



August 2024

REACH and Samsung Electronics' Products

Regulation No 1907/2006 on the *Registration, Evaluation, Authorisation and Restriction of Chemicals* (REACH)¹ entered into force on 1st June 2007. Under REACH, companies operating in the EU face certain obligations as manufacturers, importers and/or downstream users. One of the key requirements is the *Duty to Communicate Information on Substances in Articles* (Article 33).

Article 33: Information for Recipients & Customers

Article 33 of REACH requires suppliers to inform recipients and respond to consumer enquiries if an article contains more than 0.1% (by weight per article) of any substance on the Substances of Very High Concern candidate list² published by the European Chemicals Agency (ECHA).

Samsung Electronics Co. Ltd provides Article 33 information as follows. In addition, all consumers can use the contacts below to submit queries relating to the REACH obligations in Samsung Electronics' products.

environment@samsung.com

¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:396:0001:0849:EN:PDF>

² Considered as candidates for inclusion in Annex XIV of REACH. The latest revision to the candidate list was published by the European Chemicals Agency on 27rd June 2024 at: <https://echa.europa.eu/candidate-list-table>

The majority of products and packaging as manufactured and/or supplied by Samsung Electronics Co. Ltd do not contain substances on the REACH SVHC candidate list in concentrations greater than 0.1% by weight per article³. The limited numbers of articles in Samsung products affected are listed below. This is the status as of August 2024.

Substance	EC No.	CAS No.	Individual articles which may contain the substance above 0.1% by weight.	Application
Sodium dichromate	234-190-3	10588-01-9, 7789-12-0	Al alloys	Component
Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3	Paper, glass	Component
Boric acid, Boric acid crude natural	233-139-2, 234-343-4	10043-35-3, 11113-50-1,	Plastic, metal, glass, ceramic	Plasticizer, component, polymerization
Cobalt(II) sulphate	233-334-2	10124-43-3	Metal	Component of surface treatment product
Cobalt(II) dinitrate	233-402-1	10141-05-6	Metal	Component of surface treatment product
2-Ethoxyethyl acetate	203-839-2	111-15-9	Solder mask ink	Solvent
1-methyl-2-pyrrolidone (NMP)	212-828-1	872-50-4	Battery pack, plastic	Binder, polymerization
Diboron trioxide	215-125-8	1303-86-2	Glass	Component of glass, ceramic and metal alloy
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane- 2,4,6-trione (TGIC)	219-514-3	2451-62-9	Epoxy, ink, metal	Component
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	Battery	Battery electrolyte
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	Epoxy, ink	Component
Orange lead (Lead tetroxide)	215-235-6	1314-41-6	Ceramic	Impurity

³ Reference: ECHA Guidance on requirements for substances in Articles.

Substance	EC No.	CAS No.	Individual articles which may contain the substance above 0.1% by weight.	Application
Lead titanium zirconium oxide	235-727-4	12626-81-2	Ceramic	Component
Lead titanium trioxide	235-038-9	12060-00-3	Ceramic, glass	Component
Lead monoxide (Lead oxide)	215-267-0	1317-36-8	Ceramic, glass, metal	Component, additive
Hexahydromethylphthalic anhydride, including cis- and trans- stereo isomeric forms and all possible combinations of the isomers	247-094-1, 243-072-0, 256-356-4, 2260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	Epoxy, metal	Component, polymerization, curing agent
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA)	204-650-8	123-77-3	Plastic, rubber, sponge	Polymerization, plasticizer, component
Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	201-604-9, 236-086-3, 236-086-3	85-42-7, 13149-00-3, 14166-21-3	LED, sensor	Component
Trixylyl phosphate(TXP)	246-677-8	25155-23-1	Resin	Flame retardant, component
Lead di(acetate)	206-104-4	301-04-2	Alloys	Component
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1	TAC(Tri-Acetyl Cellulose) film	Preventing UV, polarizer, crosslinking agent
1,3-propanesultone	214-317-9	1120-71-4	Battery	Battery electrolyte
4,4'-isopropylidenediphenol (Bisphenol A; BPA)	201-245-8	80-05-07	Plastic	Impurity, byproduct, component
Octamethylcyclotetrasiloxane(D4)	209-136-7	556-67-2	Silicone, rubber	Additive, impurity, component
Lead	231-100-4	7439-92-1	Metal alloy, ceramic, glass, solder	Component, impurity
Ethylenediamine (EDA)	203-468-6	107-15-3	Metal alloy	Plating, stabilizer, component
Dodecamethylcyclohexasiloxane(D6)	208-762-8	540-97-6	Silicone, rubber	Additive, impurity, component

Substance	EC No.	CAS No.	Individual articles which may contain the substance above 0.1% by weight.	Application
Decamethyl cyclopentasiloxane(D5)	208-764-9	541-02-6	Ink, silicone	Additive, impurity, component
2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	404-360-3	119313-12-1	Epoxy resin, ink	Photo initiator
2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	400-600-6	71868-10-5	Epoxy resin, ink	Photo initiator, hardener, crosslinking agent, component
Perfluorobutane sulfonic acid (PFBS) and its salts, Potassium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate	- 249-616-3	- 29420-49-3	Plastic	Component
2-methylimidazole	211-765-7	693-98-1	Plastic	Plasticizer
1-vinylimidazole	214-012-0	1072-63-5	Plastic	Plasticizer
Bis(2-(2-methoxyethoxy)ethyl)ether	205-594-7	143-24-8	Solder	Component, impurity
Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	222-883-3, 293-901-5	3648-18-8, 91648-39-4	Resin	Plasticizer, additive, impurity
6,6'-di-tert-butyl-2,2'-methylene-di-p-cresol	204-327-1	119-47-1	Rubber, metal	Component
Melamine	203-615-4	108-78-1	Resin, ink	Plasticizer, additive
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	278-355-8	75980-60-8	Ink, paint, resin	Plasticizer, component
2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)	221-573-5	3147-75-9	Resin	Additive, UV stabilizer
2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one	438-340-0	119344-86-4	Adhesive	Component
Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol , Phenol, methylstyrenated	700-960-7, 270-966-8	- 68512-30-1	Metal, plastic, ink, primer	Plating material, plasticizer, component
Bis(α,α -dimethylbenzyl) peroxide	201-279-3	80-43-3	Plastics, rubber, paper	Component, additive