



SiliaSphere™ SiliaFlash®

Using Silica-Based Products for Food and Drug Applications

Silicon dioxide (SiO₂) is the most abundant mineral in the Earth's crust and is considered as a non-toxic substance. It is also classified as a "**Generally Recognized as Safe (GRAS)**" substance by the U.S. Food and Drug Administration (FDA) when used in accordance with the "**Code of Federal Regulations Title 21 (21 CFR)**".

Silicon dioxide is nominally 99.5% synthetic amorphous silica, which may be additionally referenced as silica, silica gel, silica xerogel, or silica aerogel; therefore SiliCycle silica gel products are considered as **GRAS** under **FDA** regulations and meet their requirements for direct and indirect contact with food and drugs (covered by 21 CFR 182.1711, 21 CFR 182.90, and 21 CFR 582.1711).

If you need more information about "Code of Federal Regulations Title 21 (21 CFR)", please visit: <https://www.fda.gov/drugs/development-approval-process-drugs>



Functionalized Silica Gels and Consumable Products



SiliaBond® & SiliaMets® Functionalized Silica Gels, SiliaPrep™ & SiliaSep™ Cartridges and SiliaChrom® HPLC Columns can be safely used for food and drugs applications. Below is the answer of the "Division of Drug Information" in the FDA's "Center for Drug Evaluation and Research (CDER)" regarding the use of silica-based products during food and drug synthesis:

"Please note that the FDA does not review or approve individual components or ingredients. We evaluate and/or approve the "whole" finished product (i.e., tablet, capsule, injectable, etc) under a New Drug Application (NDA), Abbreviated New Drug Application (ANDA) and Biological Licensed Application (BLA) through the drug approval application process not reagents and/or purification methods used during the drug synthesis."

For more information: <https://www.fda.gov/drugs/development-approval-process-drugs>

If you would like to get a better understanding of the drug review process, we suggest that you review the publication "From Test Tube to Patient: Protecting America's Health Through Human Drugs" produce by the FDA at: <https://www.worldcat.org/title/from-test-tube-to-patient-protecting-americas-health-through-human-drugs/oclc/1037949046>

For more information on CDER refer to the Manual of Policies and Procedures (CDER) at: <https://www.fda.gov/about-fda/center-drug-evaluation-and-research-cder/cder-manual-policies-procedures-mapp>

Please note that Safety Data Sheets (SDS) of each SiliCycle product are available upon request or downloadable directly on SiliCycle website in the "Documentation" section.

