BMT Catalyzing Cartridges

Rev 6/09

The new cartridge CAT-RS and CAT-RSC (R stands for refillable, S for stainless steel, C stands for Cabinet) can be opened at the outlet side to replace the catalyst substance in case it had been poisoned or destroyed by some substance which inadvertently was contained in the ozone sample gas. Such substances are numerous. Fluid water e.g. is one of them.

To remove the outlet lid (2) of the cartridge (1), screw in the extraction tool (5, SS screw with 1/8" threaded brass screw, which is part of the CAT-RS accessories) into the 1/8" threaded bore hole in the outlet lid. The cartridge comes with this bore open. In case a fitting had been screwed into the bore this fitting has to be removed before, of course.

The outlet lid is fixed with two 3 mm metric screws (3). A 2 mm Allen wrench (4) for removing the screws is provided with the accessories.

After removal of the screws, the outlet lid can be withdrawn from the cartridge. Even though fluorinated vacuum grease is applied to the inner surfaces, some force is necessary to pull it out.

ATTENTION: The catalyst substance CARULITE 200 contains heavy metal oxides, namely manganese dioxide. The Material Safety Data Sheet (MSDS) is available from the Carus Corp. website www.caruschem.com

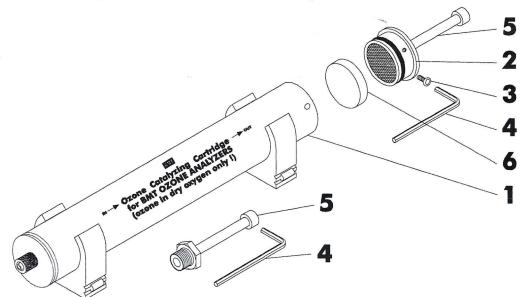
CAUTION: Read the CARULITE 200 MSDS before handling!

CAUTION: Hold the cartridge upright, with the outlet upwards! Otherwise the catalyst substance will come out!

Underneath the lid a cushion of glass fibre felt (6) is provided which covers the catalyst substance. Remove this cushion and pour out the catalyst granulate. Two spare cushions are contained in the accessories kit. In case the catalyst granulae are sticking to each other (e.g. after an inrush of water, or other fluids) use an apropriate tool to scratch the substance out.

To now refill the cartridge pour in the new catalyst substance (e.g. from the REFILL package available from BMT). For refilling, the cartridge has to be mounted upright, with the outlet end upwards. The REFILL package contains the amount of catalyst substance needed for the CAT-RSC (115 ml). The CAT-RS and older Catalyzing Cartridges may need less catalyst. They have to be filled to a filling height 19 mm below the rim of the tube, to leave enough room for for parts 2 and 6. Make sure that the inlet glass fibre cushion (deep inside the cartridge) is still at its place. Otherwise put in a new cushion.

After filling in the correct amount of catalyst substance, put the glass fibre cushion in place, and push in the outlet lid (holding it with the extraction tool). It is important to push in the lid oriented so that the small threaded bore holes M 3 in the lid will correspond with



the small radial through holes in the cartridge. Now screw in both M 3 screws with the Allen wrench.

As an alternative to self-refilling your BMT Catalyzing Cartridge we are offering to refill it in-works.