

Shiraz Petrochemical Co.

Urea (Zone I)

#	Property	Units	Test Method	Value
1	N2 Content	Wt%	201-E	46.3 min
2	Moisture	Wt%	805-1-E	0.8 max
3	Biuret	Wt%	135-E	1 max
4	Particle size (1-2.5 mm)	%	158-E	90 min

Packing : bags of 50 kgs and Bulk

Urea (Zone II)

#	Property	Units	Test Method	Value
1	N2 Content	Wt%	201-E	46.3 min
2	Moisture	Wt%	805-1-E	0.3 max
3	Biuret	Wt%	135-E	1 max
4	Particle size (1-2.84 mm)	%	158-E	90 min

Packing : bags of 50 kgs and Bulk

Sodium Hypochlorite

#	Property	Units	Test Method	Value
1	Active Chlorine (NaCLO)	gr/lit	ZP-GS-003	120 min
2	Sodium Hydroxide (NaOH)	gr/lit	ZP-GS-003	2-10

Shipping : Bulk Carrier

Sodium Carbonate (Na₂CO₃) Heavy

#	Property	Units	Test Method	Value
1	Purity	Wt%	IRANIAN STANDARD	98 min
2	Na HCO ₃	Wt%	IRANIAN STANDARD	1 max
3	Na CL	Wt%	IRANIAN STANDARD	1 max
4	Fe	Wt.ppm	IRANIAN STANDARD	60 max
5	Particle size (0.2-2mm)	%	IRANIAN STANDARD	95 min

Shipping : Bags of 50 Kgs.

Sodium Carbonate (Na₂CO₃) Light

#	Property	Units	Test Method	Value
1	Purity	Wt%	IRANIAN STANDARD	98 min
2	Na HCO ₃	Wt%	IRANIAN STANDARD	1 max
3	Na CL	Wt%	IRANIAN STANDARD	1 max
4	Fe	Wt.ppm	IRANIAN STANDARD	60 max

Shipping : Bags of 50 Kgs.

Sodium Bicarbonate (NaH CO₃)

#	Property	Units	Test Method	Value
1	Purity	Wt%	IRANIAN STANDARD	98 min
2	Na ₂ Co ₃	Wt%	IRANIAN STANDARD	1.5 max
3	Na CL	Wt%	IRANIAN STANDARD	0.1 max
4	Moisture	Wt%	IRANIAN STANDARD	Balance

Shipping : Bags of 50 Kgs.

Shiraz Petrochemical Co.

Perchlorine

#	Property	Units	Test Method	Value
1	Ca (CLO) ₂	Wt%	ZZ-AM-001	65 min
2	NaCL	Wt%	ZZ-AM-001	20 max
3	Ca (OH) ₂	Wt%	ZZ-AM-001	4 max
4	CaCL ₂	Wt%	ZZ-AM-001	3 max
5	CaCO ₃	Wt%	ZZ-AM-001	8 max
6	H ₂ O	Wt%	ZZ-AM-001	10 max
7	Others	--	--	Balance

Packing : Drums of 50 kgs

Nitric Acid (HNO₃)

#	Property	Units	Test Method	Value
1	Purity	Wt%	S.T.E.C2.1.11	53 min

Shipping : Bulk carrier

Hydrochloric Acid (HCL)

#	Property	Units	Test Method	Value
1	Purity	Wt%	ZP-GS-033	30 min

Shipping : Bulk carrier

Chlorine

#	Property	Units	Test Method	Value
1	Purity	v/v%	ZP-GS-033	99.6 min

Shipping : cylander of 60 / 90 / 1000 kgs

Methanol

#	Property	Units	Test Method	Value
1	Purity	Wt%	CALCULATED	99.85 min
2	H ₂ o	Wt%	ASTM D-1364	0.1 max
3	Color	Apha	ASTM D-1209	5 max
4	Carbonisable	Apha	ASTM E-0346	5 max
5	Sp.Gr. @ (20/20°C)	--	ASTM D-1298	0.792 – 0.793
6	Acidity (As CH ₃ -COOH)	Wt%	ASTM D-1613	0.003 max
7	Alkalinity (As NH ₃)	Wt%	ASTM D-1614	0.003 max
8	Hydrocarbons	--	ASTM D-1722	Passes Test
9	Fe	Wtppm	ASTM E-202	0.05 max
10	Chloride	Wtppm	ASTM D-512	0.2 max
11	Distillation Range	°C	ASTM D-1078	1 max
12	Permanente Time	minutes	ASTM D-1363	50 min
13	Acetone	Wt%	ASTM D-1612	0.003 max
14	Odor	--	ASTM D-1296	Nonresduali
15	Non volatile Matter	mgr/100ml	ASTM D-1353	2 max
16	Appearance	--	--	Clear Free From Suspended Matter
17	Miscibility	--	ASTM D-1722	Passes Test

Shipping : Bulk carrier

Shiraz Petrochemical Co.

Explosive Ammonium Nitrate

#	Property	Units	Test Method	Value
1	N ₂ Content	Wt%	S.T.E.C2.4.2	34.3 min
2	Moisture	Wt%	S.T.E.C2.4.4	0.2 max
3	Fuel Oil Absorption Level	Wt%	S.T.E.C2.4.8	6 min
4	Particle size (1-3mm)	%	S.T.E.C2.4.6	96 min
5	Bulk Density	Ton/m ³	--	0.75 min

Packing : Bags of 50 kgs

Agriculture Ammonium Nitrate

#	Property	Units	Test Method	Value
1	N ₂ Content	Wt%	S.T.E.C 2.4.2	34.3 min
2	Moisture	Wt%	S.T.E.C 2.4.4	0.15 max
3	Anticake	Wt%	--	0.05 min
4	Particle size (1-4mm)	%	S.T.E.C 2.4.6	96 min
5	So ₄ ⁼	Wt%	S.T.E.C 2.4.7	0.15 min

Packing : Bags of 50 kgs

Caustic Soda (NaOH)

#	Property	Units	Test Method	Value
1	Purity	Wt%	ZP-GS-033	40 min

Shipping : Bulk carrier

Ammonia Solution

#	Property	Units	Test Method	Value
1	NH ₃	Wt%	TITRATION	15 min

Shipping : Bulk carrier

Anhydrous Liquid Ammonia

#	Property	Units	Test Method	Value
1	Purity	Wt%	805-12-E	99.9 min

Shipping : prossunised cylander

Bandar Imam Petrochemical Co.

