 108-88-3) | |
| - Xylene (CAS# 1330-20-7) | |
| Bisphenol and derivatives | |
| - BADGE (Bisphenol A diglycidyl ether) (CAS# 1675-54-3) | |
| - Bisphenol A (CAS# 80-05-7) | |
| - Bisphenol F (CAS# 620-92-8) | |
| - Bisphenol S (CAS# 80-09-1) | |
| Halogenated aromatic substances | |
| - 1,2-Dichlorobenzene (CAS# 95-50-1) | |
| - 1,4-Dichlorobenzene / Paradichlorobenzene (PCDB) (CAS# 106-46-7) | |
| - PCBTF, Parachlorobenzotrifluoride, (CAS# 98-56-6) | |
| - Pentachlorophenol (PCP) (CAS# 87-86-5) | |
| - Polybrominated biphenyls | |
| - Polybrominated diphenyl ethers | |
| - Polychlorinated terphenyls (PCT) | |
| Parabens | |
| - Paraben (4-Hydroxybenzoic acid) (CAS# 99-96-7) | |
| - Methylparaben (Methyl-4-hydroxybenzoat) (CAS# 99-76-3) | |
| - Ethylparaben (Ethyl-4-hydroxybenzoat) (CAS# 120-47-8) | |
| - Propylparaben (Propyl-4-hydroxybenzoat) (CAS# 94-13-3) | |
| - Butylparaben (Butyl-4-hydroxybenzoat) (CAS# 94-26-8) | |
| - Phenylparaben (Phenyl-4-hydroxybenzoat) (CAS# 17696-62-7) | |
| Benzophenones | |
| - Benzophenone (CAS# 119-61-9) | |
| - Benzophenone 12 (CAS# 1843-05-6) | |
| - Benzophenone-2 (CAS# 131-55-5) | |
| - Benzophenone-3/Oxybenzon (CAS# 131-57-7) | |
| - Benzophenone oxide (CAS# 90-47-1) | |

| Substance | Remarks |
|--|---------|
| Other aromatic substances | |
| - Anthraquinone (CAS# 84-65-1) | |
| - Isopropyl-9H-thioxanthen-9-one (CAS# 75081-21-9) | |
| - Naphtalene (CAS# 91-20-3) | |
| - PAH (Polycyclic aromatic hydrocarbons) | |
| - VAH (Volatile aromatic hydrocarbons) | |

BIOBASED FEEDSTOCKS

| Substance | Remarks |
|--|---------|
| Components derived from animals | |
| Components derived from plants | |
| Components derived from genetically modified organisms (GMO) | |

FLAME RETARDANTS

| Substance | Remarks |
|---|---------|
| 2,2-Bis(chloromethyl)-propane-1,3-diyltetrakis (2-chloroethyl) bisphosphate (CAS# 38051-10-4) | |
| 2-Ethylhexyl-2,3,4,5-tetrabromobenzoate (EHTBB) (CAS# 183658-27-7) | |
| Bis(2-ethylhexyl) tetrabromophthalate (BEHTBP) (CAS# 26040-51-7) | |
| Tris (1-chloro-2-propyl) phosphate (TCPP) (CAS# 13674-84-5) | |
| Tris (1,3-dichloropropyl-2) phosphate (TDCPP) (CAS# 13674-87-8) | |
| Tris (2-chloroethyl) phosphate (TCEP) (CAS# 115-96-8) | |
| Triphenyl phosphate (TPP) (CAS# 115-86-6) | |
| Polybrominated Diphenyl Ethers (PBDEs) | |
| - DecaBDE (CAS# 1163-19-5) | |
| - OctaBDE (CAS# 32536-52-0) | |
| - PentaBDE (CAS# 32534-81-9) | |

GLYCOL ETHERS

| Substance | Remarks |
|--|---------|
| BDGA (Butyl diglycol acetate) (CAS# 124-17-4) | |
| EGBE (Ethylene glycol butyl ether) (CAS# 111-76-2) | |
| EGDEE (Ethylene glycol di-ethyl ether) (CAS# 629-14-1) | |
| EGDME (Ethylene glycol di-methyl ether) (CAS# 110-71-4) | |
| EGEE (Ethylene glycol ethyl ether) (CAS# 110-80-5) | |
| EGEEA (Ethylene glycol ethyl ether acetate) (CAS# 111-15-9) | |
| EGME (Ethylene glycol methyl ether) (CAS# 109-86-4) | |
| EGMEA (Ethylene glycol methyl ether acetate) (CAS# 110-49-6) | |
| DEGDME (Di-ethylene glycol di-methyl ether) (CAS# 111-96-6) | |
| DEGME (Di-ethylene glycol methyl ether) (CAS# 111-77-3) | |
| TEGDME (Tri-ethylene glycol di-methyl ether) (CAS# 112-49-2) | |

