

## Propylene (Chemical)

#	Property	Units	Test Method	Value
1	Purity	Mol%	G.C	92 min
2	Paraffin	Mol%	G.C	8 max
3	Ethylene	Mol.ppm	G.C	10 max
4	Acetylene	Mol.ppm	G.C	1 max
5	Methyl Acetylene+ Propadiene	Mol.ppm	G.C	10 max
6	Butadiene	Mol.ppm	G.C	5 max
7	Butanes & Butenes	Mol.ppm	G.C	20 max
8	Total Sulphur	Wt.ppm	Microcoulometry (Based on ASTM D-3246)	2 max
9	Water Content	Vol.ppm	Shaw dew point	2.5 max
10	Nitrogen	Mol.ppm	G.C	Nil
11	Hydrogen	Mol.ppm	G.C	10 max
12	Carbon Monoxide	Mol.ppm	G.C	5 max
13	Carbon Monoxide	Mol.ppm	G.C	10 max
14	Oxygene	Mol.ppm	G.C	5 max
15	Oxygenated Organic Compound (Methanol)	Mol.ppm	G.C	5 max
16	SP.Gr. @. (60/60 °F)	--	ASTM D-2598	To be reported

## Propylene (polymer Grade)

#	Property	Units	Test Method	Value
1	Purity	vol%	G.C	99.7 min
2	Propane & Heavier	vol%	G.C	Balance
3	Ethane	Vol.ppm	G.C	30 max
4	Ethylene	Vol.ppm	G.C	2 max
5	Acetylene	Vol.ppm	G.C	1 max
6	Methylacetylene	Vol.ppm	G.C	1 max
7	Propadiene	Vol.ppm	G.C	2 max
8	Total C4's	Vol.ppm	G.C	1 max
9	Hydrogen	Vol.ppm	G.C	5 max
10	Methane	Vol.ppm	G.C	10 max
11	Carbon Monoxide	Vol.ppm	G.C	0.3 max
12	Carbon Dioxide	Vol.ppm	G.C	2 max
13	Oxygen	Vol.ppm	G.C	2 max
14	Water Content	Vol.ppm	G.C	5 max
15	Total Sulphur	Vol.ppm	G.C	2 max
16	Methanol & Ketones	Vol.ppm	G.C	5 max

## Raffinate C4

#	Property	Units	Test Method	Value
1	Iso & Normal Butane	Mol%	G.C	28 max
2	1-Butene	Mol%	G.C	25 max
3	Iso-Butene	Mol%	G.C	45 min
4	Trans & Cis butane-2	Mol%	G.C	22 max
5	1,2 & 1,3 Butadiene	Mol%	G.C	1 max
6	Methyl Acetylene	Mol%	G.C	0.5 max
7	Vinyl Acetylene	Mol%	G.C	0.2 max
8	Ethyl Acetylene	Mol%	G.C	0.2 max
9	Sp.Gr@(15.6 °C)	—	ASTM D-2598	To be reported
10	Total Sulphur	Wt.ppm	Microcoulometry	1 max
11	Copper Corrosion	-	ASTM D-1838	No.1a
12	C <sub>3</sub> & Lighter HC	Mol%	G.C	0.05 max
13	C <sub>5</sub> & Heavier HC	Mol%	G.C	0.1 max
14	R.V.P @ (100°F)	Psia	ASTM D-1267	70 max
15	Evaporated Temp, 95%	°C	ASTM D-1837	-2.5 max
16	Residue on Evaporation	Vol%	ASTM D-2158	0.05 max
17	Water Content	Wt.ppm	Evaporation Method	700 max

## Ethylene

#	Property	Units	Test Method	Value
1	Ethylene	Vol%	Lindeinstr.553	99.95 min
2	Hydrogen	Vol.ppm	ASTM D-1946	5 max
3	Methane+Ethane	Vol.ppm	Lindeinstr.553	500 max
4	Acetylene	Vol.ppm	Lindeinstr.553	1 max
5	Propylene+Higher	Vol.ppm	Lindeinstr.553	10 max
6	Carbon Monoxide	Vol.ppm	ISO 6381	0.2 max
7	Carbon Di Oxide	Vol.ppm	ISO 6381	1 max
8	Oxygen	Vol.ppm	Oxygen Analyzer (Teledine)	1 max
9	Water	Vol.ppm	H <sub>2</sub> O analyser (show dew point meter)	1 max
10	Sulphur as H <sub>2</sub> S	Vol.ppm	ASTM E-840	1 max
11	Methanol	Vol.ppm	Lindeinstr.535	1 max
12	Oxygenated Organics	Vol.ppm	Lindeinstr.535	1 max
13	Carbonyl Sulphide		ASTM D-6228	0.1 max
#	Propert	Vol.ppm Units		



## C6 Non Aromatic

#	Property	Units	Test Method	Value
1	Doctor Test	–	ASTM D-4952	Negative
2	SP.Gr.@(60/60 °F)	–	ASTM D-1298	0.7-0.8
3	I.B.P	°C	ASTM D-86	60 min
4	F.B.P	°C	ASTM D-86	100 max
5	Benzene	Wt%	UOP-744	5 max
6	C4	Wt%	UOP-744	2 max
7	C5	Wt%	UOP-744	18 max
8	C6	Wt%	UOP-744	70 max
9	C7	Wt%	UOP-744	10 max
10	Toluene	Wt%	UOP-744	*
11	C8+	Wt%	UOP-744	*

