AROMATICS PRODUCT CATALOGUE

THE TONE Holding Group

THE TONE Holding Group

AROMATICS CATALOGUE

Export Department of

Tone Holding Group

NOVIN RAVANSAZAN KHALIJ FARS.CO

Dec. 2021

About us:

Tone Holding, Export Department, has been serving as the importer and supplier of Aromatics raw materials in Turkey and Europe since 2019.

The export department of Tone Holding Group is at your service with the exclusive representation of the largest aromatic products factory in Asia.

+44 795 867 9424 | +90 536 546 1256

connectto@drfarham.com

www.TONEHOLDING.com | www.DRFARHAM.com

THE TNE Holding Group

We are a member of the British Chamber of Commerce

Our offices in Turkey, England and Estonia are always ready to meet your needs and supply the raw materials you need.

British Chambers of Commerce Under No : CMC/0260

NRK-SOL 100

SOLVESSO 100

PROPERTY	UNIT	METHOD	MIN	MAX	TYPICAL VALUE
Specific Gravity@15.86/15.56˚c	---	ASTM D *4052*	0.860	0.880	0.872
Density @15 ˚c	Kg/M3	ASTM D4052	860	880	870
Appearance	--	visual	---	----	Clear &Transparent

		Distillation			
	UNIT	METHOD	MIN	MAX	TYPICAL VALUE
IBP	˚C	ASTM D86	155	165	162
10 %v	˚C	ASTM D86	163	167	166
20 %v	˚C	ASTM D86	163	167	166
30 %v	˚C	ASTM D86	164	168	166
40 %v	˚C	ASTM D86	164	168	167
50 %v	˚C	ASTM D86	164	168	167
60 %v	˚C	ASTM D86	165	169	167
70 %v	˚C	ASTM D86	165	169	168
80 %v	˚C	ASTM D86	166	170	169
90 %v	˚C	ASTM D86	169	174	171
95 %v	˚C	ASTM D86	169	175	173
Dry Point	˚C	ASTM D86	174	185	178

Aromatics Content	Wt%	UOP 744-86	96	99	98.4
Benzene	Wt%	UOP 744-86	0.005	0.015	0.01
C8 Aromatic	Wt%	UOP 744-86	0.3	1	0.58
C9 Aromatic	Wt%	UOP 744-86	83	90	87.82
C10 Aromatic	Wt%	UOP 744-86	8	16	10.5
Flash Point	˚C		38	50	49
Water Content	Wt.ppm		50	150	75

Application:

Its main use is as a solvent for alkyd, maleic, phenolic, ureic resins, etc. It is also used in the manufacture of inks (screen printing, lithography), in agriculture as a vehicle for insecticides, herbicides and pesticides, in the textile industry, in the oil services industry and as a solvent for degreasing metals.

NRK-SOL 150

SOLVESSO 150

THE TNE Holding Group

PROPERTY	UNIT	METHOD	MIN	MAX	TYPICAL VALUE
Specific Gravity@15.86/15.56˚c	---	ASTM D 4052	0.880	0.900	0.886
Density @15 ˚c	Kg/M3	ASTM D4052	880	900	888
Appearance	--	visual	---	----	Clear &Transparent

Distillation					
	UNIT	METHOD	MIN	MAX	TYPICAL VALUE
IBP	˚C	ASTM D86	174	185	175
10 %v	˚C	ASTM D86	176	186	178
20 %v	˚C	ASTM D86	179	186	180
30 %v	˚C	ASTM D86	180	186	182
40 %v	˚C	ASTM D86	182	186	184
50 %v	˚C	ASTM D86	184	188	186
60 %v	˚C	ASTM D86	185	189	187
70 %v	˚C	ASTM D86	188	191	190
80 %v	˚C	ASTM D86	192	196	195
90 %v	˚C	ASTM D86	196	203	202
95 %v	˚C	ASTM D86	215	222	220
Dry Point	˚C	ASTM D86	220	226	225

Aromatics Content	Wt%	UOP 744-86	98	99.5	99.3
Benzene	Wt%	UOP 744-86	0.005	0.010	0.001
C8 Aromatic	Wt%	UOP 744-86	0.01	0.10	0.03
C9 Aromatic	Wt%	UOP 744-86	10	30	28
C10 Aromatic	Wt%	UOP 744-86	65	85	71
Flash Point	˚C		60		62
Water Content	Wt.ppm		50	100	20

Application:

Its main use is as a solvent for alkyd, maleic, phenolic, ureic resins, etc. It is also used in the manufacture of inks (screen printing, lithography), in agriculture as a vehicle for insecticides, herbicides and pesticides, in the textile industry, in the oil services industry and as a solvent for degreasing metals.

