

The role of Master Files for plastic components used in the preparation of drug substances

OVERVIEW OF VARIOUS MASTER FILES SYSTEMS

Pharmaceutical Master Files are regulatory documents that are commonly used to share information with a regulatory body without disclosing confidential information to the end user. This allows the regulatory body to understand and evaluate a pharmaceutical product while also allowing a manufacturer of a pharmaceutical component to maintain confidentiality for competitive reasons. There are 3 main regulatory bodies which offer Master Files: the US Food and Drug Administration (FDA), the European Medical Agency (EMA), and the Japanese Pharmaceutical and Medical Devices Agency (PMDA).

US FDA DRUG MASTER FILES

The United States Food and Drug Administration (US FDA) established the master file system to help preserve the trade secrets of service and material suppliers while at the same time facilitating FDA's sound scientific evaluation of products. Master Files are regulatory dossiers that may contain information such as a description of facilities, manufacturing procedures and processes, product formulation, quality control procedures, and product characterization data. There are several types of Master Files available from the US FDA for use in different industries such as medical, veterinary, food, and biologics.

The US FDA has [five types of Drug Master Files](#) which can be used for submitting information considered by the manufacturer to be trade secret or confidential.

THE FIVE TYPES OF US FDA DMFS ARE:

- Type I Manufacturing Site, Facilities, Operating Procedures, and Personnel (no longer applicable)
- Type II Drug Substance, Drug Substance Intermediate, and Material Used in Their Preparation, or Drug Product
- Type III Packaging Material
- Type IV Excipient, Colorant, Flavor, Essence, or Material Used in Their Preparation
- Type V FDA Accepted Reference Information

Submitting a DMF is solely the choice of the component or raw material manufacturer to protect the products' proprietary nature and is not a regulatory requirement. A DMF also does not provide any indication of FDA approval for a material. In fact, the FDA does not review the content of a DMF unless the DMF is referenced in an Investigational New Drug Application (IND), a New Drug Application (NDA), a Biologic License Application (BLA), or an Abbreviated New Drug Application (ANDA).

When a DMF is submitted to the FDA, it is assigned a DMF number and is catalogued in their DMF system. The system requires that the pharmaceutical company that wishes to reference a supplier's DMF request a Letter of Authorization (LOA) from the supplier. The supplier prepares LOA and submits a copy to the pharmaceutical company for inclusion in their IND, NDA, BLA or ANDA and to the FDA. In order to be effectively maintained over the life of the product, the DMF must be managed with the supplier change management system and kept current. Revisions to the DMF associated with the supplier's material must be notified to any pharmaceutical companies that are authorized to reference the DMF.

EUROPEAN MEDICINES AGENCY ACTIVE SUBSTANCE MASTER FILE

In the European Union, the European Medicines Agency (EMA) provides only the Active Substance Master File. As indicated in CHMP/QWP/227/02 Rev 3/Corr * ["Guideline on Active Substance Master File Procedure:"](#)

The main objective of the Active Substance Master File (ASMF) procedure, formerly known as the European Drug Master File (EDMF) procedure, is to allow valuable confidential intellectual property or 'know-how' of the manufacturer of the active substance (ASM) to be protected, while at the same time allowing the Applicant or Marketing Authorisation (MA) holder to take full responsibility for the medicinal product and the quality and quality control of the active substance. National Competent Authorities and EMA thus have access to the complete information that is necessary for an evaluation of the suitability of the use of the active substance in the medicinal product.

JAPANESE DRUG MASTER FILES

As in Europe, the Japanese Drug Master File (DMF) System is only applicable to Active Pharmaceutical Ingredients (APIs). It allows manufacturers of APIs to register manufacturing methods, formulation and other data which is reviewed by the PMDA at the time of a pharmaceutical approval review. The DMF allows the API manufacturer to protect confidential information from the marketing authorization applicant (MAA) or marketing authorization holder (MAH).

THE POSITION OF SAINT-GOBAIN FLUID SYSTEMS ON SINGLE-USE PLASTICS COMPONENTS

Historically, Saint-Gobain Fluid Systems has submitted Type II DMFs to the US FDA since our products are commonly “materials used in drug substance preparation.” These DMFs disclosed physical properties and biocompatibility testing of various Saint-Gobain products such as C-Flex® TPE tubing and PharMed® BPT Biocompatible Pump Tubing. Saint-Gobain Fluid Systems has not historically submitted Master Files to the EMA or PMDA since these master files are for APIs only.

Because submitting a DMF is not a regulatory requirement nor a confirmation of compliance of our products, Saint-Gobain is moving away from maintaining the DMFs for most fluid handling products. Instead, we are focusing on providing the same information that was typically included in the DMF directly in our product [Validation Guide Summaries and Regulatory Information Overviews \(RIOs\)](#) found on the Saint-Gobain website. Our customers now have rapid, easy access to compatibility and characterization data as well as a variety of other product compliance information. Typical information found in a Validation Guide Summary includes USP <88> Class VI testing, ISO 10993 testing, and extractable data.

Please feel free to [Contact Us](#) if you have questions about the regulatory compliance claims on our products.

About

SAINT-GOBAIN

The Bioprocess Solutions business unit of Saint-Gobain supplies the bioprocessing, pharmaceutical, cell therapy, and laboratory industries with high performance assemblies and fluid path components.

Its industry-leading product portfolio and material expertise provide customers with the answers and assurance they need when processing pharmaceutical products.

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Nathan Klettlinger (Formerly) a Product Manager for Saint-Gobain. Nathan has a chemical engineering degree and a master's degree in business, bringing with him more than 10 years' experience in plastics and rubber including R&D and manufacturing engineering.