HALOGENATED ORGANIC SUBSTANCES

(Please also refer to the chapter halogenated aromatic substances and flame retardants)

| Substance | Remarks |
|---|---------|
| Brominated substances | |
| Chlorinated substances (e. g. Shortchain chlorinated paraffins, PVC (Polyvinylchloride) (CAS# 9002-86-2), Tetrachloroethylene (CAS# 127-18-4), Vinyl chloride (CAS# 75-01-4), Polyvinylidene chloride (CAS# 9002-85-1)) | |
| Fluorinated substances (e.g. polyfluorinated substances (PFAS), perfluorinated alkylsulfonates (PFAS), perfluorinated carboxylic acids (PFCA), fluorinated greenhouse gases) | |
| Halogenated hydro carbons (Group 1-9 according Regulation (EC) No 1005/2009 (substances that deplete the ozone layer) - status September 2009) | |

(HEAVY) METALS AND THEIR COMPOUNDS

| Substance | Remarks |
|--|---------------------------------------|
| Aluminum | approx. 0.15 % (as Aluminiumoxide) |
| Antimony (e. g. Antimony oxide) | ≤ 1 ppm |
| Arsenic | ≤ 1 ppm |
| Barium | approx.40 ppm |
| Boron | |
| Cadmium | ≤ 1 ppm |
| Chromium (III) | ≤ 10 ppm (as total Cr) |
| Chromium (VI) | ≤ 10 ppm (as total Cr) |
| Cobalt | ≤ 1 ppm |
| Copper | |
| Lead | ≤ 3 ppm |
| Manganese | |
| Mercury | ≤ 1 ppm |
| Nickel | |
| Selenium | ≤ 1 ppm |
| Silver | |
| Strontium | |
| Tin (e. g. Tin organic compounds) | ≤ 1 ppm |
| Zinc (e. g. Zinc oxide (CAS# 1314-13-2)) | |

OPTICAL BRIGHTENERS

| Substance | Remarks |
|--|---------|
| 1,2-Di(5-methyl-benziasoly)ethylene (CAS# 12224-12-3) | |
| 1,4-Bis(2-cyanostyryl)benzene (CAS# 13001-39-3) | |
| 1,4-Bis(4-cyanostyryl)benzene (CAS# 12001-40-6) | |
| 1,4-Bis-Benzoxazolyl-naphthalene (CAS# 5089-22-5) | |
| 1,4-Di[4-cyanostyryl]benzene (CAS# 58449-88-0) | |
| 2,2'-(1,2-ethenediyl)bis(4,1-phenylene)bisbenzoxazole (CAS# 1533-45-5) | |
| 2,2'-(2,5-thiophenediyl)bis(5-tert-butylbenzoxazole) (CAS# 7128-64-5) | |
| 4,4-Bis(2-methoxystyryl)biphenyl (CAS# 40470-68-6) | |
| 4,4'-Diamino-2,2'-stilbenedisulfonic acid (CAS# 81-11-8) | |
| 4-(4-cyanostyryl)benzene (CAS# 13001-38-2) | |
| Benzenesulfonic acid,2,2'-(1,2-ethenediyl)bis[5-4-[bis(2-hydroxyethyl)amino]-6-{(4-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino]-, tetrasodium salt (CAS# 16470-24-9) | |
| Bis(5-methyl-2-benzoxazolyl)stilbene (CAS# 2397-00-4) | |
| Diphenylethylene triazine (CAS# 12768-92-2) | |
| Disodium 4,4'-bis (2-sulfo styryl) biphenyl (CAS# 27344-41-8) | |
| Distyryl biphenyl (DSBP) (CAS# 54227-96-2) | |
| Umbelliferone (CAS# 93-35-6) | |

PHTHALATES

| Substance | Remarks |
|---|---------|
| BBP (Benzyl butyl phthalate) (CAS# 85-68-7) | |
| DAP (Diallyl phthalate) (CAS# 131-17-9) | |
| DBP (Dibutyl phthalate) (CAS# 84-74-2) | |
| DCHP (Dicyclohexyl phthalate) (CAS# 84-61-7) | |
| DEHP (Di-2-ethylhexyl phthalate) (CAS# 117-81-7) | |
| DHNUP (Di-C7-11-branched alkylphthalates) | |
| DHP (Di-n-hexylphthalate) (CAS# 84-75-3) | |
| DIBP (Diisobutyl phthalate) (CAS# 84-69-5) | |
| DIDP (Diisodecyl phthalate) (CAS# 26761-40-0) | |
| DIHP (Di-C6-8-branched alkylphthalates) | |
| DINP (2-Diisononyl phthalate) (CAS# 28553-12-0) | |
| DMEP (Bis-(2-methoxyethyl) phthalate) (CAS# 117-82-8) | |
| DNOP (Di-n-octyl phthalate) (CAS# 117-84-0) | |
| DPENP (Di-n-pentyl phthalate) (CAS# 131-18-0) | |

