

About the advantage of induction-free **SUPREME** winding technology

The special design of our capacitor foil makes it possible to fit together two capacitor windings, wound in opposite directions, in such a way that the inductivity of the individual winding is increased! Both windings are connected in series, which therefore means that for the manufacture of a 1µF **MCap® SUPREME**, two conventional models windings of 2 µF each would be required - in total, therefore, 4 µF of material would need to be processed.

This demanding production process requires a huge amount of care in production, mostly manual, as well as subsequent quality control measures. Production costs and an increase in the material used are nevertheless absolutely justified by the audible results.

This capacitor mobilises such unbelievable reserves in your sound system that it is justified to speak of a new dimension of music reproduction. Be it the resolution, dynamic or tone of the music signal, Supreme impresses with its natural liveliness and tonal coherence like no conventional capacitor can. And it is not only for use with extremely expensive hi-fi components.

Use of the capacitor in cheaper design concepts is, however, a good idea and often incredibly effective.

Thorough quality controls before, during and after the costly manufacture of **MCap® SUPREME** ensure the user extremely low tolerance values and an exceptionally high long-term stability. The lowest tolerances that are used in the right and left signal path are the decisive basis for stereophonic-spatial music reproduction that is extremely close to the original. The exact localizability of musicians and a corresponding spatial imaging is only possible if the properties of the left and right canal are almost identical.

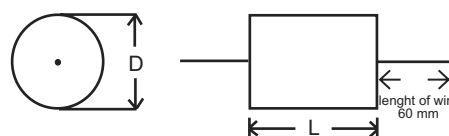
In order to eliminate microphonic effect, which can lead to an alienation of the music signal, the **MCap® SUPREME** capacitor is in addition mechanically stabilised in a special process.

The **MCap[®] SUPREME Silver.Oil** is an oil impregnated metallised polypropylene dielectric capacitor. As the name indicates, high-purity silver is used for the capacitor coating, and the winding is impregnated with a special oil developed in an exhaustive series of experiments and listening tests. Both these features contribute to an even fuller and smoother tonal richness and diversity. Our state-of-the-art metallised polypropylene foils make it possible to maintain extremely low production tolerances that cannot be achieved with traditional oil/paper capacitor designs. This is also the first time that the benefits of oil-impregnated capacitor design have been successfully combined with the well-known long-term stability of polypropylene foil and internal series wiring for induction-free SUPREME performance. (see also page 9)

Its lively reproduction of music impresses in particular with its subtly dynamic speed, precision and marked fine detail.

Technical specifications:

Dielectric: Polypropylene
Dielectric strength: 1 000 VDC
Loss factor: $\tan \delta = 0.0002$ @1 kHz
Loss factor: $\tan \delta = 0.0001$ @10 kHz
Permissible ambient temperature 70°C/158°F



SUP.SO

Supreme capacitors, Silver.Oil

Capacity [µF] ±5%	VDC	Body Ø * L [mm]	Wire Ø [mm]	[€]
0,010 ±5%	1000	13 * 36	0,6 * 60	21,90
0,10 ±5%	1000	17 * 36	0,8 * 60	23,90
0,22 ±5%	1000	19 * 39	0,8 * 60	25,90
0,33 ±5%	1000	19 * 39	1,0 * 60	27,90
0,47 ±3%	1000	26 * 41	1,0 * 60	29,90
0,68 ±3%	1000	26 * 41	1,0 * 60	34,90
1,0 ±3%	1000	31 * 42	1,4 * 60	39,90
1,5 ±3%	1000	36 * 42	1,4 * 60	44,90
2,2 ±3%	1000	41 * 57	1,4 * 60	49,90
2,7 ±3%	1000	41 * 57	1,4 * 60	54,90
3,3 ±3%	1000	41 * 57	1,4 * 60	59,90
3,9 ±3%	1000	41 * 57	1,4 * 60	69,90
4,7 ±2%	1000	41 * 71	1,4 * 60	79,90
5,6 ±2%	1000	46 * 71	1,4 * 60	89,90
6,8 ±2%	1000	46 * 71	1,4 * 60	99,90
8,2 ±2%	1000	51 * 71	1,4 * 60	109,90
10 ±2%	1000	46 * 110	1,4 * 60	129,90

Capacitors

Capacitors (Latin term: condensus = compressor) are capacitive, i.e. they store electric charge. The physical unit of measure for capacity [C] (Latin term: capacitas = capacity) is Farad [F] (in honour of the English physicist and chemist Michael Faraday). Capacitors consist of two electrodes (surfaces conducting electricity) which are arranged close to each other, and a dielectric (insulating layer) in between.

Capacitors (abbr. cap) are frequency-dependent resistors. This is an important property for audio applications because capacitors can filter out low frequencies (i.e. low tones) from music signals. As the filter effect decreases with increasing frequency, the reverse conclusion is: The lower the capacity, the higher the filter effect (i.e. the higher the separating frequency).

Coils

Coils (also referred to as inductors) are inductive, i.e. they influence the current flowing through them by their own magnetic field. The physical unit of measure for inductivity [L] (Latin term: inductio = induce) is Henry [H] (in honour of the US-American physicist Joseph Henry). Coils consist of a wire wound around a core (ideally air).

Similar to capacitors, coils are frequency-dependent resistors. Their filter effect increases with increasing frequency allowing for the elimination of high frequencies (= high tones), i.e. the higher the inductivity, the lower the separating frequency.

Resistors

Resistors (R) (Latin term: resistere = to resist) reduce the current flowing through them by converting part of the energy into heat. The physical unit of measure indicating electric resistance is [Ω] (according to the German physicist Georg Simon Ohm).

The effect which is important for audio applications is that resistors attenuate the entire audio signal irrespective of the frequency. The higher the resistance value, the more energy is converted.

Stereophony

Lowest tolerances of components used in the left and right signal path are fundamental for realistic and stereophonic (Greek stereos = spatial) music reproduction. Only if the characteristics of both channels are close to identical, each musician can be exactly allocated and an according spatial reproduction is possible.

Richness of detail

The conversion of mechanical into electrical vibrations is referred to as microphonic effect. This effect results in vibrations added to the electric music signal thus overlaying and alienating it. On the one hand, the transparency and stereophony of reproduction decreases, and on the other hand, distortions and tonal irritations increase significantly. Therefore, mechanically solid and vibration-damping components are a vital prerequisite for audiophile music reproduction.

Raw materials & processing

Lowest tolerances and highest mechanical stability can only be guaranteed by using raw materials of highest quality and pureness, maximum accuracy regarding to controls as well as utmost precision and continuity in production. Furthermore, these characteristics which apply for all products made by MUNDORF ensure highest audio pleasure.