

Reference Document for Supplier Compliance

- U.S. EMC (electromagnetic compatibility to monitor interference for emitters) EMC stands for Electromagnetic Compatibility. It's an essential part of regulatory compliance for electronic devices. When electronic devices and equipment are intended to be sold in the United States and other countries, they are required to pass tests for electromagnetic compatibility and meet certain legal standards. EMC standards define specific test equipment, test set-ups, and pass/fail limits. EMC standards generally set limits on both peak (or quasi-peak) and average emissions levels vs. frequency range for the appropriate classification of the measured device. https://incompliancemag.com/fundamentals-of-electromagnetic-compliance/
- NTEP (National Type Evaluation Program for weights and measures) NTEP requires industry to submit prototype weighing devices for evaluation to determine whether or not it meets the uncertainties which are related to tolerances associated with the intended final use in the marketplace. All devices sold in the United States for "legal for trade" purposes must pass these evaluations. <a href="https://www.nist.gov/programs-projects/national-type-evaluation-program-ntep#:~:text=NTEP%20requires%20industry%20to%20submit%20prototype%20weighing%20devices,%22legal%20for%20trade%22%20purposes%20must%20pass%20these%20evaluations
- UL 508 (Underwriters Laboratories for safety for industrial equipment) UL508A is a standard that pertains to the construction of Industrial Control Panels (ICPs). It provides guidelines for various safety aspects related to control panels. UL508A certification requires a manufacturer to design, build, and test to certain standards before releasing a final product. This means all individual materials and components in an ICP must also prove to be safe and reliable. https://www.ul.com/sites/g/files/qbfpbp251/files/2020-04/508A%20Supplement%20SA%204 13 20 L.pdf#:~:text=The%20current%20version% 20will%20be%20stored%20on%20UL%E2%80%99s,may%20be%20downloaded%2C%20 stored%20and%2For%20printed%20as%20needed
- TSCA (U.S. Toxic Substances Control Act for chemical regulation) The Toxic Substances
 Control Act of 1976 (15 U.S.C. §2601 et seq. (1976)) provides the EPA with authority to
 require reporting, record-keeping and testing requirements, and restrictions relating to
 chemical substances and/or mixtures. TSCA addresses the production, importation, use,
 and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos,
 radon and lead-based paint. https://www.epa.gov/laws-regulations/summary-toxic-substances-control-act
- PFAS (U.S. per- and polyfluoroalkyl substances in drinking water) PFAS stands for perfluoroalkyl or polyfluoroalkyl substances. These are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. They



- are widely used and have a long-lasting nature. However, their persistence in the environment and widespread use has led to concerns about potential harmful health effects. https://www.epa.gov/pfas
- UFLPA (Uyghur Forced Labor Prevention Act for Chinese slavery) The Uyghur Forced Labor Prevention Act (Public Law No. 117-78), also known as the UFLPA, directs the Forced Labor Enforcement Task Force to develop a strategy for supporting enforcement of the prohibition on the importation of goods into the United States manufactured wholly or in part with forced labor in the People's Republic of China, especially from the Xinjiang Uyghur Autonomous Region, or Xinjiang. https://www.dhs.gov/uflpa
- Prop65 (Safe Drinking Water and Toxic Enforcement Act in California for cancer causing chemicals) - Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986, protects the California's drinking water sources from being contaminated with chemicals known to cause cancer, birth defects or other reproductive harm, and requires businesses to inform Californians about exposures to such chemicals. https://oehha.ca.gov/proposition-65
- CE (Conformite Europeenne for European health, safety, and environment for electronics)

 Conformité Européenne (CE) certification is a regulatory standard that verifies certain products are safe for sale and use in the European Economic Area (EEA). Manufacturers place a CE marking on certified products to indicate that the product complies with European safety rules and can be traded freely within the EEA. https://europa.eu/youreurope/business/product-requirements/labels-markings/ce-marking/index en.htm
- UK/CA (U.K. version of CE since Brexit) UK Conformity Assessed (UKCA) marking is a
 conformity mark that indicates conformity with the applicable requirements for products
 sold within Great Britain. Products with the CE mark are also acceptable in the UK market.
 https://www.gov.uk/guidance/using-the-ukca-marking
- RoHS (European Restriction of Hazardous Substances for chemicals) Restriction of Hazardous Substances (RoHS) impacts the entire electronics industry and many electrical products as well. The original RoHS (Directive 2002/95/EC) restricts the use of six hazardous materials found in electrical and electronic products. RoHS 2 (Directive 2011/65/EU) includes a CE-marking directive, with RoHS compliance now being required for CE marking of products. RoHS 2 added Categories 8 and 9 and has additional compliance recordkeeping requirements. https://www.rohsguide.com/
- REACH (European Registration, Evaluation, Authorisation and Restriction of Chemicals) REACH is a regulation of the European Union, adopted to improve the protection of
 human health and the environment from the risks that can be posed by chemicals and
 promote alternative methods for the hazard assessment of substances.
 https://echa.europa.eu/regulations/reach/understanding-reach