PLASTICIZERS

(Please also refer to the chapter PHTHALATES)

| Substance | Remarks |
|--|---------|
| Chlorinated naphthalenes | |
| Chlorinated paraffines (CAS# 85535-85-9, 85535-84-8) | |
| Monocresyl phosphate (CAS# 14265-44-2) | |
| Monocresyl diphenyl phosphate (CAS# 26444-49-5) | |
| Tricresyl phosphate (CAS# 1330-78-5) | |

OTHERS

| Substance | Remarks |
|---|---------|
| 2,4 Diethylthioxanthone (CAS# 82799-44-8) | |
| Acetaldehyde (CAS# 75-07-0) | |
| Allergenic Fragrances (EG 1223/2009, Article 19) | |
| Ammonium nitrate (CAS# 6484-52-2) | |
| Asbestos | |
| Azo Dyes | |
| Crystalline silica and leucophyllite minerals containing crystalline silica | |
| Cyanuric acid (CAS# 108-80-5) | |
| Diacetone alcohol (CAS# 123-42-2) | |
| Dimethyl fumarate (CAS# 624-49-7) | |
| DMF (Dimethylformamide) (CAS# 68-12-2) | |
| Ethanol (CAS# 64-17-5) | |
| Food Allergens (EU Reg. 1169/2011) | |
| Formaldehyde (CAS# 50-00-0) | |
| HAP (Hazardous air pollutant) according to U.S. EPA Clean Air Act Section 112(b)(1) | |
| IPBC (3-Iodo-2-propynyl butylcarbamate) (CAS# 55406-53-6) | |
| Isocyanates | |
| Methanol (CAS# 67-56-1) | |
| Melamine (CAS# 108-78-1) | |
| Mineral oil | |
| Nanomaterials (according to Recommendation 2011/696/EU) | Yes* |
| Natural rubber or dry rubber latex | |
| Nitrosamines | |
| N-(3-aminopropyl)-N-dodecylpropane-1, 3-diamine (CAS# 2372-82-9) | |
| NMP (N-methyl-2-pyrrolidone) (CAS# 872-50-4) | |
| Ozone-Depleting Substances according U.S. EPA list, Class I and Class II | |
| Pentane-2,4-dione (CAS# 123-54-6) | |
| Persistent Organic Pollutants (POPs) according to Stockholm Convention | |
| PIC substances according to Rotterdam Convention | |
| Pesticides, which are not mentioned in the chapter Biocides | |
| Photo-initiators | |
| Pigments | |
| Quaternary ammonium salts | |
| Radioactive substances | |
| Rare earth metals | |
| Sodium sulfite (CAS# 7757-83-7) | |
| Talc (CAS# 14807-96-9) | |
| Titanium dioxide | |

FURTHER INFORMATION

*According to the REACH-Regulation this substance/mixture contains nanoforms. The product does not fall under the definition of "nanomaterial" or "engineered nanomaterial" according to cosmetics regulation (EC) 1223/2009 and the food information regulation (EC) 1169/2011.

OTHER REGULATIONS

For the following Regulation detailed information are available on request.

- Conflict Minerals

Should you require any additional information regarding the regulatory status of SPHERILEX® DP-0110, please do not hesitate to contact us!

Disclaimer

The information given above is based on and represents our current compositional knowledge (based on the knowledge of the production process, supplier information for raw materials and analytical data where applicable).

Please note that Evonik Operations GmbH does not analyse whether the mentioned substances are contained, because the content of such substances is not part of our product specification or formulation.

We use raw materials of technical purity, therefore negligible amounts on the level of natural / technical impurities cannot be excluded.

In case of provided values these are considered to be typical concentrations and are not part of the product specification.

All provided information is based on our present knowledge and experience and is true and complete to the best of our knowledge and belief. However, no warranty, whether expressed or implied, or guarantee of product properties in the legal sense is intended or implied.

In case of any questions concerning the provided information or if you need additional advice you are welcome to contact us:

Evonik Operations GmbH
Specialty Additives | Coating Additives
Goldschmidtstraße 100
45127 Essen
Germany
www.evonik.de
www.coating-additives.com

Please contact for region Europe, Middle East, Russia and Africa
regulatory-coating-additives-europe@evonik.com

Please contact for region Americas
regulatory-coating-additives-americas@evonik.com

Please contact for region Asia, Australia and New Zealand
regulatory-coating-additives-asia@evonik.com