## Heavy End

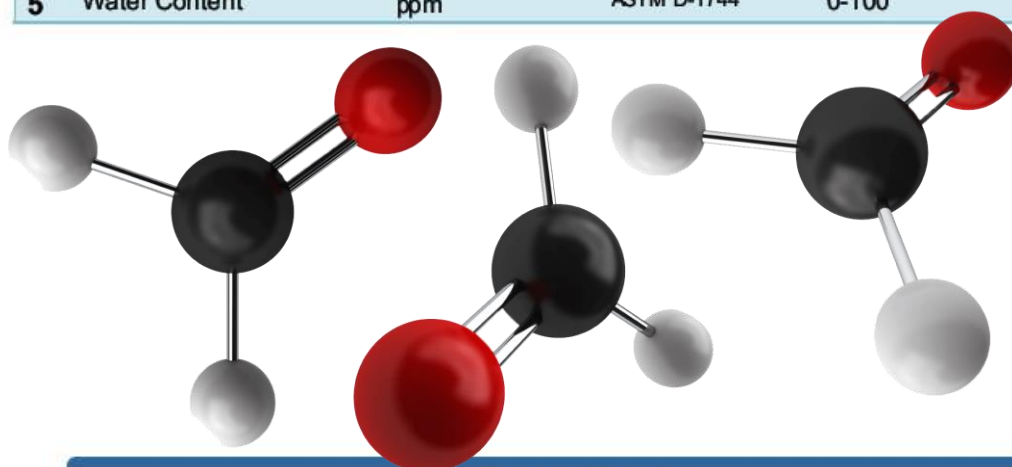
#	Property	Units	Test Method	Value
1	Distillation Range IBP 10% 30% 50% 90% FBP	Centigrade	ASTM D-86	165-176 177-183 186-194 194-203 252-271 297-322
2	Total Sulphur	Ppm	ASTM D-3120	1800 max
3	Water content	Ppm	ASTM D-1744	160 max
4	Color	–	ASTM D-1500	1.0 max
5	Flash Point	Centigrade	ASTM D-93	55 min
6	Po Na Paraffinic Olefins Naphthenic Aromatic Others	Wt% Wt% Wt% Wt% Wt%	ASTM D-5134	0.05-1.17 0 0.26-2.34 4.73-19.86 80-90
7	Specific-Gravity	–	ASTM D-1298	0.78-0.81

## Light End

#	Property	Units	Test Method	Value
1	Po Na Paraffinic Olefinic Naphthenic Aromatic Others	Wt% Wt% Wt% Wt% Wt% Wt%	ASTM D-5134	86-97 0-1.67 0.47-5.5 0-5 0-0.02
2	Total Sulphur	Ppm	ASTM D-3120	850-1260
3	Water content	Ppm	ASTM D-1744	160

## Raffinate

#	Property	Units	Test Method	Value
1	Total Non-Aromatics	Wt%		90.0 min
2	Aromatics	Wt%		10.0 max
3	Density	Gr/cm3	ASTM D-4052	0.63-0.72
4	Total Sulpur	Ppm	ASTM D-4045	1.0 max
5	Water Content	ppm	ASTM D-1744	0-100



## Butadiene

ITEM	COMPONENT	TEST METHOD	UNIT	RESULT
1	1,3 BD	ASTM D-2593	WT%	Min 99.4
2	Total Acetylenes	ASTM D-2593	PPM	Max 60
3	Total Butenes	ASTM D-2593	WT%	Max 0.5
4	1,2 BD	ASTM D-2593	PPM	Max 200
5	Propadiene	ASTM D-2593	PPM	Max 50
6	C5s	ASTM D-2593	PPM	Max 20
7	BD Dimer	ASTM D-2426	WT%	Max 0.1
8	NMP	GC	PPM	Max 10
9	TBC	ASTM D-1157	PPM	50-200
10	Peroxides	ASTM D-5799	PPM	Max 10
11	Carbonyl	ASTM D-4423	PPM	Max 30
12	Water	ASTM D-1744	PPM	Max 100
13	Total Sulfer	ASTM D-3246	PPM	Max 10

### DPG

PROPERTY	UNIT	METHOD	RESULT
<i>Density at 15.6 °C</i>	GR/CM3	D-4052	0.78-0.82
<i>R.V.P.</i>	PSIA	D-323	7-12
<i>Colour Saybolt</i>	-	D-156	10-20
<i>Total Sulphur</i>	PPM	D-3120	300 MAX
<i>Lead Content</i>	PPB	A.A.	10 MAX
<i>I.B.P</i>	°C	D-86	34MIN
<i>F.B.P</i>	°C	D-86	210 MAX
<i>Paraffin</i>	WT%	G.C.	TBR
<i>Olefins</i>	WT%	G.C.	TBR
<i>Naphthenes</i>	WT%	G.C.	TBR
<i>Aromatics</i>	WT%	G.C.	MIN 50
<i>DOCTOR TEST</i>	-----	-----	NEGATIVE
<i>COPPER CORROSION</i>	-----	D 130	NO 1A

### Pentane Plus ( C5+ )

PROPERTY	UNIT	METHOD	RESULT
<i>Density at 15.6 °C</i>	GR/CM3	D-4052	0.735 MAX
<i>R.V.P.</i>	PSIA	D-323	13 MAX
<i>Colour Saybolt</i>	-	D-156	18 MIN
<i>Total Sulphur</i>	PPM	D-3120	100 MAX
<i>Lead Content</i>	PPB	A.A.	50 MAX
<i>I.B.P.</i>	°C	D-86	30 MIN
<i>F.B.P.</i>	°C	D-86	165 MAX
<i>Paraffins</i>	WT%	G.C.	80 MIN
<i>Olefins</i>	WT%	G.C.	1 MAX
<i>Naphthenes +Aromatics</i>	WT%	G.C.	BALANCE
<i>Total Chloride</i>	PPM	Microcoulometry	10 MAX
<i>H2 S</i>	PPM	D-2440	2 MAX