Benzene

#	Property	Units	Test Method	Value
1	Purity	Wt%	ASTM D-4492	99.9 min
2	Toluene	Wt.ppm	ASTM D-4492	150 max
3	Non Aromatic	Wt.ppm	ASTM D-4492	700 max
4	Density @ (15.6 °c)	gr/cm ³	ASTM D-4052	0.8820 – 0.8860
5	Appearance	--	VISUAL	Clear
6	Color,Pt-Co scale	--	ASTM D-1209	10 max
7	Acid Wash Color	--	ASTM D-848	1 max
8	Acidity	mgr NaOH/100ml	ASTM D-847	No Free Acid
9	Copper Corrosion	--	ASTM D-849	No .1a
10	Total Sulphur	Wt.ppm	UOP 727	1 max
11	H ₂ S & So2 Content	--	ASTM D-853	Free of (H ₂ S/SO ₂)
12	Distillation Range	°C	ASTM D-850	1.0max (Include80.1)
13	Solidification Point	°C	ASTM D-852	5.45 min
14	Water Content	Wt.ppm	ASTM E-1064	200 max
15	Thiophene	Wt.ppm	ASTM D-1685	1 max
16	Methyl Cyclohexane	Wt.ppm	ASTM D-4492	200 max
17	Total Nitrogen	Wt.ppm	ASTM D-6069	1 max
18	Total Chloride	Wt.ppm	IP-AK-81	2.0 max

Shipping : Bulk Carrier

Caustic Soda

#	Property	Units	Test Method	Value
1	Purity	Wt%	ASTM D-3875	48.5 min
2	Na ₂ CO ₃	Wt%	ASTM D-3875	0.4 max
3	NaCL	Wt.ppm	Spectrophotomerty (DENORA)	15 max
4	Na ₂ SO ₄	Wt.ppm	ASTM D-516/D-4130	15 max
5	AL ₂ O ₃	Wt.ppm	Standard Method	10 max
6	Total Fe (AS Fe ₂ O ₃)	Wt.ppm	ASTM D-2790	6 max
7	SiO ₂	Wt.ppm	ASTM D-859-88	5 max
8	Total Ca (As CaO)	Wt.ppm	ASTM D-511	10 max
9	Hg	Wt.ppm	Mercury Analysis	0.5 max
10	Sp.Gr.@(15.6°C)	--	ASTM D-3875	1.515 min
11	Appearance	--	Visual	Clear
12	Na CLO ₃	Wt.ppm	Vogel Analysis	120 max

Shipping : Bulk Carrier

Hydrochloric Acid (HCL)

#	Property	Units	Test Method	Value
1	Purity	Wt %	BIPC	30 min
2	Iron , Fe	Wt.ppm	STD METHOD VOL.2	7 max
3	Free Chlorine , Cl ₂	Wt.ppm	DENORA	20 max

Shipping : Bulk Carrier

Bandar Imam Petrochemical Co.

1,2 Di Chloro Ethane (E.D.C)

#	Property	Units	Test Method	Value
1	Purity	Wt%	G.C	99.97 min
2	Density @ (15.6°C)	gr/cm ³	ASTM D-4052	To Be Reported
3	Lo – Boil	Wt.ppm	G.C	170 max
4	Hi – Boil	Wt.ppm	G.C	130 max
5	Acidity (As HCL)	Wt.ppm	T.S.K JAPAN	1 max
6	Iron	Wt.ppm	ASTM D-2790	0.2 max
7	Water Content	Wt.ppm	ASTM D-1744	50 max
8	Free Chlorine	Wt.ppm	T.S.K JAPAN	Nil
9	Color , pt-Co Scale	--	ASTM D-1209	No.5 max

Shipping : Bulk Carrier

Aromatic Raffinate

#	Property	Units	Test Method	Value
1	5% Vol. Distillation	°C	ASTM D-86	50 max
2	95% Vol. Distillation	°C	ASTM D-86	150 max
3	Density @ (15.6C)	gr/cm ³	ASTM D-4052	To Be Reported
4	R.V.P	Psia	ASTM D-323	13 max
5	Color Saybolt	--	ASTM D-156	20 min
6	Lead Content	Wt.ppm	ATOMIC ABSORPTION	10 max
7	Total Sulphur	Wt.ppm	MICROCOULO METRY	20 max
8	Paraffins	Wt %	GC	80 min
9	Olefins	Wt %	GC	Balance
10	Naphthenes+Aromatics	Wt %	GC	15 max

Shipping : Bulk Carrier

Bandar Imam Petrochemical Co.

D.P.G

#	Property	Units	Test Method	Value
1	Density@ (15.6°C)	gr/cm ³	ASTM D-4052	To Be Reported
2	Lead Content	Wt.ppm	ASTM D-3559	10 max
3	Copper Corrosion	--	ASTM D-130	No.1a
4	Total Sulphur	Wt.ppm	ASTM D-3120	300 max
5	Aromatics	Wt %	G.C	39 min
6	Paraffins	Wt %	G.C	--
7	Olefins	Wt %	G.C	--
8	Naphthenes	Wt %	G.C	--
9	R.V.P.	Psia	ASTM D-323	10 max
10	Color Saybolt	--	ASTM D-156	12 min
11	Doctor Test	--	ASTM D-4952	Positive
12	5% Vol. Recovery	°C	ASTM D-86	35 min
13	95% Vol. Recovery	°C	ASTM D-86	195 max

Shipping : Bulk Carrier

Mixed - Xylene

#	Property	Units	Test Method	Value
1	Appearance	--	VISUAL	Clear
2	Density @ (15.6°C)	gr/cm ³	ASTM D-4052	To Be Reported
3	Color , Pt-Co Scale	--	ASTM D-1209	10 max
4	Acid Wash Color	--	ASTM D-848	2 max
5	Acidity	mgr NaOH/100ml.	ASTM D-847	NOFree Acid
6	Copper Corrosion	--	ASTM D-849	No.1a
7	H ₂ S & So ₂ Content	--	ASTM D-853	Free of (H ₂ S/SO ₂)
8	Distillation Range @ 760 mmHg	°C	ASTM D-850	5 max
9	I.B.P	°C	ASTM D-850	137 min
10	D.P	°C	ASTM D-850	143 max
11	Para - Xylene	Wt %	ASTM D-2306	16 min
12	Ortho Xylene	Wt %	ASTM D-2306	16 min
13	Ethyl Benzene	Wt %	ASTM D-2306	18.5 max
14	Metha Xylene	Wt %	ASTM D-2360	49 max
15	Benzene	Wt %	ASTM D-2360	0.005 max
16	Toluene	Wt %	ASTM D-2360	0.04 max
17	C ₉ Aromatics	Wt %	ASTM D-2360	0.5 max
18	Non Aromatics	Wt %	ASTM D-2360	0.1 max
19	Total Sulphur	Wt.ppm	UOP 727	1 max
20	Total Chlorides	wt.ppm	IP-AK/81	1 max
21	Bromine Index	mgr/100gr	IP-129(MODIFIED)	20 max

Shipping : Bulk Carrier

Bandar Imam Petrochemical Co.

