

SBR-1705 TDAE, SBR-1705 Hi-Ar

Synthetic styrene-butadiene rubber

Oil-extended styrene butadiene synthetic rubber SBR-1705 is a styrene (23.5%) and butadiene (76.5%) copolymer obtained by emulsification method with the usage of resin and fatty soaps. The copolymer is filled with oil TDAE or High Aromatic oil (Hi-AR) and stabilized with staining antioxidant.

Appearance: bale of dark-brown color; weight of a bale — 30 ± 1 kg

Package: PE wrapping film (Vicat softening point ≤ 95 °C); metal or plywood containers (1,26 MT) or plastic container 0,54 MT

Shelf life: 2 (two) years from the date of manufacturing

Storage conditions: at the temperature not higher than 30 °C, in place protected from direct sunlight and atmospheric precipitation

Parameters	SBR-1705 TDAE SBR-1705 Hi-Ar grade B	Test method
Mooney viscosity MML ₁₊₄ (100 °C), UM	50 ± 4	ASTM D 1646
Organic acids, % wt	5,0–6,4	ASTM D 5774
Organic acids soap, % wt	≤0,25	ASTM D 5774
Bound styrene, % wt	22,0–25,0	ASTM D 5775
Solvent extract, % wt	19,5–24,5	ASTM D 5774
Oil, % wt	14–17	ASTM D 5774
Volatile matter, % wt	≤0,6	ASTM D 5668
Ash, % wt	≤0,6	ASTM D 5667

Stress-strain properties in standard recipe on ASTM D 3185 (method 1A), 145 °C x 35 min.

Tensile stress at 300% elongation, MPa	≥10,8	
Tensile strength, MPa	≥21,6	ASTM D 412
Ultimate elongation, %	≥400	

Curing characteristics of rubber compound: Rheometer MDR 2000, measurement conditions: 160 °C, deformation of 0.5°, MH at 30 min.

Minimum torque (ML), dNm	1,4–3,4	
Maximum torque (MH), dNm	13,0–20,0	
Scorch time (ts'1), min.	2,5–7,0	ASTM D 5289
Time to 50 % of full cure (t'50), min.	6,5–11,5	
Time to 90 % of full cure (t'90), min.	12,0–20,0	

Technical support service: techservice@sibur.ru

Issue: **09-February-2021**

MOSCOW

16/1 Krzhizhanovskogo St., Moscow,
117218
Phone: +7 (495) 777-55-00; +7 (495)
780-55-00
E-mail: info@sibur.ru

VIENNA

SIBUR International Gesellschaft m.b.H.
Prinz Eugen-Straße 8-10 1040 Vienna, Austria
tel.: +43 1 370 8000
e-mail: office@sibur-int.com
www.sibur-int.com

ISTANBUL

SIBUR İstanbul Uluslararası Tic. Ltd. Şti.
Ferko Signature Levent
Esentepe, Büyükdere Cd. No:175, 4.Kat / A25
34394 Şişli/İstanbul
tel.: +90 (212) 465 2321
e-mail: info@sibur-int.com
www.sibur-int.com

SHANGHAI

SIBUR International Trading (Shanghai) Co., Ltd
Rm.62T70, SWFC Century Ave.100 Pudong New
Area, Shanghai
tel: +86 (021) 2206 5066
e-mail: infoChina@sibur-int.com
www.sibur-int.cn