

POPs Certificate of Compliance

The EU POP Regulation lists 33 regulated persistent organic pollutants. The directive prescribes that “The manufacturing, placing on the market and use of substances listed . . . whether on their own, in mixtures or in articles, shall be [restricted or] prohibited” Consequently, when the writers added the word “Articles” to the regulation, they included “electronic parts.” Whether this was intentional or not, it is mute without guidance from the ECHA. One interpretation would be that the writers meant the container holding the substance such as plastic bottle, or paint can.

Most countries have banned or regulated many of the POP for decades. Pesticides (insecticides), such as DDT and Chlordane, make up most of the POP substances. These substances should never show up in electronic parts intentionally.

Flame retardants constitute the rest of the regulated POP. They include Polychlorinated Biphenyls (PCBs), and Hexabromocyclododecane. Producers have incorporated these flame retardants into plastics and foam used in consumer products, such as older TV cases and automobile upholstery.

The regulation also contains provisions intended to control stockpiles now treated as waste management. These provisions reduce stockpiles of all POP and clean up and eliminate these restricted substances in the future. The regulation further sets out concentration limits for waste management in stockpiles of waste materials. This does not extend to levels contained in substance homogeneous articles, such as RoHS and REACH currently regulates. This suggests the writer’s envisioned regulation of raw substances, and not articles per se. Any article containing POP substances, however, is part of POP waste.

We hereby declare that all products are free of 33 substances listed in POPs (Persistent Organic Pollutants) Regulation shown in the table. Further, all products mentioned in first paragraph qualify the Regulation (EU) 2019/1021 of the European Parliament and of the Council and its amendments [(EU) 2022/2291, (EU) 2022/2400 and (EU) 2023/866 、(EU) 2024/2570 、(EU) 2024/2555 、(EU)2025/718 、(EU) 2025/843...etc.].



持久性有機污染物 符合性宣告

歐盟POP法規列出34種受管制的持久性有機污染物。這項指令規定：「所列物質之製造、上市和使用……無論是單獨使用、混用或用於製品之中，皆應加以（限制或）禁止。」因此，當立法者將「產品」一詞添加到規範中時，這也包括了「電子元件」。這是否為立法者的本意尚未明確，需待歐洲化學品管理局提供指導。另一種解釋是，立法者可能指的是這些物質的容器，如塑料瓶或油漆罐。

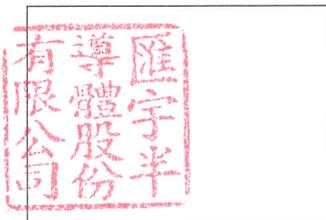
多數國家已經對許多持續性有機污染物（POP）進行了禁令或規範，這一措施已經持續了數十年。DDT和Chlordane等農藥（殺蟲劑）佔據了大部分的POP物質。這些物質不應被故意添加到電子元件中。

阻燃劑則佔管制持久性有機污染物的其餘部分，包括多氯聯苯（PCB）和六溴環十二烷。生產商以往都將這些阻燃劑摻入消費性產品（例如舊電視櫃和汽車內裝）所使用的塑膠和泡棉中。

該規範還包括了控制現存庫存的條款，這些庫存現在被視為廢物管理的一部分。這些條款旨在減少所有持續性有機污染物（POP）的庫存，並在未來清理和消除這些受限物質。規範還設定了对廢物庫存中的濃度限制，但不包括像RoHS和REACH目前對產品中濃度的要求。這表明，立法者可能是設想對原料進行規範，而非對產品本身進行規範。然而，任何含有持久性有機污染物的製品皆屬持久性有機污染物的廢棄物。

本公司宣告所有產品未使用下列 34 項持久性有機汙染物。且且本公司產品符合歐盟持久性有機汙染物法規(EU) 2019/1021 及其修正案[(EU) 2022/2291、(EU) 2022/2400 與(EU) 2023/866、(EU) 2024/2570、(EU) 2024/2555、(EU)2025/718、(EU)2025/843、(EU)2025/1930...等]。

Globaltech (ASIA) Semiconductor Co., Ltd.



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34 Substances listed in POPs Regulation / 34 項持久性有機汙染物

Substance Name	CAS No.
Aldrin / 阿特靈	309-00-2
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) / 短鏈氯化石蠟	85535-84-8
Bis(pentabromophenyl) ether / 十溴聯苯醚	1163-19-5
Chlordane, pur / 氯丹	57-74-9
Chlordecone / 十氯酮	143-50-0
Dichlorodiphenyltrichloroethane (DDT) / 滴滴涕	50-29-3
Dicofol / 大克蟎	115-32-2
Dieldrin / 地特靈	60-57-1
Endosulfan and its isomers / 硫丹(又名安殺番)及其異構體	-
Endrin / 安特靈	72-20-8
Heptabromodiphenyl ether (Group) / 七溴二苯醚	-
Heptachlor / 飛佈達	76-44-8
Hexabromo-1,1'-biphenyl / 六溴聯苯	36355-01-8
Hexabromocyclododecane (HBCDD) / 六溴環十二烷	-
Hexabromodiphenyl ether (group) / 六溴二苯醚	-
Hexachlorobenzene / 六氯苯	118-74-1
Hexachlorobuta-1,3-diene / 六氯-1,3-丁二烯	87-68-3
Hexachlorocyclohexanes, including lindane / 六氯環己烷(包含林丹)	-
Mirex / 滅蟻靈(又名滅蟻樂)	2385-85-5
Pentabromodiphenyl ether (group) / 五溴二苯醚	-
Pentachlorobenzene / 五氯苯	608-93-5
Pentachlorophenol and its salts and esters / 五氯酚及其鹽類與酯類	-
Perfluorohexane-1-sulphonic acid, its salts and related substances 全氟己烷磺酸 (PFHxS)及其鹽類與相關化合物/	-
(Perfluorooctane sulfonates (PFOS) C ₈ F ₁₇ SO ₂ X (X = OH, Metal salt (O-M ⁺), halide, amide, and other derivatives including polymers) / 全氟辛烷磺酸	-
Perfluorooctanoic acid (PFOA), its salts and PFOA-related substances / 全氟辛酸	-
Polychlorinated Biphenyls (PCB) / 多氯聯苯	-
Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF) / 戴奧辛(呔喃)	-
Polychlorinated naphthalenes (PCNs) / 多氯萘	-
Polycyclic aromatic hydrocarbons (PAHs) / 多環芳香烴碳氫化合物	-
Tetrabromodiphenyl ether (group) / 四溴二苯醚	-
Toxaphene / 毒殺芬	8001-35-2
Methoxychlor / 氯化甲醇(甲氧滴滴涕)	72-43-5
2-(2H-benzotriazol-2-yl)-4,6-di-tert-pentylphenol (UV-328)/ 2-(2H-苯並三唑-2-基)-4,6-二叔戊基苯酚(UV-328)	25973-55-1
Dechlorane Plus / 德克隆	-

10/11/11