

SPECIFICATION
AROMATIC /PARAFFINIC /NAPHTHENIC OILS

Sr.No.	PARAMETER	TEST METHOD	PANOIL C 160 (A)	PANOIL C 160 (P)	PANOIL C 160 (N)
1	Appearance	Visual	C & B	C & B	C & B
2	Colour	D 1500	8	1.5	<1.0
3	Sp.grv @ 29.5 °C	ASTM D1298	0.98 ± 0.02	0.83 -0.87	0.89 -0.90
4	Kin.Viscosity @ 40°C cSt	ASTM D445	-	29.0 - 33.0	
5	Kin.Viscosity @ 100°C cSt	ASTM D445	20.0 - 30.0	-	3.0 - 6.0
6	Flash Point (COC) °C,	ASTM D92	210	190	160
7	MinPour Point°C, Max	ASTM D 97	20	-6	0
8	Aniline Point °C	ASTM D-611-63T	40MIN	90-110	80-90
9	Neutralization No, mg KOH/gm, Max	ASTM D 130	0.1	0.05	-
10	Chemical Composition A) Asphaltene B) Aromatic wt% C) Polar Compounds wt% D) Saturates wt.	ASTM D 2007	-	Nil 20 Min 0.6 Max 80 Min	0.3 Max - 0.1 Max 35 - 65
11	Refractive Index @ 20°C	ASTM D 1218	-	-	1.4710 - 1.5210
12	VGC	ASTM D 2501	-	-	0.820 - 0.850
13	Total Sulpur %	ASTM D 129	2 Max	2 Max	2 Max
14	PCA Content %wt max	IP - 346	-	<3.0	< 3.0

Benefits And Applications:-
PANOIL C-160A

This aromatic oil have good solvent power & special blend of furfural extraction of lube oils.

This oils has high aromatic content and low aniline point with high flash point.

This aromatic oil is highly suitable for natural rubber, styrene butadiene rubber , polybutadiene rubber & Neoprene rubber which are used for heavy duty tyre.

This is also suitable for rubber compounds, asphalt tile, adhesives and plasticizer for plastic compounds, belting, and batteries cases.

PANOIL C 160P

This kind oil having long paraffinic chains.

This oil has excellent oxidation resistance and aging under UV Light.

This oil is having higher aniline point, low solvency power and low volatility.

Recommended for natural rubber, Styrene Butadiene Rubber, EP, EPDM & Butyl rubber manufacturing.

This oil is also used in chemical processes as carrier, diluents, extender and plasticizer.

PANOIL C 160N

This is a naphthenic rubber processing oil conforming to ASTM 103 Type, formulated from carefully selected hydrogenated Naphthenic base oils. This is non staining in nature and possess excellent thermal, oxidation and color stability. It is compatible for processing NR, SBR, PBR, EPDM Rubbers.

Manufacturing of Automotive Tubes.

Light colored non-black foot wear products.

Molded extended products.

SPECIFICATION
HIGH VISCOSITY PARAFFINIC OIL

Sr.No.	PARAMETER	TEST METHOD	PANOIL 150BS - G	PANOIL 150 BS - L	PANOIL 2400	PANOIL 2400 - L
1	Appearance	Visual	C & B	C & B	C & B	C & B
2	Colour , Max	D 1500	5.5	5.5	5.5	6.0
3	Sp.grv @ 30 °C	ASTM D1298	0.87 - 0.90	0.87 - 0.90	0.87 - 0.910	0.8780 - 0.920
4	Kin.Viscosity @ 40°C cSt	ASTM D445	240 - 260	120 - 150	440 - 510	360 - 400
5	Kin.Viscosity @ 100°C cSt	ASTM D445	-	-	-	-
6	Flash Point (COC) °C, Min	ASTM D92	250 - 260	260 - 265	270	245
7	Pour Point°C, Max	ASTM D 97	-6	-6	-3	-3
8	Aniline Point °C	ASTM D-611-63T	105 - 110	105 -110	115 - 125	100 - 115
9	Acid Value mg KOH/gm, Max	ASTM D 130	0.1	0.1	-	-
10	Carbon Type Analysis					
	% CA	ASTM D2140	7 Max	7 Max	7 Max	7 Max
	% CP		60 Min	60 Min	60 Min	60 Min
	% CN		20 Min	20 Min	20 Min	20 Min

Benefits And Applications:-
PANOIL 150BS G

This is a high viscosity paraffinic rubber processing oil conforming to ASTM 104 Type, Formulated from highly refined solvent extracted paraffinic base stock of low Sulphur content.

These are suitable for achieving high retention of properties after ageing and high loading of oil and have good thermal stability.

It is compatible for processing EPM and EPDM Rubbers.

Manufacture of heat resistant conveyor belts, radiator and steam hoses.

Heat resistant Seals and Gaskets.

Use as a process oil.

Blending of Lubricants.

PANOIL 150BS L

This is a high viscosity paraffinic rubber processing oil conforming to ASTM 104 Type, Formulated from highly refined solvent extracted paraffinic base stock of low Sulphur content.

These are suitable for achieving high retention of properties after ageing and high loading of oil and have good thermal stability.

It is compatible for processing EPM and EPDM Rubbers.

Manufacture of heat resistant conveyor belts, radiator and steam hoses.

Heat resistant Seals and Gaskets.

Use as a process oil.

Blending of Lubricants.

PANOIL 2400

An extender oil for EPDM, Rubber EPDM profiles, heat resistance, conveyor belt, steam hose and butyl tube.

