FLEX 44LV is a one-component polyurethane product, which reacts in contact with moisture and rinsing water. During the reaction a gel is formed - which expands under development of gas (CO2) to a flexible gel (TACSS-FLEX), or when FLEX is added to TACSS to a less flexible gel.

For sealing work FLEX 44LV is being used as a “flexibilizer” to TACSS 020NF. Commonly added FLEX44LV to TACSS020NF is 20-25%. This mixture is highly contributory to the very long time durability of the TACSS/FLEX injection system.

Under very rare circumstances FLEX 44LV is being used as “its own” injection product for very elastic joint tasks. In such cases a special catalyst may be added: FLEXCAT. FLEX 44LV, on its own, should not be used in heavily alkaline surroundings.

TIGHTNESS
The TACSS/FLEX systems give, contrary to other foaming polyurethane products, a durability in sealing, without needing an after-injection with a (second type) elastic type of polyurethane.

NO PRE-SEALING
Due to the very fast reaction of TACSS/FLEX in damp or wet surroundings a sealing prior to the injection is not only unnecessary, but should be avoided, due to the fact that TACSS/FLEX is forced out through the crack and quickly hardens up to “its own presealing”. Furthermore your eyes may be able to follow to proper injection step by step without the pre-sealing. The discharged foam is easily removed sooner or later, when the injection work is finished. This of course will give a perceptible decrease in the injection expenses!

PACKERS
Our composite packers have been made especially to meet all requirements for a proper TACSS/FLEX injection. Using composite packers saves time, because the packer element remains inside the concrete. The pressure part is simply screwed of the packer element (may be used several times). The drilled holes may be casted immediately after the injection. The packer element can also be delivered in stainless steel (only 13 mm!).

LONG TIME DURABILITY
Throughout the world TACSS has been in use since 1967 - and in Scandinavia since 1977. Statens Provningsanstalt in Borås/Sweden has carried out long time tests which shows constant sealing and water tightness in alkaline surroundings: at 15°C 43 years. At 7°C 110 years. The mix: 75% TACSS 020NF and 25% FLEX 44LV gives an expected durability at 7°C for 320 years.

AREAS OF APPLICATION
TACSS/FLEX may be used as a general sealing product in concrete. TACSS/FLEX is also suitable for the so called RASTER INJECTION, i.e. sealing of areas of concrete without visible cracks. A kind of “Pressure-creosoting” of the concrete. In order to make TACSS/FLEX to react, i.e. foam and make the wanted sealing, moisture (at least 6%) should be present inside the concrete.

DRINKING WATER
Investigation carried out at Göteborgs VA-verk and at Hygiene Institut in Gelsenkirchen TACSS may be used in connection with drinking water.

CONSTRUCTION JOINTS
When f.inst. INFILTRA STOP hoses has been built-in the concrete, the TACSS/FLEX systems will give an easy and fast sealing of the construction joint. (See separate data sheet for INFILTRA)

MIXING
In order to control the reaction 2 to 10% of catalyst C-852 is added to TACSS 020NF (stirring). Hereafter FLEX may be added, if an even more flexible system is required. The reaction, i.e. the foaming will take place within 30 - 120 sec. depending on temperature and content of moisture. At very high amounts of streaming water 10% of catalyst must be added. Never use FLEXCAT when FLEX44LV is mixed into TACSS020NF!