



Product Information

Florisil®

Product Number **F 9127**
Store at Room Temperature

Product Description

CAS Number: 1343-88-0

This product is a highly selective adsorbent which has found extensive use in preparative and analytical chromatography and it is similar to acidic alumina in strength. It is a white, hard powdered magnesium silica gel frequently referred to as magnesium silicate. It is a coprecipitated mixture of silica gel and magnesia composed of approximately 84.0% silicone dioxide, 15.5% magnesium oxide, and 0.5% sodium sulfate. It has a surface area of approximately 300 m²/g. It forms columns having high flow rates, is dense and packs firmly in columns, has little tendency to form dusts, and differs in its activity towards various substances.

Florisil absorbs steroids, esters, lactones, glycerides, alkaloids and some carbohydrate.^{1,2} It may be used for lipid separation, purification of pharmaceuticals, separation of nitrogen compounds from hydrocarbons, decolorization, sample clean up for PCBs, and pesticides analysis. The use of lower activity material by the addition of water affects the adsorption power of the powder and has been shown to reduce tailing.³ We do not recommend reusing Florisil because removal of some compounds can be difficult.

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Procedure

Although Florisil is activated by the manufacturer, it may adsorb moisture at any time and it should be stored tightly capped in a glass bottle. The following procedure can be used to prepare the activated Florisil 60/100 PR for use.

1. Place sufficient Florisil for use in an unstoppered Erlenmeyer flask.
2. Heat the product for about 16 hours at 130 °C in a forced draft oven.
3. Remove the product from the oven, stopper the flask, and allow it to cool to room temperature prior to use.
4. Prepare a chromatographic column that contains activated Florisil with some anhydrous sodium sulfate on top (a ratio of eight inches of Florisil per inch of anhydrous sodium sulfate is sufficient).
5. Proceed to pre-wet the column with the organic solvent used in the purification of the sample.

References

1. The Chemist's Companion, Gordon, A. J., and Ford, R. A., John Wiley & Sons (1973), p. 372.
2. J. Chrom., **12**, 488 (1963).
3. Meth. Enzymol., **14**, 268 (1969)

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