Para - Xylene

#	Property	Units	Test Method	Value
1	Purity	Wt %	ASTM D-3798	99.7 min
2	Non Aromatics	Wt %	ASTM D-3798	0.2 max
3	Distillation Range	°C	ASTM D-860	2max
4	Total Sulphur	Wt.ppm	UOP 727	1 max
5	Total Chloride	Wt.ppm	IP-AK/81	1 max
6	SO ₂ /H ₂ S	--	ASTM D-853	Free
7	Appearance	--	VISUAL	Clear, Colorless
8	Toluene+Benzene	Wt.ppm	ASTM D-3798	300 max
9	Ethyl Benzene	Wt %	ASTM D-3798	0.3 max
10	Color , Pt – Co . Scale	--	ASTM D-1209	20 max
11	Meta – Xylene	Wt %	ASTM D-3798	0.25 max
12	Ortho – Xylene	Wt %	ASTM D-3798	0.1 max
13	Acid Wash Color	--	ASTM D-848	1 max
14	Sp.Gr. @ (15.6 / 15.6°C)	--	ASTM E-4052	0.8650-0.8661

Shipping : Bulk Carrier

Sodium Hypochlorite

#	Property	Units	Test Method	Value
1	Free Chlorine ,CL ₂	Wt %	BIPC	10 min
2	Total Alkalinity	Wt %	BIPC	4 max

Shipping : Bulk Carrier

Tabriz Petrochemical Co.

1,3 BD

#	Property	Units	Test Method	Value
1	1,3 BD	Wt %	ASTM D-2593	99.4 min
2	Total Acetylenes	ppm	ASTM D-2593	60 max
3	Total Butenes	Wt %	ASTM D-2593	0.5 max
4	1,2 BD	ppm	ASTM D-2593	200 max
5	Propadimer	ppm	ASTM D-2593	50 max
6	C5,S	ppm	ASTM D-2593	20 max
7	BD Dimer	Wt %	ASTM D-2426	0.1 max
8	NMP	ppm	GC	10 max
9	TBC	ppm	ASTM D-1157	50 – 200
10	Peroxides	ppm	ASTM D-5799	10 max
11	Carbonyl	ppm	ASTM D-4423	30 max
12	Water	ppm	ASTM D-1744	100 max
13	Total Sulfur	ppm	ASTM D-3246	10 max

Shipping : Bulk Carrier

Ethyle Benzene

#	Property	Units	Test Method	Value
1	Purity	Wt %	ASTM D-5060	99.65 min
2	Diethyle Benzene (DEB)	Ppm wt	ASTM D-5060	10 max
3	Benzene	Wt %	ASTM D-5060	0.15 max
4	Others	Wt %	ASTM D-5060	0.2 max

Shipping : Bulk Carrier

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	*

Shipping : Bulk Carrier

Toluene

#	Property	Units	Test Method	Value
1	Purity	Wt %	ASTM D-5135	98 min
2	Others*	Wt %	ASTM D-1209	2 max

Shipping : Bulk Carrier

Tabriz Petrochemical Co.

Styrene Monomer

#	Property	Units	Test Method	Value
1	Purity	Wt %	ASTM D-5135	99.7 min
2	Color (PT-CO) Scale	--	ASTM D-1209	10 max
3	Polymers	ppm wt	ASTM D-2121	10 max
4	Inhibitor (AS TBC)	ppm wt	ASTM D-4590	15 max
5	Aldehyde (AS BENZALDEHYDE)	ppm wt	ASTM D-2119	100 max
6	Peroxide (AS H2O2)	ppm wt	ASTM D-2340	50 max
7	Total Sulphur (AS "S")	ppm wt	ASTM D-3120	5 max
8	Ethyl-Benzene	ppm wt	ASTM D-5135	1000 max

Shipping : Bulk Carrier

C7-C9

#	Property	Units	Test Method	Value
1	Sp.Gr @ (60/60 ^o f)	---	---	0.7 – 0.9
2	R.V.P	Psia	---	10 max
3	I.B.P	°C	---	100 min
4	F.B.P	°C	---	165 max

Shipping : Bulk Carrier

Cracked Fuel Oil (C.F.O)

#	Property	Units	Test Method	Value
1	Sp.Gr. @ (15 ^o c)	--	IP 189 , 190	1 – 1.3
2	Viscosity @ (100 ^o C)	Cst	ASTM D-445	8 – 20
3	Flash Point	°C	ASTM D-93	70 min

Shipping : Bulk Carrier

Crude Fuel Oil (C9 + CUT)

#	Property	Units	Test Method	Value
1	Sp.Gr. 15°C	--	ASTM D-1298	0.85 – 1
2	Flash Point	°C	ASTM D-93	45 min
3	Pour Point	°C	ASTM D-97	<0

Shipping : Bulk Carrier

Razi Petrochemical Co.

