

■ Rtx[®]-5 Amine

- Excellent for the analysis of mono-, di-, triamines, and ethanolamine and other alkanolamines.
- Eliminates the need to derivatize basic compounds.
- Column priming not required, even at ppm levels.
- Same polarity as the widely used Rtx[®]-5 (5% diphenyl/95% dimethyl polysiloxane) stationary phases.
- Crossbond[®] stationary phase results in reduced bleed, increased column lifetime, and solvent rinsability.
- Inject samples in a water matrix.

The reproducible analysis of basic compounds by capillary gas chromatography has always been difficult. The presence of silanol groups (SiOH) causes an inherent acidity on the tubing surface. When basic compounds such as amines are analyzed on an acidic surface, they are adsorbed due to acid/base interactions.

The Rtx[®]-5 Amine column has been developed with a unique deactivation technology that reduces adsorption and improves response of basic compounds. Analyses of active basic compounds that previously required derivatization or another analytical technique such as HPLC can now be performed on the Rtx[®]-5 Amine column. The tubing surface (not the stationary phase) is chemically altered to eliminate tailing of basic compounds, thereby eliminating the need for column priming. The Rtx[®]-5 Amine is a strong departure from outdated technology still being utilized by most column manufacturers. Such outdated procedures typically add stationary phase dopants (such as KOH) during the coating procedure to make a column suitable for the analysis of amines.

The Rtx[®]-5 Amine is ideal for analyzing a wide variety of basic compounds such as alkylamines, diamines, triamines, ethanolamines, and nitrogen-containing heterocycles. The breakthrough technology of this column also allows the analysis of neutral compounds, adsorptive compounds with oxygen groups susceptible to hydrogen bonding, and even mildly acidic compounds such as phenols.

Thorough testing of every Rtx[®]-5 Amine column with a special test mixture consisting of basic, neutral, and oxygenated compounds guarantees consistent results. Minimum response factor specifications have been established to ensure that every column exceeds the requirements for analyzing ppm levels of amines, without priming. A temperature program bleed profile test is also utilized so that each column can be monitored to ensure low bleed at its maximum operating temperature. Each column is shipped with the actual test chromatogram demonstrating the ability to reproducibly analyze basic compounds (such as diethylenetriamine and diethanolamine). All Rtx[®]-5 Amine columns are bonded and can be rejuvenated by solvent rinsing with common organic lab solvents.

Rtx[®]-5 Amine (Fused Silica)

(Crossbond[®] 5% diphenyl - 95% dimethylpolysiloxane)
Stable to 340°C

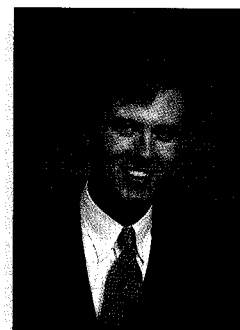
ID	df (μm)	temp. limits	15-Meter	30-Meter
0.25mm	0.50	-60 to 300/315°C	12335	12338
	1.00	-60 to 300/315°C	12350	12353
0.32mm	1.00	-60 to 300/315°C	12351	12354
	1.50	-60 to 290/305°C	12366	12369
0.53mm	1.00	-60 to 290/305°C	12352	12355
	3.00	-60 to 280/295°C	12382	12385

Base Deactivated Fused Silica Guard Columns for use with Rtx[®]-5 Amine columns are also available. Please see page 386 for details.

You can
SAVE MONEY—
get six columns
for the price of five

Call your local distributor for details!

The Rtx[®]-5 Amine column provides consistent and reproducible results for analyzing basic compounds - Guaranteed!



*David Smith
Research Chemist/Basic
Analysis Specialist*

Applications: basic and neutral compounds