

Product Information

08471 Dichlorodimethylsilane solution

~5% in toluene, for GC derivatization, LiChropur®

Storage temperature: room temperature

5% Dichlorodimethylsilane (DMDCS) solution in toluene is particularly useful for deactivating the surfaces of gas chromatography columns or other glassware.

Features/Benefits

- Chemically binds a thin, water-repellent film to glass, quartz, silica and ceramics. Coated surfaces are neutral, hydrophobic and non-oily, offer increased electrical resistivity, are not affected by solvents and are not readily hydrolyzed.
- Can be wiped on or applied by immersion.

Applications

Treat chromatography columns, glass injection port liners, reaction vessels, sample storage containers, pipettes, beakers, certain plastics, ceramics and fiber optics to minimize nonspecific binding and sample loss.

Reduce absorption of polar compounds, including proteins and trace metals, onto glass surfaces; reduce leaching of trace materials into solution. Protect delicate samples against the possible reactive effects of -OH sites present on all types of glassware.

Provide complete drainage; eliminate meniscus. Prevent electric current tracking, minimize electrical leakage on glass and ceramic surfaces.

Typical Procedure

1. Coat the glass surface by rinsing with the reagent for 10 to 15 seconds, then discard the reagent
2. Rinse the surface two times with toluene
3. Rinse the surface three times (or until the rinsings are neutral) with methanol
4. Dry the surface, using clean nitrogen (Note: compressed air lines can contain oils, rust particles, etc.)

Storage/Stability

Properly stored, this reagent is stable indefinitely. Recommended storage conditions for the unopened product are stated on the label. Moisture will reduce the effectiveness of the reagent. To exclude moisture, this product is packaged under nitrogen. If you store an opened container or transfer the contents to another container for later reuse, add desiccant. Before reuse, validate that your storage conditions adequately protected the reagent. **Before reuse, validate that your storage conditions adequately protected the reagent.**

References

1. K. Blau and J. Halket, *Handbook of Derivatives for Chromatography* (2nd ed.), John Wiley & Sons, New York, 1993.
2. D.R. Knapp, *Handbook of Analytical Derivatization Reactions*, John Wiley & Sons, New York, 1979.
3. "Gas-Chromatographic Analysis of Trace Metals Isolated from Aqueous Solutions as Diethyldithiocarbamates." N. J. Carvajal, R. H. Zienius, *J. Chromatogr.* **1986**, 355 (1). 107-116.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

