



# Guide for the Care and Use of Separator™ Arton Deluxe columns

The Separator reversed-phase columns have been extensively tested and inspected to ensure highest quality. The purpose of this guide is to provide information that will help to successfully use the Separator columns.

#### **Operational Guidelines**

- The direction of flow is marked on the column. Initially operate the column with the mobile phase flowing in this direction.
- A new reversed-phase column contains a mixture of Acetonitrile and Water. Care should be taken not to pass any mobile phase through the column that might cause a precipitation.
- The recommended mobile phase pH is between 1.5 and 10 for **Separator™ Arton Deluxe**.
- Only use HPLC grade solvents and freshly prepared aqueous buffer solutions and degas and filter all mobile phases prior to use.
- Maximum operating pressure for 2.0 and 3.0 mm ID columns is 70 MPa, unless otherwise specified.
- Avoid any sudden pressure changes.

#### **Column Care**

Samples containing particles larger than 0.5  $\mu$ m should be filtered prior to injection, because the inlet and outlet frits of the column have a porosity of 0.5  $\mu$ m, and the particles will plug the inlet frit. To remove strongly retained materials such as lipids or very hydrophobic molecules from the column, we recommend to rinse the column with several column volumes (minimum 20) of dichloromethane, chloroform or tetrahydrofuran with 1/5 to 1/2 of the typical flow rate.

#### **Washing Procedure**

- Flush the column with 20 column volumes Water
- Flush the column with 20 column volumes Acetonitrile
- Flush the column with 5 column volumes Isopropanol
- Flush the column with 20 column volumes Dichloromethane, Chloroform or Tetrahydrofuran
- Flush the column with 5 column volumes Isopropanol
- Flush the column with 20 column volumes Acetonitrile
- Caution!!! Please make sure that all buffers are washed out of the column before flushing with Acetonitrile. Buffer salts are mainly not soluble in Acetonitrile and can block the capillaries and the column. Please make also sure, that the neighboring solvents are always mixable.

### **Storage**

For storage please wash the buffers thoroughly out, then equilibrate the column to shipping solvent conditions and seal it with the end plugs. Store the column in a dry location with a constant temperature around 25 °C.

If you need additional information or if you have questions not answered in this guide, please do not hesitate to contact us.

With best regards
Your dichrom-Team

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