Urea

#	Property	Units	Test Method	Value
1	Nitrogen	Wt %	PROCEDURE MANUAL	46.1-46.3
2	Moisture	Wt %	PROCEDURE MANUAL	0.7 max
3	Biuret	Wt %	PROCEDURE MANUAL	1.2 max
4	Particle size (1.2-2.4 mm)	%	PROCEDURE MANUAL	90 min

Packing : bags of 50 kgs and Bulk

Sulfuric Acid

#	Property	Units	Test Method	Value
1	Purity	Wt %	PROCEDURE MANUAL	98 min
2	Calcination Residue	Wt %	--	0.01 max
3	Arsenic	Wt %	ASTM E-223	Trace
4	SO ₂	Wt %	ASTM E-223	0.0025 max
5	Hg	Wt %	--	Trace
6	Fe	Wt %	ASTM E-225	0.0035 max
7	Turbidity	N.T.U	ASTM E-225	100 max

Shipping : Bulk Carrier

Di Ammonium Phosphate (D.A.P)

#	Property	Units	Test Method	Value
1	Nitrogen	Wt %	PROCEDURE MANUAL	18.0 min
2	P2O5	Wt %	PROCEDURE MANUAL	46.0 min
3	Moisture	Wt %	PROCEDURE MANUAL	1.5 max
4	Particle Size (1-4mm)	%	PROCEDURE MANUAL	85 min
5	Density	Kg/ m ³	PROCEDURE MANUAL	960 min

Packing : bags of 50 kgs and Bulk

Sulphur

#	Property	Units	Test Method	Value
1	Purity	Wt %	BS-4113	99.5 min
2	Moisture	Wt %	BS-4113	0.5 max
3	Ash	Wt %	BS-4113	0.05 max
4	Hydrocarbon	Wt %	BS-4113	0.05 max
5	Acidity (H ₂ SO ₄)	Wt %	BS-4113	0.02 max
6	As/ Te/ Se	Wt %	BS-4113	Commercially Free
7	Color	Wt %	BS-4113	Bright Yellow

Shipping : Bulk Carrier

Phosphoric Acid

#	Property	Units	Test Method	Value
1	P2O5	Wt %	A.F.P.C # 3	48 min
2	S _{O4}	Wt %	A.F.P.C # 9	4 max
3	Fe ₂ O ₃ & Al ₂ O ₃	Wt %	A.F.P.C # 6	3.7 max
4	F	Wt %	A.F.P.C # 9	1.6 max
5	MgO	Wt %	A.F.P.C # 12	1.0 max
6	Suspended Solid	Wt %	FILTRATION	5 max
7	Sp.Gr. @ (21 °C)	--	PYCHNOMETER	1.65 min

Shipping : Bulk Carrier

Ammonia

#	Property	Units	Test Method	Value
1	Purity	Wt %	PROCEDURE MANUAL	99.9 min
2	Water	Wt %	PROCEDURE MANUAL	0.1 max
3	Oil	ppm	PROCEDURE MANUAL	5 max

Shipping : Pressured cylinder

Khorasan Petrochemical Co.

Urea (for Eexport)

#	Property	Units	Test Method	Value
1	N2 Content	Wt %	Stamicarbon Procedure	46.3 min
2	Moisture	Wt %	Stamicarbon Procedure	0.3 max
3	Biuret	Wt %	Stamicarbon Procedure	0.9 max
4	Particle size (1-2.4mm)	%	Stamicarbon Procedure	95 min

Packing : bags of 50 kgs

Ammonia

#	PROPERTY	Units	Test Method	Value
1	Purity	Wt %	M.W Kellogg Procedure	99.75 min
2	Water	Wt %	M.W Kellogg Procedure	0.25 max
3	Oil	ppm	M.W Kellogg Procedure	5 max

Shipping : Pressurized cylinder

Melamine Crystal

#	Property	Units	Test Method	Value
1	Purity	Wt %	---	99.9
2	Turbidity (NTU)	-	----	2
3	ASH (%)	Wt %	----	0.006
4	Moisture	Wt %	----	0.02
5	APHA	-	----	5

Uromieh Petrochemical Co.

Ammonium Sulfate

#	Property	Units	Test Method	Value
1	Nitrogen Content	Wt %	--	20.8 min
2	Moisture (H ₂ O)	Wt %	--	1.0 max
3	Free Acid (H ₂ SO ₄)	Wt %	--	0.2 max

Packing : bags of 50 kgs

Melamine Crystal

#	Property	Units	Test Method	Value
1	Purity	Wt %	---	99.93
2	Turbidity (NTU)	-	----	<20
3	ASH (%)	Wt %	----	0.006
4	Moisture	Wt %	----	0.04
5	APHA	-	----	<20

Buali Sina Petrochemical Co.

O - Xylene

#	PROPERTY	Units	Test Method	Value
1	O – Xylene	WT%	ASTM D -3797	98.5 Min
2	Non – Aromatics	WT%	ASTM D -3797	0.3 Max
3	C9 & Heavier Aromatics	WT%	ASTM D -3797	1.0 Max
4	Total C8	WT%	ASTM D -3797	98.5 Min
5	Distillation Range	Centigrade	ASTM D -850	2.0 Max
6	Total Sulphur	ppm	ASTM D-4045	1.0 Max
7	Color,Pt-CO scale	----	ASTM D-1209	20.0 Max
8	Acidity	----	ASTM D-847	None detected
9	SO2 / H2S Content	----	ASTM D -853	None detected

Shipping : Bulk Carrier

Benzene

#	PROPERTY	Units	Test Method	Value
1	Benzene	WT%	ASTM D – 4492	99.9 Min
2	Non-Aromatic	WT%	ASTM D – 4492	0.08 Max
3	Toluene	WT%	ASTM D – 4492	0.02 Max
4	Specific Gravity	-----	ASTM D -3505	0.882 – 0.886
5	Methyl cyclo hexane	WT%	ASTM D -4492	0.02 Max
6	Chlorine	ppm	ASTM D -4929	1.0 Max
7	Acidity	mg NaOH/100mg	ASTM D -847	No free acid
8	Solidification point	Centigrade	ASTM D -852	6
9	Distillation Range	Centigrade	ASTM D -850	2.0 Max
10	Total Nitrogen	ppm	ASTM D -4629	1.0 Max
11	Total Sulphur	ppm	ASTM D -4045	1.0 Max
12	Color (Pt-CO) Scale	----	ASTM D -1209	10.0 Max
13	SO2 / H2S Content		ASTM D -853	Free of H2S / SO2
14	Acid Wash Color	----	ASTM D -848	1.0 Max
15	Copper Corrosion	----	ASTM D -849	No.1 a
16	Thiophene	ppm	ASTM D -1685	1.0 Max
17	Br.Index	mg/100 gr	ASTM D -1744	10. Max
18	Water content	ppm	ASTM D -1744	Saturated

Shipping : Bulk Carrier

Buali Sina Petrochemical Co.