TOLUENE

THE TNE Holding Group

ROW	PROPERTY		SPECIFICATION VALUE	TEST METODE
1	PUNTY	wt.%	99.9 min	ASTMD 2360-00
2	NON AROMATICS	wt.%	0.1 max	ASTMD23600-00
3	BENZENE	wt.%	0.03 max	ASTMD23600-00
4	DISTILLATION RANGE At 760 mm Hg	◦c	1.0 max including 110.6	ASTMD 850-00
5	APPEARANCE		Clear liquid free of sedimentation or haze at 18.3 to 25.6 ◦c	VISUAL
6	TOTAL SULFUR	wt.ppm	1.0 max	ASTMD 4045-99
7	COPPER CORROSION		Pass (1a or 1b)	ASTMD 849-97
8	COLOR Pt-Co scale		20 max (expected value: 10)	ASTMD 1209-00
9	ACID WASH COLOR		2 max	ASTMD 848-97
10	ACIDITY		None detected	ASTMD 847-96
11	SPECIFIC GRAVITY At 15.56 ◦c		0.869-0.873	ASTMD 4052-96
12	SO_2 / H_2S		None detected	ASTMD 853-97
13	VAPOR PRESSIRE	psi	1.1	ASTMD 323-99A

BENZENE

Manufacturer: EPC (under UOP,s License)

CAS NO: 71- 43 - 2

Other designation : Cyclohexatriene / C6H6

PROPERT	SPICIFFICATION VALUE	TEST METHOD
PURITY WT. %	99.90 MIN (expected value 99.8)	ASTM D 4499-10
NON AROMATICS WT.%	0.070 MAX	ASTM D 4499-10
TOLUENE WT. %	0.015 MAX	ASTM D 4499-10
DISTILLATION RANGE ◦c at 760 mm Hg	1.0 max including 80.1	ASTM D 850-02
APPEARANCE	Clear liquid free sedimentation or haze at 18.3 to 25.6 ◦c	Visual
TOTAL SULFUR WT. PPM	1.0 MAX	ASTM D 4045-04
COPPER CORROSION	PASS (1 a or 1b)	ASTM D 849-11
COLLOR, Pt-co scale	10 max (expected value : 5)	ASTM D 1209-11
ACID VASH COLOR	Pass with 1	ASTM D 848-09
ACIDITY	None detected	ASTM D 847-08
SPECIFIC GRAVITY at 15.56 ◦c	0.882 - 0.886	ASTM D 4052-11
SO2 / H2S	None detected	ASTM D 853-04
SOLIDIFICATION point ℃	5.45 min	ASTM D 852-08
THIOPHENE WT. PPM	0.6 MAX	ASTM D 523-09
VAPOR PRESSURE (Psi)	3.3	ASTM D 323-08

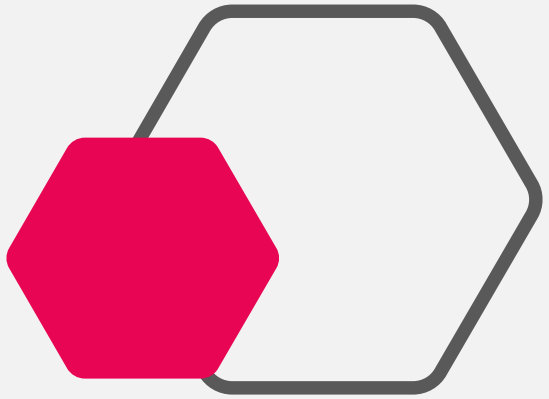
ORTHO XYLENE

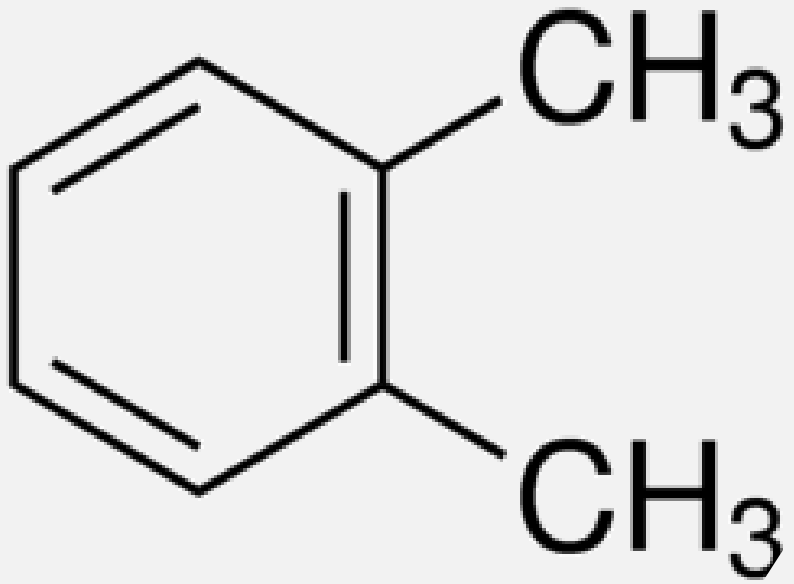
Manufacturer: EPC (under UOP,s License)

