

## Technical Data Sheet

**STRUKTOL® WB 300 A****STRUKTOL® KW 400****STRUKTOL® KW 600****STRUKTOL® AW 1**

## Synthetic Ester Plasticizers

Properties		<b>STRUKTOL WB 300 A</b>	<b>STRUKTOL KW 400</b>	<b>STRUKTOL KW 600</b>	<b>STRUKTOL AW 1</b>
Appearance		yellowish liquid	light yellow liquid	yellowish liquid	yellowish liquid
Density	[kg/m <sup>3</sup> ]	1100	1000	1100	1100
Viscosity at 20 °C	[mPa·s]	550	15	13.5	140
Pour point	[°C]	-30	-60	-70	15
Evaporation loss (2 h/ 160 °C)	[%]	5	5	5	5
Physiological behaviour		refer to safety data sheet			
Storage stability		at least 24 months under normal storage conditions			
Packing		200 kg drums			

**Solubility**

STRUKTOL KW400 and STRUKTOL KW 600 are easily soluble in aliphatic and aromatic hydrocarbons.

STRUKTOL WB 300 A and STRUKTOL AW 1 are incompatible with aliphatic hydrocarbons, oils and greases.

The data given are typical values which are not intended for use in preparing specifications. For test methods refer to the corresponding supplement.



## Recommendations for Application

STRUKTOL ester plasticizers are special purpose synthetic plasticizers mainly used in compounds based on nitrile rubber.

The decreased compound viscosity facilitates further processing.

**STRUKTOL WB 300 A** is used in NBR, ECO, and ACM to improve oil and fuel resistance. Owing to its incompatibility with aliphatic hydrocarbons, mineral oils and greases STRUKTOL WB 300 A will not leach from vulcanizates, which means that hardly any hardening or shrinkage of the vulcanized rubber is experienced.

It is highly compatible with phenolic resin modified NBR and NBR/PVC polyblends.

**STRUKTOL KW 400** will improve the low temperature flexibility with all commonly used rubbers. For example, NBR vulcanizates can be compounded with flexibility at temperatures as low as -55 °C.

**STRUKTOL KW 600** (chemically: Dibutyl-methylene-bis-thioglycolate) is used for the same purpose, giving even better low temperature flexibility, but shows slightly higher evaporation loss.

**STRUKTOL AW 1** is an antistatic plasticizer for mineral filled NBR-, SBR-, and NR-compounds. A surface resistance as low as  $1 \times 10^6$  Ohms can be achieved for NBR based vulcanizates. Partial crystallization and viscosity increase may occur at low temperatures, but should be eliminated by briefly heating to ca. 60 °C and subsequent stirring.

Long-term exposure to light should be avoided.

## Dosage

Depending upon compound composition and specification: 5 - 50 phr

STRUKTOL AW 1: 5 - 20 phr

The suggestions for application and usage of our products as well as possible proposed formulations are meant to advise only to the best of our knowledge. This information is without obligation and does not release customers from their own testings to ensure suitability for intended processes and use. Liability is only accepted in case of intention or gross negligence.

Liability for any defects caused by minor negligence are not accepted. Each producer is responsible and liable to observe legislation and patent rights of third parties.

This new leaflet replaces all previously printed documentation.

Alterations reserved. 11/2008

Schill + Seilacher "Struktol" GmbH Moorfleeter Straße 28 22113 Hamburg Germany

Phone: +49 40 73362-0 Fax: +49 40 73362-194 E-Mail: info@struktol.de