P - Xylene

#	PROPERTY	Units	Test Method	Value
1	P - Xylene	WT%	ASTM D - 3798	99.7 Min
2	Non - Aromatic	WT%	ASTM D - 3798	0.01 Max
3	BZ + TOL	WT%	ASTM D - 3798	0.01 Max
4	Ethyl benzene	WT%	ASTM D - 3798	0.13 Max
5	O - Xylene	WT%	ASTM D - 3798	0.05 Max
6	M - Xylene	WT%	ASTM D - 3798	0.1 Max
7	Total Sulphur	ppm	ASTM D -4045	1.0 Max
8	Total Chloride	ppm	ASTM D - 4929	1.0 Max
9	Acid Wash Color	----	ASTM D - 848	1.0 Max
10	SO2 / H2S content	----	ASTM D - 853	Free of H2S/SO2
11	Distillation Range	Centigrade	ASTM D - 850	1.0 Max
12	Color (PT-CO) scale	---	ASTM D - 1209	10.0 Max
13	Sp - Gr	----	ASTM D - 3505	0.858 - 0.875
14	Appearance	----	Visual	clear

Shipping : Bulk Carrier

Light End

#	PROPERTY	Units	Test Method	Value
1	PONA 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

Shipping : Bulk Carrier

Heavy Aromatic

#	PROPERTY	Units	Test Method	Value
1 2 3 4	GC Composition Total C8A C9 Aromatics C10 + Aromatics	WT% WT% WT%	ASTM D - 5134	1.0 max 6.0 max 93.0 min
5	Flash point	Centigrade	ASTM D - 93	65 min
6	Density	gr / cm3	ASTM D - 4052	0.89 - 0.95
7	H2S / SO2 Content	ppm	ASTM D - 853	Free of H2S / SO2

Shipping : Bulk Carrier

Buali Sina Petrochemical Co.

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	PONA Paraffins Olefins Naphthenes Aromatics 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

Shipping : Bulk Carrier

Raffinate

#	PROPERTY	Units	Test Method	Value
1	Total Non – Aromatics	WT%	ASTM D -	90.0 min
2	Aromatics	WT%		10.0 max
3	Density	gr / cm3	ASTM D – 4052	0.63 – 0.72
4	Total Sulphur	ppm	ASTM D – 4045	1.0 Max
5	Water content	ppm	ASTM D – 1744	0 – 100

Shipping : Bulk Carrier

Fanavaran Petrochemical Co.

Methanol

#	PROPERTY	Units	Test Method	Value
1	Purity	WT%	ASTM E – 346	99.85 min
2	Water	WT%	ASTM E – 203	0.1 max
3	Ethanol	WT%	ASTM E –346	0.005 max
4	SP.GR@20/20		ASTM D – 4052	0.791 – 0.793
5	Acetone	WT%	ASTM E – 346	0.005 max
6	*Permanganate Time@15 C.minutes		ASTM D – 1363	Minimum 60
7	Distillation Range		ASTM D – 1078	C or Max 1.0 include 64.6 C = 0.1
8	Acidity (as acetic acid)	WT%	ASTM D – 1613	0.003 max
9	Total Iron	ppm	ASTM D – 1068	0.1 max
10	Chloride	ppm	ASTM D –512	0.2 max
11	SULPHUR	ppm	ASTM D – 5623	0.5 max
12	Carbonisable PT – CO		ASTM E – 346	30 max APHA
13	Hydrocarbons (Water Miscibility)		ASTM D – 1722	Passes test
14	Odor		ASTM D – 1296	Characteristic with nonresidual odour
15	Color PT-CO APHA		ASTM D – 1209	5 max APHA
16	Non Volatile Matter		ASTM D – 1353	10 max mg/kg
17	Alkalinity as HN3	WT%	ASTM D – 1614	0.003 max

Shipping : Bulk Carrier

Acetic Acid

#	PROPERTY	Units	Test Method	Value
1	Acetic Acid	wt %	* M602.50	99.85 min
2	Water	wt %		0.15 max
3	Formic Acid	wt %		0.05 max
4	Acetaldehyde	wt %		0.05 max
5	Iron (Fe)	Ppm (wt)		1.0 max
6	Heavy Metals (Pb)	Ppm (wt)		1.0 max
7	Propionic Acid	Ppm (wt)	* M602.512	100 max
8	Iodides (T+Mel)	Ppm (wt)		0.04 max
9	Permanganate Time	h	* M602.501	2 min
10	Color	Platinum-Cobalt scale	ASTM D-1209	10 max
11	Sulphate	Ppm (wt)	**	1 max
12	Chloride	Ppm (wt)	**	1 max
13	Nonvolatile Residue	Wt %	ASTM D-1353**	0.003 max
14	Density at 20 °C	Kg/l	ASTM D-1298**	1.408 – 1.501
15	Distillation range at 1.013 bar	°C	ASTM D-1078**	117.5 – 119
16	Freezing Point	°C	**	16.35 min
17	Flash Point	°C		40 - 55

Shipping : Bulk Carrier

Shahid Tondgoonian Petrochemical Co.

Purified Terephthalic Acid

#	PROPERTY	Units	Test Method	Value
1	Acidity	mgKOH/gm	MA -863	675+/-2
2	Moisture	WT%	MA -1015	0.2 Max
3	APHA color	APHA	MA -998	10Max
4	4-Carboxybenzaldehyd	ppm	MA -1262	25 Max
5	P- Toluic acid	ppm	MA -667	150 Max
6	ΔY	NA	----	10Max
7	b- Value	NA	----	2.0 Max
8	Ashes	ppm	MA -969	15 Max
9	Total metal(Co,Mn.Fe,Ni,Ti,Cr)	ppm	MA -1302/1	8 Max

Shipping : Bulk Carrier

Bistoon Petrochemical Co.

