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The expansion joints of roads, parking decks, airport runways, aprons, taxiways and washing areas need sealants that are resistant to chemicals commonly found there. Soudal offers sealants especially tailored for areas with a high tear and mechanical stress resistance including an excellent resistance to aircraft oils and fuels.

The following sealants are suited for use in environments where contact with chemical liquids can occur:

- Soudaflex 36FL
- Soudaflex 33SL

These sealants were tested on chemical resistance according to different standards which are part of the requirements for cold applied normal and fuel resistant joint sealants for concrete pavements to be used in roads, parking decks, bridge decks, airfields and other trafficked areas:

- Tested and conform DIN EN 14187-4: Change in mass and volume following storage in chemical liquids.
- Tested and conform DIN EN 14187-5: Resistance to hydrolysis.
- Tested and conform DIN EN 14187-6: Adhesion/cohesion properties following storage in chemical liquids.

These sealants were also tested according to ISO 37 (Determination of tensile strength at break, tensile stress at yield, elongation at break and stress values in a tensile test) and ISO 8339 (Tests on the mechanical and adhesion properties on concrete). These tests were performed over different time periods after complete immersion in the following chemical liquids:

- Gasoline – Petrol
- Jet Fuel - Kerosene
- Diesel
- Hydraulic Fluid - Lubricating oil
- Motor oil
- Salt water
- De-icing fluid (50/50 glycol/water)

Both tests were passed with a minimum of change in mechanical properties. These tests can be considered a very thorough test: the joints were immersed totally during up to 2 weeks. In real life circumstances, the chemical fluid will only touch the sealant superficially on 1 side.

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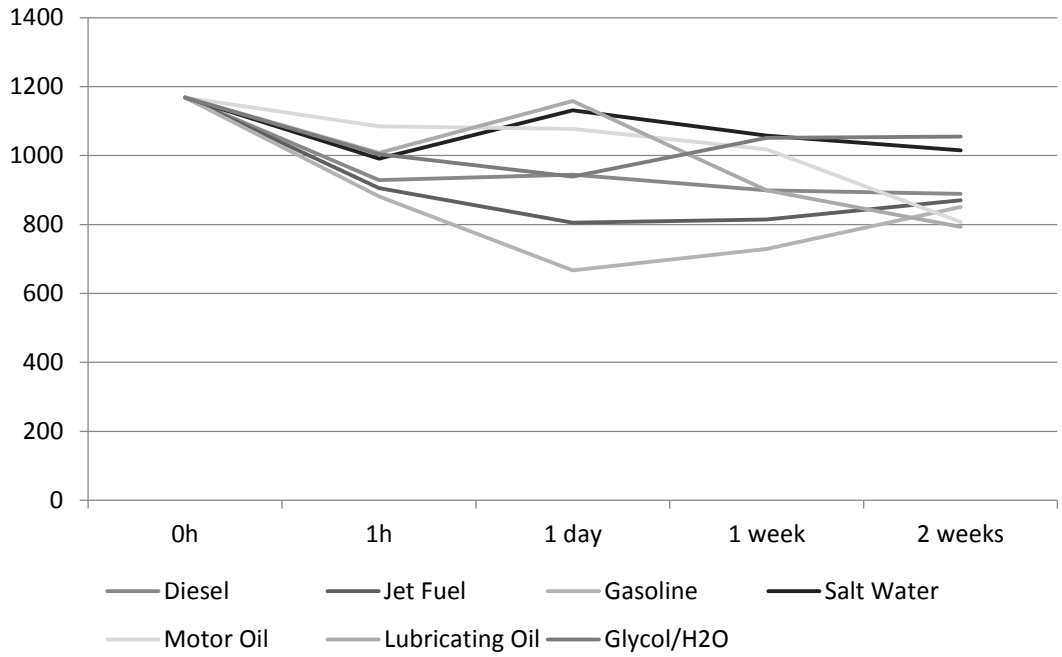
Elongation at break after immersion:



The tests prove that these sealants are suited for sealing applications in environments where fuel and oil contact occur:

1. resistance to splash and spillage contact
2. long-term intense contact / immersion (tested up to 1 week) in combination with Primer 100.

Please note: On porous substrates there can be an influence of the chemical substance migrating through the porous substrate accessing the adhesion surface of the expansion joint. This is why in very extreme conditions of extreme chemical exposure the use of a primer is recommended.

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