

RUBBER PROCESS OIL PRODUCT DATA SHEET

German Technology
Lubricants!

Description : VELVEX Rubber process oils are obtained from petroleum (crude oil), after the more volatile petrol and heating oil fractions have been separated through distillations. Velvex rubber process oil grades are classified as follows:

GRADES	Description
VELVEX - PR	: Paraffinic process oils - Low solvency & high aniline point with low aromaticity, excellent color, oxidation & Thermal stability & also elastomeric compatibility
VELVEX - AR	: Aromatic Process oils - Exhibit low volatility with higher solvency & viscosity for improved productivity & safety standards
VELVEX - NA	: Naphthenic Process oils - Exhibit High solvency, good thermal stability, excellent compatibility & non staining properties
VELVEX - Specialty	: LOW PCA/PAH oils - Meets PAH limits specified by regulation 1907/2006/EC, Annex XVII, Entry 50(REACH) formerly EU directive 2005/69/EC, IP 346 requirements for PCA content & fulfills mutagenicity index (MI) requirement of < 0.4 (according to ASTM E 1687-10)

Packaging Option : Velvex Rubber process oils are offered in HDPE & MS drums, also in bulk flexi bags or ISO tanks

Specific Requirements : Custom viscosity ranges, density, added additives etc shall be made on specific request.

Paraffinic Rubber Oils

Typical Properties

Test Description		Test Method (ASTM)	Specification Limits					
			Velvex PR 32	Velvex PR 95	Velvex PR 230	Velvex PR 330	Velvex PR 410	Velvex PR 430
Appearance	Visual		Bright & Clear					
Colour	D1500		2.5 Max	4 Max	5.5 Max	5.5 Max	5.5 Max	5.5 Max
Density @ 15.6 °C, g/ml	D1298		0.86	0.88	0.88	0.88	0.88	0.88
Kin. Viscosity @ 40 °C, cSt	D 445		28 – 34	90 – 110	240 – 260	330 – 360	425 – 480	421 – 480
Aniline Point °C	D 611		94 – 105	90 – 110	104 – 116	118 – 125	105-110	118 min
Flash Point °C, min	D 92		200	240	250	250	250	285
Pour Point, °C, max	D 97		0	0	-6	-6	-3	-3
VGC	D 2501		0.81	0.79	0.83	0.83	0.8	0.8
Volatility, 5 hrs @ 175°C, %			< 1	< 1	< 1	< 1	< 1	< 1
Sulphur %, Max	D 129		< 1	< 1	< 1	< 1	< 1	< 1
Carbon Type Analysis, %	IR method IS 13155 – 1991							
C _P			60-70	60-70	75-65	75-65	75-65	75-65
C _N			35 – 21	35 – 21	20-28	20-28	20 – 28	20 – 28
C _A			5 – 9	5 – 9	5 – 7	5 – 7	5 – 7	5 – 7
Regulatory Compliance Information	Polycyclic-aromatic hydrocarbons (PAH) Compliance (According to REACH1 Annex XVII, entry 50)	Test Method: standard EN 16143:2013	Benzo[a]pyrene (BaP) CAS No 50-32-8 < 1 ppm & <10 ppm (sum of all PAHs)					
			✓	✓	✓	✓	✓	✓
	Conforms to REGULATION (EC) No 1907/2006 (REACH)1	-	✓	✓	✓	✓	✓	✓
	SVHC Compliance (accordance with Article 59(10) of the REACH)	-	✓	✓	✓	✓	✓	✓
	Note L ² applies (accordance with Part 1.1.3.1. of Annex VI of REGULATION (EC) No 1272/2008 (CLP)	Test Method: IP 346	✓	✓	✓	✓	✓	✓

Nandan Petrochem Limited as formulator has appointed an Only Representative under the REACH regulation.

Note L: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.