LAB

#	PROPERTY	Units	Test Method	Value
1	T.N.P	WT%	UOP-698	0.5 max
2	LAB9	WT%	UOP-698	< 1
3	LAB10	WT%	UOP-698	< 10
4	LAB11	WT%	UOP-698	30-40
5	LAB12	WT%	UOP-698	30-40
6	LAB13	WT%	UOP-698	11-20
7	LAB14	WT%	UOP-698	< 1
8	TOTAL LAB	WT%	UOP-698	92 min
9	Non LAB	WT%	UOP-698	< 7
10	LAB14+	WT%	UOP-698	< 0.3
11	HAB	WT%	UOP-698	----
12	2-PHENYL	WT%	UOP-698	20 max
13	Br.Index		ASTM D-1492	15 max
14	WATER	ppm	ASTM D-6304	200 max
15	A.M.W			238 – 244
16	Refractive– index(20°C)		ASTM D –1218	1-2
17	DENSITY (60°F)	gr / cm3	ASTM D –4052	0.858 – 0.870
18	TETRALINE	WT%		1 max
19	Dr TEST		ASTM D –484	Negative
20	SULFONABILITY	%		98 min
21	COLOR	SYB	ASTM D –156	30 min
22	Viscosity (40°C)	Cp	ASTM D –88	< 20
23	APPERANCE			Clear & bright

Shipping : Bulk Carrier

HAB

#	PROPERTY	Units	Test Method	Value
1	HAB	WT%	UOP – 696	65-75

Shipping : Bulk Carrier

Normal Paraffin

#	PROPERTY	Units	Test Method	Value
	ISO-C8	wt %	IFP 9915	0
	C9	wt %	IFP 9915	0
	C10	wt %	IFP 9915	7.33
	C11	wt %	IFP 9915	39
	C12	wt %	IFP 9915	30.54
	C13	wt %	IFP 9915	22.12
	C14	wt %	IFP 9915	0.01
	C15	wt %	IFP 9915	0
	NON	wt %	IFP 9915	1
3	T.N.P	wt %	IFP 9915	99
4	TN	ppm	ASTM D-4629	<1
5	TS	ppm	ASTM D-5453	<0.1
6	Water	ppm	ASTM D-6304	25
7	CL	ppm	ASTM D-5194	NIL
8	Aromatic	wt %	UOP 495-00	0.5 max
9	Br.Index		ASTM D-1492	5
10	Color	SYB	ASTM D-156	30
11	Peroxide		ASTM E299	NIL
12	A.M.W	Gr / Gr MOLE		165.91
13	Density (60°F)	G / CM ³	ASTM D-4052	0.7525

Amir Kabir Petrochemical Co.

Pyrolysis Gasoline

#	PROPERTY	Units	Test Method	Value
1	C4 -	WT%	ASTM D2163	0.38
2	NC5	WT%	ASTM D2163	0.26
3	NC5=	WT%	ASTM D2163	0.73
4	NC5= =	WT%	ASTM D2163	3.45
5	IC5	WT%	ASTM D2163	0.35
6	IC5=	WT%	ASTM D2163	1.25
7	IC5= =	WT%	ASTM D2163	5.60
8	CYC C5	WT%	ASTM D2163	0.28
9	CYC C5=	WT%	ASTM D2163	1.16
10	CYC C5 = =	WT%	ASTM D2163	5.23
11	C6 P	WT%	ASTM D2163	0.64
12	C6 OL	WT%	ASTM D2163	0.13
13	C6 DIOL	WT%	ASTM D2163	1.57
14	CYC C6	WT%	ASTM D2163	0.29
15	CYC C6-	WT%	ASTM D2163	0.23
16	CYC C6= =	WT%	ASTM D2163	0.89
17	BENZENE	WT%	ASTM D2163	43.33
18	C7 P	WT%	ASTM D2163	0.04
19	C7 OL	WT%	ASTM D2163	0.03
20	CYC C7	WT%	ASTM D2163	0.01

Pyrolysis Gasoline

#	PROPERTY	Units	Test Method	Value	
21	CYC C7= =	WT%	ASTM D2163	0.27	
22	TOLUENE	WT%	ASTM D2163	11.54	
23	XYLENE	WT%	ASTM D2163	5.16	
24	C8 P	WT%	ASTM D2163	0.02	
25	C8 NAPH	WT%	ASTM D2163	0.00	
26	ETHYL-BENZENE	WT%	ASTM D2163	0.90	
27	STYRENE	WT%	ASTM D2163	4.42	
28	C9 P	WT%	ASTM D2163	0.00	
29	C9 OL	WT%	ASTM D2163	0.00	
30	C9 NAPH	WT%	ASTM D2163	0.00	
31	C9 ARO	WT%	ASTM D2163	3.29	
32	C10 P	WT%	ASTM D2163	0.00	
33	INDENE	WT%	ASTM D2163	1.24	
34	INDANE	WT%	ASTM D2163	0.10	
35	C10 ÷	WT%	ASTM D2163	0.79	
36	DI-CYC-C5 = =	WT%	ASTM D2163	5.83	
37	Total Sulphur	WT ppm	ASTM D5453	90-130	
38	UNKNOWN	WT%	ASTM D2163		
	P,IP	DIOL	O	N	A
	1.69	17.28	9.7	0.59	70.74

Shipping : Bulk carrier

Shipping : Bulk carrier

Amir Kabir Petrochemical Co.

C.F.O

#	PROPERTY	Units	Test Method	Value
1	Sulphur	WT %	ASTM D5453	< 3.7
2	Flash point	C °	ASTM D93	≤ 100
3	Pour point	C °	ASTM D97	< 25
4	CViscosity at 100	Cst	ASTM D88	< 20

Shipping : Bulk carrier

1-3 BD

#	PROPERTY	Units	Test Method	Value
1	Purity	wt %	ASTM D-2593	99.5 min
2	Total Acetylene (VAC , EAC , MAC)	ppm wt	ASTM D-2593	25 max
3	Vinyl Acetylene	ppm wt	ASTM D-2593	14 max
4	Carbonyls	ppm wt	ASTM D-4423	20 max
5	Butadiene Dimer	wt %	ASTMD-2426	0.10 max
6	Peroxides	ppm wt	ASTM D-5799	5 max
7	Non Volatile Residue	wt %	ASTM D-1025	0.1 max
8	Inhibitor TBC	ppm wt	ASTM D-1157	40-150
9	Total Sulphur	ppm wt	ASTM D-5453*	5 max
10	Oxygen	% MOL	TELEDYNE ANALYTICAL	2 max
11	Water	ppm wt	DEW POINT METER	300 max
Remarks :				
* cover ASTM D-3246				
** cover ASTM D-2505				
*** cover ASTM D-1744				

Shipping : Bulk carrier

Marun Petrochemical Co.

