

IEC 60296:2020

Type A - fully inhibited "high grade" insulating oil

In June 2020 the International Electrotechnical Commission (IEC) published a revised version of the standard for "Fluids for electrotechnical applications – Mineral insulating oils for electrical equipment": the IEC 60296:2020

A novelty of the new IEC 60296:2020 is the focus on the specification of technical quality and performance parameters of insulating oils.

The origin of the oil molecules (crude oil, gas or used oil) does not longer matter regarding specification, classification and performance.

This standard is undoubtedly a very positive and innovative milestone within the "conservative transformer family" and we are proud that our company could participate in the revision of this standard within the Technical Working Committee MT 38.

With regard to the IEC 60296:2020 and our long-term activities, developments and efforts concerning the establishment and acceptance of so-called "recycled insulating oils", we would like to point out particularly the following:

- Mineral oil-based insulating oils, regardless whether they result from an initial- or re-refining, can be considered normatively, internationally and objectively as equivalent if they meet this mentioned standard.
- **StaSo Transformer Oil I** is the only insulating oil of its kind produced in Europe and Germany that meets the top requirements of the IEC with regard to higher oxidation stability and low sulphur content.
- **StaSo Transformer Oil I** is the only insulating oil of its kind produced in Europe and Germany whose quality and performance has been verified and confirmed by an reputable and independent institution (LABORELEC) in accordance with the new IEC60296:2020
- **StaSo Transformer Oil I** is classified as a Type A insulating oil and has, compared to Type B insulating oils, with its higher oxidation stability and lower sulphur content technically optimized figures regarding TAN, sludge, DDF, colour, interfacial tension and measurable stray-gassing behavior
- **StaSo Transformer Oil I** is defined as a recycled mineral insulating oil in accordance with section 3.9 of IEC 60296: 2020 and can be identified in accordance with 5.4.1. of IEC 60296: 2020 with TRAI (fully inhibited recycled high grade oil for transformers)

StaSo Transformer Oil I is produced in a resource-saving and sustainable manner on basis of re-refined, naphthenic base oils, made by means of MSR-Technology (Multiple-Selective-Refining)

When using **StaSo Transformer Oil I**, customers, energy producers, network operators, transformer manufacturers and service companies choose a high-quality, standardised product and make a contribution equally, consciously or unconsciously.

When using **StaSo Transformer Oil I**, customers, energy producers, grid operators, transformer manufacturers and service companies choose a high-quality, standardized product and contribute, consciously or unconsciously,

- to a resource-saving use of materials & systems,
- to promote the circular economy,
- to an economic action geared towards sustainability and
- to an ecologically and economically valuable alternative.