- WEEE (European Waste from Electrical and Electronic Equipment for landfill waste) –
 WEEE refers to the environmentally-friendly disposal of IT items to reduce the
 environmental impact of electronic waste.
 https://environment.ec.europa.eu/topics/waste-and-recycling/waste-electrical-and-electronic-equipment-weee en
- WELMEC (Western European Legal Cooperation for metrology and measures) The
 general task of WELMEC is for authorities to cooperate and to interact with stakeholders,
 in order to establish a common understanding which supports the implementation of
 European regulatory framework on metrology. https://www.welmec.org/about-welmec/about-us
- POP (European Persistent Organic Pollutants for chemicals) Persistent organic pollutants (POPs) are organic substances that persist in the environment, accumulate in living organisms and pose a risk to our health and the environment. They can be transported by air, water or migratory species across international borders, reaching regions where they have never been produced or used. https://echa.europa.eu/understanding-pops
- CEPA (Canadian Environmental Protection Act for toxic substances, air and water pollution, and waste management) - The Canadian Environmental Protection Act, 1999 (CEPA 1999) is part of Canada's federal environmental legislation aimed at preventing pollution and protecting the environment and human health. https://laws-lois.justice.gc.ca/eng/acts/c-15.31/index.html
- PCMR (Canadian Products Containing Mercury Regulations for mercury import) Since the
 Regulations came into force in November 2015, manufacturers and importers of
 exempted or permitted mercury containing products are required to report to
 Environment and Climate Change Canada (ECCC) every 3 years.
 https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/reporting-products-containing-mercury-regulations.html
- Conflict Minerals (for precious metal mining in politically unstable areas) "Conflict minerals," as defined by U.S. legislation, currently include the metals tantalum, tin, tungsten and gold, which are the extracts of the minerals cassiterite, columbite-tantalite and wolframite, respectively. Downstream companies often refer to the extracts of these minerals as 3TG. https://www.state.gov/conflict-minerals/ The internationally recognized OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, has a broader scope and covers all minerals, not only 3TG. <a href="https://www.oecd-ilibrary.org/governance/oecd-due-diligence-guidance-for-responsible-supply-chains-of-minerals-from-conflict-affected-and-high-risk-areas/9789264252479-en



- Human Slavery and Trafficking (numerous laws and regulations worldwide) https://www.justice.gov/humantrafficking/key-legislation
- Packaging Directive (European for packaging waste recovery and recycling) The
 Packaging and Packaging Waste Directive (PPWD Directive 94/62/EC) lays down
 measures to prevent the production of packaging waste in the EU.
 https://environment.ec.europa.eu/topics/waste-and-recycling/packaging-waste-en
- Battery Directive (European batteries and accumulators for waste and recycling) Directive 2006/66/EC on batteries and accumulators and waste batteries and
 accumulators regulates the manufacture and disposal of batteries in the European Union
 with the aim of improving the environmental performance of batteries and accumulators.
 https://echa.europa.eu/understanding-batteries-regulation
- Nanoparticles (numerous laws and regulations worldwide) Nanomaterials are chemical substances or materials with particle sizes between 1 to 100 nanometres in at least one dimension. Many everyday products contain nanomaterials such as batteries, coatings, anti-bacterial clothing and cosmetics. While nanomaterials may offer technical and commercial opportunities, they may also pose risks to our health and the environment. https://www.fda.gov/science-research/nanotechnology-programs-fda/fdas-approach-regulation-nanotechnology-products;
 - https://www.echa.europa.eu/regulations/nanomaterials
- Privacy (Jurisdiction Dependent) the right to privacy is a fundamental human right firmly grounded in international law.
 - CCPA/CPRA (California) https://www.oag.ca.gov/privacy/ccpa
 - GDPR (EU/EEA) https://gdpr-info.eu/
 - UK GDPR (United Kingdom) https://ico.org.uk/for-organisations/data-protection-and-the-eu-in-detail/the-uk-gdpr/
 - PIPEDA (Canada) https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/the-personal-information-protection-and-electronic-documents-act-pipeda/
 - LGPD (Brazil) https://iapp.org/resources/article/brazilian-data-protection-law-lgpd-english-translation/
 - DPDP (India) https://assets.kpmg.com/content/dam/kpmg/in/pdf/2023/08/digital-personal-data-protection-act-2023-overview.pdf
 - PIPL (China) https://digichina.stanford.edu/work/translation-personal-information-protection-law-of-the-peoples-republic-of-china-effective-nov-1-2021/
 - APP (Australia) https://www.oaic.gov.au/privacy/australian-privacy-
 https://www.oaic.gov.au/privacy/australian-privacy-
 principles#:~:text=The%20Australian%20Privacy%20Principles%20%28or%20APPs%2
 https://www.oaic.gov.au/privacy/australian-privacy-
 principles#:~:text=The%20Australian%20Privacy%20Principles%20%28or%20APPs%2">principles#:~:text=The%20Australian%20Privacy%20Privacy%20Principles%20%28or%20APPs%2">principles#:~:text=The%20Australian%20Collection%2C%20use%20and%20disclosure%20of%20personal%20information



- PA2020 (New Zealand) https://www.legislation.govt.nz/act/public/2020/0031/latest/LMS23312.html
- PDPO (Hong Kong) https://www.pcpd.org.hk/english/data-privacy-law/ordinance-at-a-Glance/ordinance.html
- Other U.S. states Colorado; Connecticut; Delaware; Indiana; Iowa; Kentucky;
 Maryland; Minnesota; Montana; Nebraska; New Hampshire; New Jersey; Oregon;
 Tennessee; Texas; Utah; Virginia