MEG

#	PROPERTY	Units	Test Method	Value
1	Appearance	--	Visual	Colorless Trans Parent
2	Purity	% (m/m)	100- impuritie s	99.8 min
3	Color (Pt-Co)		ASTM E202	5 max
4	DEG	% (m/m)	ASTM E611	0.08 max
5	Water	% (m/m)	ASTM E202	0.08 max
6	Specific ravity 20 / 20 %		ASTM D-4052	1.11S1- 1.1156
7	Boiling range at 0.1013 MPa 5 % Vol 95 % Vol		ASTM E202	196 min 199 max
8	Aldehydes (acetaldehyde)	Mg/kg	SMS 1996	8 max
9	Acidity (as acetic acid)	Mg/kg	ASTM D-1613	10 max
10	Iron (as Fe)	Mg/kg	ASTM E202	0.1 max
11	Inorganic Chlorides (asCl)	Mg/kg	SMS 2296	0.05 max
12	Ash	Mg/kg	ASTM D-482	50 max
13	UV Transmittance % -220 nm -275 nm -350 nm		SMS 1997	80 min 95 min 99 min

DEG

#	PROPERTY	Units	Test Method	Value
1	Appearance	% (m/m)	Visual	Clear colorless
2	Purity	% (m/m)	100- impurities	99.8 min
3	MEG	% (m/m)	ASTM E202	0.05 max
4	TEG	% (m/m)	ASTM E202	0.05 max
5	Water		ASTM E202	0.05 max
6	Specific gravity 20 / 20%		ASTM D-4052	1.1175- 1.1195
7	Boiling range at 0.1013 MPa 5 % Vol 95 % Vol	°C °C	ASTM E202	242 250
8	Color (Pt-Co)		ASTM E202	10 max
9	Acidity (as acetic acid)	Mg/kg	ASTM D-1613	50 max
10	Ash	Mg/kg	ASTM D-482	50 max

Shipping : Barrel Bulk Carrier

Marun Petrochemical Co.

TEG

#	PROPERTY	Units	Test Method	Value
1	Appearance		Visual	Clear colorless
2	Purity	% (m/m)	100-impurities	99.5 max
3	DEG	% (m/m)	ASTM E-202	0.5 max
4	PEG	% (m/m)	ASTM E-202	0.1 max
5	Water	% (m/m)	ASTM E-202	0.05 max
6	Specific gravity 20 / 20 %		ASTM D-4052	1.124-1.126
7	Boiling range at 0.1013 MPa 5 % Vol 95 % Vol	°C °C	ASTM E-202	280 min 295 min
8	Color (Pt-Co)		ASTM E-202	25 min
9	Ash	Mg/kg	ASTM D-482	100 min

Shipping : Barrel Bulk Carrier

Jam Petrochemical Co.

C.F.O

#	PROPERTY	Units	Test Method	Value
1	BMI	-	Visual	135.06
2	Viscosity (100 °c)	Cst	100-impurities	1.5
3	Viscosity (40 °c)	Cst	ASTM E-202	4.6
4	Flash Point	°c	ASTM E-202	123
5	Water Content	Ppm	ASTM E-202	730
6	Density	Gr/cm ³	ASTM D-4052	0.994
7	Total S	ppm	ASTM E-202	295
8	Na Content	ppm	ASTM E-202	107
9	Ash Content	-	ASTM D-482	0.057%

Shipping : Barrel Bulk Carrier

Borzuyeh Petrochemical Co.

Benzene

#	Property	Units	Test Method	Value
1	Purity	Wt%	ASTM D-4492	99.9 min
2	Toluene	Wt%	ASTM D-4492	0.015 max
3	Non Aromatic	Wt%	ASTM D-4492	0.07 max
4	Density @ (15.6 °c)	gr/cm ³	ASTM D-1298	0.882 – 0.888
5	Appearance	--	VISUAL	Clear Free of haze / sediment
6	Color (Pt-Co) scale	--	ASTM D-1208	16 max
7	Acid Wash Color	--	ASTM D-848	1.0 max
8	Acidity	mg NaOH/100mg	ASTM D-847	Pass 1A
9	Copper Corrosion	--	ASTM D-849	No .1a
10	Total Sulphur	Wt.ppm	ASTM D-5453	1.0 max
11	H ₂ S & So ₂ Content	--	ASTM D-853	Free of (H ₂ S/SO ₂)
12	Distillation Range	°C	ASTM D-850	1.0max (Include80.1)
13	Solidification Point	°C	ASTM D-852	5.45 min
14	Water Content	Wt.ppm	ASTM D-1744	200 max
15	Thiophene	Wt.ppm	IFP 9421	1.0 max
16	Total Chloride	Wt ppm	ASTM D-4929	2.0 max
17	Br.Index	Mg/100gr	ASTM D-1492	10 max
18	Total Nitrogen	Wt.ppm	ASTM D-4629	1.0 max
19	Methyl Cyclohexane	Wt.ppm	ASTM D-4492	400 max

Para - Xylene

#	Property	Units	Test Method	Value
1	Purity	Wt %	ASTM D-3798	99.7 min
2	Non Aromatics	Wt %	ASTM D-3798	0.2 max
3	Distillation Range	°C	ASTM D-850	2max Including 138.3
4	Total Sulphur	Wt.ppm	ASTM D-6463	1 max
5	Total Chloride	Wt.ppm	ASTM D-4929	1 max
6	SO ₂ /H ₂ S	--	ASTM D-853	Free
7	Appearance	--	VISUAL	Clear, Colorless
8	Toluene+Benzene	Wt.ppm	ASTM D-3798	300 max
9	Ethyl Benzene	Wt %	ASTM D-3798	0.3 max
10	Color , Pt – Co . Scale	--	ASTM D-1209	20 max
11	Meta – Xylene	Wt %	ASTM D-3798	0.25 max
12	Ortho – Xylene	Wt %	ASTM D-3798	0.1 max
13	Acid Wash Color	--	ASTM D-848	1 max
14	Sp.Gr. @ (15.6 / 15.6°C)	--	ASTM E-4052	0.8650-0.8661

Borzuyeh Petrochemical Co.

