Recommendations for safe use of Supercontinuum lasers

1. Fully enclose the beam path
2. For aligning run the laser in low power or “oscillator only” mode (Fianium products)
   - Only low power IR 1064nm is generated
   - Use appropriate goggles for the IR
   - Once alignment completed – enclose the beam before turning the full power
3. Use a combination of several different filter-technologies (absorption and interference)
   - Absorption filters can be edge filters as well as band pass filters, only a combination of these filters makes it possible to solve complex requirements for broadband light source laser applications.
4. Use suitable beam dumps at all times when the laser product is operating
   - The range of ultra-broadband supercontinuum lasers (SuperK Extreme) with the spectral brightness of a laser and the bandwidth of a lamp (delivered in a single mode fiber) is from 300 nm up to 3000 nm.
   - Beam dump must be rated for pulsed light (supercontinuum produces ~100 ps wide pulses).
   - Despite the non-ionizing nature of the operating wavelengths, damage can still occur to living tissue as a result of heat produced during radiation absorption.
5. Protective eyewear can only provide partial protection
   - The IRD5 filter from NoIR
     http://noirlaser.com/ird5.html
   - Filter T1P02 and T1P04 from Laservision
     http://www.uvex-laservision.de/en/laser-safety-filters/glass-filters/t1p02/
     http://www.uvex-laservision.de/en/laser-safety-filters/glass-filters/t1p04/

Make sure that at all times during system operation the beam path is known and controlled. Wear suitable protection and make sure everybody in the laser area is aware of the fact that the system is being operated.