HEALTH

FAQs

Below you will find answers to frequently asked customer questions. If you have a question that is not addressed here or if you would like more information, please contact us to be connected with one of our regulatory experts.

Q How do I know if my material is compliant?

A Your material supplier should be able to review the compliance profile of specific materials and provide you with documentation.

Q What does the new EU MDR mean for medical device companies?

A After four years in development and being postponed for a year due to the Covid-19 pandemic, the new EU Medical Device Regulation (MDR) went into effect on May 26, 2021. The EU MDR replaces the earlier Medical Device Directive (MDD) that had been in place since 2017. Entities responsible for devices sold in the EU are expected to follow the new regulations. In a May 26 press release, the industry trade association Medtech Europe said: "While the first 'implementation' chapter closes today, the medical device industry and other stakeholders are now entering another second major chapter of the MDR story. While some positive progress was achieved in preparing the new infrastructure over the past four years, some key pillars of that infrastructure are still not fully operational or even in place."

Because the vast majority of medical devices are likely to be marketed in both Europe and the United States, the stricter EU regulations have become the de facto global standard.

Q How does EU MDR impact the materials I source for my device?

A Human safety is a key issue in the new EU MDR. One major change is in chemical compliance requirements for directly or indirectly invasive medical devices. For a device to be certified for use in Europe, OEMs will need to provide assurances that manufacturing materials in the device don't contain any of more than 1,000 MDR-regulated carcinogenic, mutagenic or toxic to reproduction (CMR), and/or endocrine-disrupting substances in a concentration above 0.1% by weight on a part-by-part basis. In most cases, the best way to tackle these chemical compliance requirements will be to ask your suppliers to provide you with declarations indicating the absence of CMR and/or endocrine-disrupting substances. In cases where a chemical containing one of these substances must be used, documentation must include a justification and clarification to support that there were no alternatives available or that there were not additional exposure or risks for the patients, along with a risk-benefit analysis.

What is REACH and what is SVHC?

REACH, which stands for Registration, Evaluation, Authorisation and Restriction of Chemicals, regulates the use of chemicals in the EU. The regulation aims to protect human health and the environment through better and earlier identification of the intrinsic properties of chemical substances.

SVHCs are Substances of Very High Concern. The first list of SVHCs was published in October 2008, and it has been updated many times to include new candidates. REACH calls for substitution of SVHCs with suitable alternatives. As of January 20, 2021, there are 211 substances on the SVHC candidate list. The listing is the first step in the possible classification of a substance as hazardous to human health and/or the environment. If so classified (and added to the REACH authorization list), the substance cannot be placed on the EU market, or used after a given date, unless an authorization is granted for its specific use, or the use is exempted from authorization.

What is RoHS?

RoHS stands for Restriction of Hazardous Substances. RoHS originated in the EU in 2002. It restricts the use of six hazardous materials found in electrical and electronic products. As of 2021, RoHS specifies maximum levels for 10 restricted substances. Any business that sells applicable electrical or electronic products, equipment, sub-assemblies, cables, components, or spare parts directly to RoHS-directed countries, or sells to resellers, distributors or integrators that in turn sell products to these countries, is impacted if it utilize any of the 10 restricted substances:

- Cadmium (Cd): < 100 ppm
- Lead (Pb): < 1000 ppm
- Mercury (Hg): < 1000 ppm
- Hexavalent Chromium: (Cr VI) < 1000 ppm
- Polybrominated Biphenyls (PBB): < 1000 ppm
- Polybrominated Diphenyl Ethers (PBDE): < 1000 ppm
- Bis(2-Ethylhexyl) phthalate (DEHP): < 1000 ppm
- Benzyl butyl phthalate (BBP): < 1000 ppm
- Dibutyl phthalate (DBP): < 1000 ppm
- Diisobutyl phthalate (DIBP): < 1000 ppm

What should I know about conflict minerals?

Conflict minerals are natural resources extracted in a war or conflict zone and sold to perpetuate the fighting or human rights abuses. The most prominent contemporary example has been in the Democratic Republic of the Congo (DRC). The conflict minerals provision of the 2010 Dodd Frank Act requires U.S. publicly-listed companies to check their supply chains for tin, tungsten, tantalum and gold and try to determine if the minerals might originate in the DRC or its neighbors. Companies must take steps to address any risks they find and report on their efforts every year to the U.S. Securities and Exchange Commission. Given the wide variety of medical devices, it is unavoidable that conflict minerals will be used as part of some approved medical devices. **As there are currently no substitutes for these minerals, the continued sourcing of them is necessary to ensure the safety and efficacy of medical devices and many other products.** For more information, we recommend consulting your company's legal department.