O - Xylene

#	PROPERTY	Units	Test Method	Value
1	Purity	WT%	ASTM D- 2306	98.5 Min
2	Non-Aromatics	WT%	ASTM D- 2306	0.3 Max
3	Bzn+C9 & Heavier Aromatics	WT%	ASTM D- 2306	1.0 Max
4	Total CS Aromatics +Toluene + Ethyl Benzene	WT%	ASTM D- 2306	98.5 Min
5	Distillation Range at 760 mmhg	°C	ASTM D - 850	2.0 Max
6	Total Sulfur	ppm	ASTM D-5453	1.0 Max
7	Color (Pt-Co) scale	----	ASTM D-1209	20.0 Max
8	Acidity	----	ASTM D-847	None detected
9	Hydrocarbon Residue after Evaporation	Ppm wt	ASTM D -1353	20 Max
10	SO2/H2S Content	----	ASTM D- 853	None detected

Light End

#	PROPERTY	Units	Test Method	Value
1	PONA P O N A Others	Wt %	IFP9301	86 – 97 0 – 3 0.47 – 5.5 0 – 5 0 – 0.02
2	Total Sulphur	ppm	ASTM D – 5453	5000MAX
3	Water content	ppm	ASTM D - 1744	2000MAX

Borzuyeh Petrochemical Co.

Heavy End

#	PROPERTY	Units	Test Method	Value
1	Distillation Range IBP 10% 30% 50% 90% FBP Total Recovery	°C %	ASTM D – 86	165-176 180-190 190-205 215-230 295-330 350-370 90
2	Total Sulphur	ppm	ASTM D – 5453	2000 Max
3	Water Content	ppm	ASTM D – 6304	250 Max
4	Color	----	ASTM D – 1500	2 Max
5	Flash point	°C	ASTM D – 93	56 Min
6	Specific – Gravity	----	ASTM D - 1298	0.77-0.83

Heavy Aromatic

#	PROPERTY	Units	Test Method	Value
1	Total C8A	Wt%	CPX21501	1 max
2	C9 Aromatic	Wt%	CPX21501	6 max
3	C10+Aromatics	Wt%	CPX21501	93 min
4	H2S/S02 Content	ppm	ASTM D-853	Free

Borzuyeh Petrochemical Co.

Raffinate

#	PROPERTY	Units	Test Method	Value
1	RVP	Psia	ASTM D-323	8 max
2	IBP	°C	ASTM D-86	45-60
3	10%	°C	ASTM D-86	55-65
4	50%	°C	ASTM D-86	70-80
5	90%	°C	ASTM D-86	95-105
6	FBP	°C	ASTM D-86	115-125
7	Total Recovery	%	ASTM D-86	97 min
8	Paraffins	Wt%	IFP9302	92 max
9	Olefins	Wt%	IFP9302	2.5 max
10	Naphthenic	Wt%	IFP9302	4.5-10
11	Aromatics	Wt%	IFP9302	2-5
12	Density@15.6°C	Gr/cm3	ASTM D-4052	0.65-0.70
13	Total Sulfur	ppm	ASTM D-5453	5 max
14	Color	-	ASTM D-1209	15 max

Mixed - Xylene

#	Property	Units	Test Method	Value
1	Distillation Range IBP FBP Range	°C	ASTM D-850	137 min 143 min 5 max
2	Density	Gr/cm3	ASTM D-1298	To be reported
3	Acid Wash Color	-	ASTM D-848	2 max
4	P-Xylene	Wt%	ASTM D-2306	16 min
5	O-Xylene	Wt%	ASTM D-2306	16 min
6	Ethyl Benzene	Wt%	ASTM D-2306	18.5 max
7	M-Xylene	Wt%	ASTM D-2306	49 max
8	Benzene	Wt%	ASTM D-2306	0.01 max
9	Toluene	Wt%	ASTM D-2306	0.5 max
10	C9 Aromatic	Wt%	ASTM D-2306	1.5 max
11	Non Aromatic	Wt%	ASTM D-2306	2 max
12	Bromine Index	Mgr/100gr	ASTM D-1482	20 max

Borzuyeh Petrochemical Co.

Mixed Naphtha

#	PROPERTY	Units	Test Method	Value
1	Distillation Range IBP 10 % 20 % 50 % 90 % FBP	°C	ASTM D-86	2-30 30-65 65-90 90-180 270-320 340-360
2	Total Sulfur	Ppm	ASTM D-6453	2700 MAX
3	Water Content	Ppm	ASTM D-1744	2000 MAX
4	RVP	Psia	ASTM D-323	13 MAX
5	Specific Gravity	-	ASTM D-1298	0.7-0.75
6	PONA P O N A	Wt %	IFP 9302	30-60 0-5 1-15 1-20

LPG

#	Property	Units	Test Method	Value
1	Water Content	Ppm	ASTM D-1744	2000 MAX
2	Specific Gravity	--	ASTM D-1657	0.544
3	PONA P O N A	Wt %	ISO 7941	100* 0 0 0

***Paraffin's Break Down Is As Follow:**

C2 : 2-5 %wt

C3 : 26-30 %wt

C4 : 65-70 %wt

Heavy Gasoline

#	Property	Units	Test Method	Value
1	Specific Gravity	---	ASTM D-1298	0.75-0.8
2	PONA P O N A	WT %	IFP 9420	12* 0 0 88**

***Paraffin's Break Down Is As Follow:**

C11+ : 12 %wt

****Aromatics Break Down Is As Follow:**

C9 A : 10-13 %wt

C10 A : 75-78 %wt

Karun Petrochemical Co.

TDI (Toluene Di Isocyanate)

#	PROPERTY	Units	Test Method	Value	
1	Appearance	--	VISUAL	Format 30 °c Clear Liquid	
2	Color	--	VISUAL	Water white to pale yellow	
3	APHA Color Raging		H900.1700S	25 max	
4	Freezing point	°C	H900.3000S	14.0+1.0	
5	Purity	Wt %	H900.6500S	99.5 min	
6	Total Acidity	Wt %	H900.0500S	0.004 max	
7	Hydrolysable Chlorine	Wt %	H900.3500S	0.006 max	
8	Total Chlorine	Wt %	H900.8000S	0.05 max	
9	Isomer Content	2,4 TDI	Wt %	-	80.0+1.0
		2,6 TDI	Wt %	-	20.0+1.0

Hydrochloric Acid (HCL)

#	Property	Units	Test Method	Value
1	Purity	Wt %	--	32±2% wt
2	T-Fe	ppm	--	<1
3	Organic	Wt.ppm	--	3 max