

SUMICHIRAL Technical News

A novel chiral stationary phase chemically bonded with cyclodextrin with novel spacer

SUMICHIRAL OA-7000

SUMICHIRAL OA-7000 is a novel chiral stationary phase bonded with cyclodextrin to the silica gel via new type of spacer. A large number of racemates, including ketones, amines, and amino acid derivatives can be separated under reversed phase conditions.

★ Separation mechanism

The chiral selector of SUMICHIRAL OA-7000 is β -cyclodextrin which is a cyclic oligosaccharide consisting seven glucose units. A nonpolar part of the sample molecule, such as phenyl or naphthyl group, can penetrate into the cavity of the cyclodextrin ring and form complexes. The chiral sugar units of the cyclodextrin allow enantioselective interactions and the racemate separation is accomplished.

★ Special merits of SUMICHIRAL OA-7000

- (1) Sharp peaks and high theoretical plate number are obtained. Improved peak shape is due to the effect of hydrophilic spacer moiety which prevents secondary interactions between the silica gel and the sample molecules.
- (2) Popular reversed phase conditions can be used. SUMICHIRAL OA-7000 is typically operated using the mixtures of phosphate buffer (pH 2-3.5) and methanol or acetonitrile, and special reagents are usually not required.

Details : SUMICHIRAL OA-7000

(Name)	(Size)
SUMICHIRAL OA-7000	4.0 mm i.d × 1 cm
	4.6 mm I.d. × 25 cm

To protect your columns, we recommend to use of a garde column.

SCAS Sumika Chemical
Analysis Service

SUMIKA CHEMICAL ANALYSIS SERVICE, LTD.

1-135,3-CHOME,KASUGADE-NAKA,KONOHANA-KU,OSAKA,554-0022,JAPAN

FAX : 81-6-6466-5255 e-mail : column@scas.co.jp

★ *Applications*