Compatible with Butyl and reclaimed rubber. Optimize manufacturing process , low power cost,

Safe to Handle.

Lubricates the Polymer molecules.

PANOIL 2400-L

An extender oil for EPDM, Rubber EPDM profiles, heat resistance, conveyor belt, steam hose and butyl tube.

Compatible with Butyl and reclaimed rubber.

Optimize manufacturing process , low power cost,

Safe to Handle.

Lubricates the Polymer molecules.

SPECIFICATION
SPECIALITY PRODUCTS

Sr.No.	PARAMETER	TEST METHOD	PANOIL 2500 (TDAE)	PANOIL 2800 (RAE)
1	Appearance	Visual	Clear	Dark Colored viscous Liquid
2	Colour , Max	D 1500	8	Greenish
3	Sp.grv @ 29.5 °C	ASTM D1298	0.93 ± 0.02	0.950 - 1.010
4	Kin.Viscosity @ 40°C cSt	ASTM D445	20.0 ± 2.0	-
5	Kin.Viscosity @ 100°C cSt	ASTM D445	-	45 - 60
6	Flash Point (COC) °C, Min	ASTM D92	220	260
7	Pour Point°C, Max	ASTM D 97	39	35
8	Aniline Point °C	ASTM D-611-63T	70 ± 10.1	80 Max
9	Acid Value mg KOH/gm, Max	ASTM D 974	0.5	0.5
10	Carbon Type Analysis % CA % CP % CN	ASTM D2140	26 30 44	25 Min 50 Max 40 Max
12	Refractive Index @ 20°C	ASTM D 1218	-	1.55500
13	VGC	ASTM D 2501	-	0.850 - 0.960
14	PAH	GC MS	-	Sum of 8 restricted PAHs < 10ppm Bap < 1 ppm
15	PCA Content %wt max	IP - 346	2.9	-

Benefits And Applications:-
PANOIL 2500 (TDAE)

Our Specialty oil are highly suitable for rubber and plasticizers application.

These Oils are formulated keeping the PNA structure to the required level with lowest PCA/PAH content conforming to International Standards and Methods.

PANOIL 2800 (RAE)

Panoil 2800 with Restricted Polycyclic Aromatic Hydrocarbons (PAH) content being less than 10ppm and Benzo-a-Pyrene less than 1ppm, allows to be classified as non-carcinogenic oil.

In rubber compound, it is to provide better physical properties, both before ageing and after hot air ageing.

This is mainly due to high viscosity, high flash points and lower volatile loss at higher temperature.

Compatible with Natural Rubber, styrene butadiene Rubber (SBR) and Polybutadiene (PBR).

Tyres – Automotive, cycle & solid etc.

Extruded – Tubes, hoses, profiles etc.

Moulded – Floorings, Mats, Automotive product etc.

Whole tyre/SBR reclaim Rubber.



SPECIFICATION
SPECIALITY PRODUCTS

Sr.No.	PARAMETER	TEST METHOD	PANOIL 2900 (TRAE)	PANOIL 3000 (MES)
1	Appearance	Visual	Dark Colored viscous Liquid	Dark Colored viscous Liquid
2	Colour , Max	D 1500	Light Greenish to Dark Greenish	Greenish brown
3	Sp.grv @ 29.5 °C	ASTM D1298	0.920 - 0.950	0.925-0.955
4	Kin.Viscosity @ 40°C cSt	ASTM D445	–	–
5	Kin.Viscosity @ 100°C cSt	ASTM D445	25 - 32	15 - 20
6	Flash Point (COC) °C, Min	ASTM D92	260	220
7	Pour Point°C, Max	ASTM D 97	0	- 6
8	Aniline Point °C	ASTM D-611-63T	80 - 95	88 - 92
9	Neutralization No, mg KOH/gm, Max	ASTM D 130	–	0.05 max
10	Carbon Type Analysis % CA % CP % CN	ASTM D2140	25 Typical 45 Typical 30 Typical	25 Max 25 +/- 4 56 +/- 3
11	Refractive Index @ 20°C	ASTM D 1747	–	–
12	VGC	ASTM D 2501	–	0.866+/- 0.002
13	PAH	GC MS	10 ppm	8 ppm max
14	PCA Content %wt max	IP - 346	3	3

Benefits And Applications:-
PANOIL 2900 (TRAE)

Panoil 2900 with Polycyclic Aromatics (PCA) content being less <3%, allows to be classified as non-carcinogenic oil.

In rubber compound, it is found to provide better physical properties ageing and after hot air ageing.

This is mainly due to high viscosity, high flash points and lower volatile loss at higher temperature.

Compatible with Natural Rubber, styrene butadiene Rubber (SBR) and Polybutadiene (PBR).

Tyres – Automotive, cycle & solid etc.

Extruded – Tubes, hoses, profiles etc.

Moulded – Floorings, Mats, Automotive product etc.

Whole tyre/SBR reclaim Rubber.

PANOIL 3000 (MES)

Panoil 3000 with Polycyclic Aromatics (PCA) content being less <3%, allows to be classified as non-carcinogenic oil.

In rubber compound, it is found to provide better physical properties ageing and after hot air ageing.

This is mainly due to high viscosity, high flash points and lower volatile loss at higher temperature.

Compatible with Natural Rubber, styrene butadiene Rubber (SBR) and Polybutadiene (PBR).

Tyres – Automotive, cycle & solid etc.

Extruded – Tubes, hoses, profiles etc.

Moulded – Floorings, Mats, Automotive product etc.

Whole tyre/SBR reclaim Rubber.