



PersianPetro



Olefin Products

Product Capacity of Olefin plant

Products	Production Capacity 1000 T/Y	Saleable Products 1000 T/Y	Applications
Ethylene	1345	220	Polyethylene, PVC
Propylene	305	20	Polypropylene
C ₄ cut	265		Feed for downstream plant
Pyrolysis gasoline	216	220	To Aromatic Plant
Fuel Oil	38	24	Feed for downstream plant
Hydrogen	1.5		For hydrogenation
Methane	3.9		Fuel
Total	2174.4		

➤ *Olefin made via Techinp Tecnology*



Ethylene

Is a simple olefin, the chemical formula is C_2H_4 , has a prominent role in the petrochemical industry. It is colorless flammable gas.

COMPONENT	SPECIFICATION	
Ethylene	99.9	vol % min
Methane + Ethane	1000	ppm vol max
Ethane	500	ppm vol max
Acetylene	5	ppm vol max
C3 & Higher	10	ppm vol max
Carbon Monoxide	2	ppm vol max
Carbon Dioxide	5	ppm vol max
Water	10	ppm vol max
Oxygen	5	ppm vol max
Hydrogen	10	ppm vol max
Nitrogen	100	ppm vol max
Oxygenated Compounds	10	ppm vol max
Basic Nitrogen Compound Caloulated as NH3	1	ppm vol max
Total sulphur	2	mg/kg max
Methanol	0.5	ppm vol max
Total Combined Nitrogen	0.2	ppm vol max
COS	0.02	ppm vol max
Mercaptans	0.3	ppm vol max

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Propylene

Also called propane, a colorless, flammable, gaseous hydrocarbon, C_3H_6 , obtained from low molecular weight constituents of petroleum.

COMPONENT	Unit	SPECIFICATION
Propylene	% vol	min 99.8
Propane	% vol	max 0.2 %
Hydrogen	ppm vol	max 5
Ethylene	ppm vol	max 1
Butenes	ppm vol	max 1
Pentenes	ppm vol	max 1
Non-condensables	ppm vol	max 20
Ethane	ppm vol	max 20
Butane-pentanes	ppm vol	max 10
C6-C12 Hydrocarbons	ppm vol	max 1
Acetylene	ppm vol	max 1
Methyl-acetylene	ppm vol	max 1
Propadiene	ppm vol	max 1
Butadiene	ppm vol	max 10
Oxygen	ppm vol	max 2
Carbon Monoxide	ppm vol	max 0.03
Carbon Dioxide	ppm vol	max 2
COS	ppm vol	max 0.02
Total sulphur	ppm wt	max 1
Methanol	ppm vol	max 5
Isopropanol	ppm vol	max 5
Water	ppm wt	max 2
Arsine	ppm vol	max 0.01
Phosphine	ppm vol	max 0.01
Ammonia	ppm wt	max 1
Cyclopentadiene	ppm vol	max 0.05


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Pyrolysis gasoline

Pyrolysis gasoline, is a naphtha-range product with a high aromatics content used either for gasoline blending or as a feed stock for aromatics plants.

SPECIFICATION	Unit	Spec.	Analysis Method
Aromatics	wt%	max 50	
Benzene	wt%	max 30	
Toluene	wt%	.....
Density at 15.6C	gr/cm3	0.8-0.84	ASTM D4052
FBP	.c	max 225	ASTM D86
IBP	.c	min 33	ASTM D86
R.V.P	kpa	40-65	ASTM D6378
Paraffines	wt%	max 21	
Isoparaffines	wt%	max 21	
Naphtenes	wt%	max 2	
Olefins	wt%	max 20	
Total Sulfur	mg/kg	350	ASTM D5453
Gum Content	mg/100ml	max 50	
Lead Content	ppb	max 30	
Water Content		.....	ASTM E203
Unknown	wt%	.....
Residue	wt%	.....	ASTM D86
%5Recovery	.c	min 45	ASTM D86
10%Recovery	.c	.....	ASTM D86
20%Recovery	.c	.....	ASTM D86
30%Recovery	.c	.....	ASTM D86
40%Recovery	.c	.....	ASTM D86
50%Recovery	.c	.....	ASTM D86
60%Recovery	.c	.....	ASTM D86
70%Recovery	.c	.....	ASTM D86
80%Recovery	.c	ASTM D86
90%Recovery	.c	min 175	ASTM D86
Recovery	.c	ASTM D86
Color Sybolt		-16	

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C4 Cut

C4 Cut produced in Ethylene production plants by steam cracking of naphtha. It is a mixture of C₄ hydrocarbons mainly 1,3-butadiene, Iso Butene, Butane.

COMPONENT	SPECIFICATION
1,3-Butadiene	45.1 %wt
Methyl-Acetylene	0.12 %wt
Propadiene	0.02 %wt
Propylene	0.1 %wt
Propane	0.03 %wt
Vinyl-Acetylene	1.13 %wt
i-Butene	19.2 %wt
1 Butene	9.16 %wt
Cis2-Butene	1.86 %wt
Trans2-Butene	2.58 %wt
i-Butane	3.94 %wt
n-Butane	16.56 %wt
C5-diolefins	0.06 %wt
Pentenes	0.1 %wt
Pentanes	0.02 %wt
2-methyl-butene	0.03 %wt
Total	100.01 %wt

Fuel Oil

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Fuel oil product is a heavy hydrocarbon cut rich (poly) aromatic components.

TEST/COMPOSITION	VALUE
Flash point	>60°C
Viscosity	approx. >40 cP at 80°C