



1225 Elko Drive  
Sunnyvale, CA 94089

Tel:  
408.734.8686  
Fax:  
408.734.3592  
Toll-Free:  
800.893.7825

January 15, 2019

Dear Valued Customer,

Under the REACH directive, chemicals being imported into Europe at 1 ton per year or more will need to be registered through the European Chemical Agency (ECHA). Westak does not sell chemicals, as defined by REACH, to our customers. According to the REACH directive, Westak's printed circuit boards, as sold to our customers, are considered articles that do not require registration.

Based solely on the composition information we have received from our raw material suppliers, the printed circuit boards manufactured by Westak do not contain any of the SVHC's (Substance of Very High Concern) identified in the candidate list at [http://echa.europa.eu/chem\\_data/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/candidate_list_table_en.asp), with the following exception(s):

Lead (II) bis(methanesulfonate), CAS# 17570-76-2, EC# 401-750-5

A final finish of Hot Air Solder Level (HASL) or Tin-Lead Reflow will have the lead substance. Westak offers lead-free final finish alternatives for customers who have products that need to be RoHS2 and REACH compliant. Lead final finish on a circuit board is defined as an article, not a chemical substance.

Bisphenol A, CAS# 80-05-7

Isola laminate materials IS420 and G200 and EMC laminate EM-827B may contain Bisphenol A above the threshold.

N,N-dimethylformamide, CAS# 68-12-2

Park Electrochemical's Nelco N4000-11 prepreg material contains between 1000 – 2000 ppm of this substance. This is not a standard material for Westak and alternatives are available, however customer designs that specify N4000-11 prepreg without deviation would have it in the final product.

1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (TGIC), CAS# 2451-62-9, EC# 219-514-3

1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC), CAS# 59653-74-6, EC#423-400-0

These two substances are present in a component of Taiyo solder mask when in the uncured/wet form. During the cure reaction these substances react and lose their identity. Our suppliers have stated they expect less than 0.1% TGIC remains after cure. Cured solder mask on a PCB is defined as an article, not a chemical substance.

Westak has not conducted any independent research, testing or evaluation to confirm the accuracy of this information. This information has been provided in good faith at your request.

Westak is committed to ensuring environmental compliance globally and will continue to stay informed of changes to the REACH directive and comply as necessary. More information about REACH can be found on the ECHA website, including a guidance document on articles: <http://ec.europa.eu/echa>

If you have any questions regarding Westak's compliance with REACH, you may contact Debby Hall at [drhall@westak.com](mailto:drhall@westak.com) or 408.734.8686 x6219.

Sincerely,

Deborah Hall  
Director of Business Services