What is Proposition 65? Is it mandatory for medical device companies to label their products with Proposition 65 warnings?

In 1986, California voters approved an initiative to address growing concerns about exposure to toxic chemicals. That initiative became the Safe Drinking Water and Toxic Enforcement Act of 1986, better known by its original name of Proposition 65. Proposition 65 requires the state to publish a list of chemicals known to cause cancer or birth defects or other reproductive harm. This list, which must be updated at least once a year, has grown to include over 800 chemicals since it was first published in 1987. Proposition 65 requires businesses to notify Californians about significant amounts of chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. "Medical devices are within scope of California Proposition 65 and are required to provide a 'clear and reasonable warning' on products that contain any of the substances over the applicable safe harbor level and where a risk of exposure exists," according to compliance consultancy Assent. "Lack of safe harbor levels for a substance means that the applicable level is zero and the product probably needs to include a warning."

What considerations are there around the use of animal derived materials in polymers?

The role of animal-derived materials (ADMs) in medical devices is well established. ADMs or derivatives of ADMs may be used in polymers to enhance properties and aid in processing. However, these materials may carry a risk of transmitting infectious disease when improperly collected, stored or processed into additives used in polymer formulations. The U.S. Food and Drug Administration (FDA) issued guidance in March 2019 to update the policy regarding the use of animal-derived material in medical device manufacturing. It is important to ensure that your material supplier can provide information on safe handling and processing of raw materials used in their products.

Q What is biocompatibility testing?

A

Biocompatibility testing is important because the presence of extractable chemical compounds and agents from processing may influence biocompatibility that can affect an entire biological system such as the nervous or immune systems. Because of potential material interactions, the complete device needs to be evaluated for biocompatibility. In-vivo biological testing is performed after completion of in-vitro ("test tube") testing. The extent of the in-vivo testing depends upon the device's intended use. Various tests performed as part of in-vivo testing include skin irritation testing, sensitization testing, and implantation testing. Some device design firms may offer a certain level of biocompatibility testing, but typically the OEM hires a specialized lab to perform these tests. Your materials supplier, device design firm and regulatory consultant all may be helpful in determining your biocompatibility assessment strategy.

Q Who conducts Extractable and Leachable (E&L) studies and when?

A

In order to fulfill the biocompatibility and compositional assessment for their device, OEMs may choose to conduct extractable and leachable studies. OEMs typically hire a laboratory to conduct a chemical and biological assessment of the entire device, including extractables and leachables. The lab should be experienced in testing devices that contain your selected device materials of construction. This will ensure that the lab is able to help guide you in selection of appropriate test methods and conditions and may be able to help with interpreting the results of the study. Your materials suppliers may be able to recommend qualified labs and help interpret the results. Regulatory agencies typically require a biocompatibility assessment (which E&L studies may support) on the entire device in its finished form, exposed to all necessary processing steps, including sterilization. Therefore, individual material E&L data may be helpful in understanding the E&L profile of a full device.

Q How do I know if the materials in my device are used in any other marketed medical devices? How do I find potential predicate devices?

A

Your manufactured materials supplier may be able to help identify other comparable devices in which the materials they are supplying you have been used. The FDA's medical device databases are the best place to search for potential predicate devices. If you do not have a qualified regulatory and compliance professional on your team, your device designer should be experienced in using these databases to identify the most appropriate predicate device.

What is an MAF?

MAF is an FDA abbreviation for Master File. In order for the FDA to make a sound scientific evaluation of a premarket approval or other device submission, the review of data and other information related to the device's materials of construction and manufacturing processes may be required. To help preserve material supplier's trade secrets, the FDA established the Device Master File System. The device maker can request a Letter of Access from the supplier in order to reference the MAF in their application. (At Lubrizol, this is done through the account manager.) Materials suppliers are not required to provide MAFs to the FDA, but many do so in order to support their customers. OEMs may want to discuss the availability of MAFs with materials suppliers at the selection stage.

LUBRIZOL LIFE SCIENCE

21-1584