CAS NO: 95-47-6

1, 2 Dimethyl Benzene / C8H10

PROPERT	SPICIFFICATION VALUE	TEST METHOD
PURITY WT. %	98.0 MIN (expected value 99)	UOP 744-86
NON AROMATICS WT.%	0.5 MAX	ASTM D 2360-11
BENZENE PLUS C9 and heavier aromatics wt.%	1.0 MAX	UOP 744-86
ORTHO, META & PARA XYLENE PLUS TOLUENE PLUS ETHYLBENZENE wt.%	98.5 MIN	UOP 744-86
DISTILLATION RANGE ℃ at 760 mm Hg	2.0 max including 144.4	ASTM D 850-02
TOTAL SULFUR WT. PPM	1.0 MAX	ASTM D 4045-04
COLLOR, Pt-co scale	20 max (expected value : 10)	ASTM D 1209-11
ACIDITY	None detected	ASTM D 847-08
HYDROCARBON Residue after evaporation wt.% ppm	20 MAX	ASTM D 1353-13
SO2 / H2S	None detected	ASTM D 853-04
VAPOR PRESSURE (Psi)	0.3	ASTM D 323-08
SPECIFIC GRAVITY at 15.56 ℃	0.88 – 0.89	ASTM D 4052-11





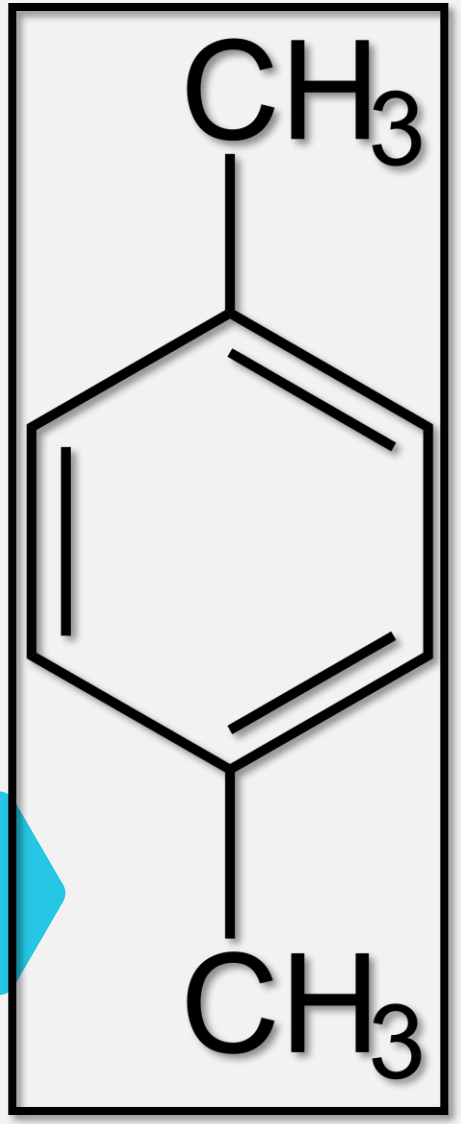
PARA XYLENE

Manufacturer: EPC (under UOP,s License)

CAS NO: 106 – 42 - 3

1, 4 Dimethyl Benzene / C8H10

PROPERT	SPICIFFICATION VALUE	TEST METHOD
PURITY WT. %	99.7 MIN	ASTM D 3798-03
NON AROMATICS WT.%	0.1 MAX	ASTM D 3798-03
m-Xylene wt. %	0.2 MAX	ASTM D 3798-03
o-Xylene wt.%	0.1 Max	ASTM D 3798-03
Ethylbenzene wt.%	0.3 Max	ASTM D 3798-03
Toluene wt%	0.1 MAX	ASTM D 3798-03
Appearance	Clear liquid free of sedimentation or haze at 18.3 to 25.6°c	VISUAL
Color, P-co scale	20 max (expected value. 10)	ASTM D 1209-11
Distillation range c at 760 mm Hg	2.0 MAX including 138.3	ASTM D 850-02
Total Sulfur wt. ppm	1.0 max	ASTM D 4045-04
Specific Gravity at 15.56%c	0.865 – 0.867	ASTM D 4052-11
Vapor Pressure (psi)	0.3	ASTM D 323-08



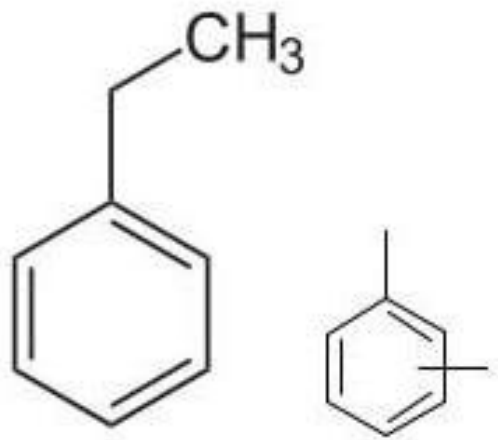
MIXED XYLENE

(ISOMER GRADE)

Manufacturer: EPC (under UOP,s License)

CAS NO: 1330-20-7

PROPERT	SPICIFFICATION VALUE	TEST METHOD
NON AROMATICS WT.%	3.0 MAX	ASTM D 2360-11
Distillation range °c at 760mm Hg	10 MAX	ASTM D 850-02
Initial Boiling point °c at 760mm Hg	Min١٣٥	ASTM D 850-02
Dry point °c at 760 mm Hg	Max ١۴٥	ASTM D 850-02
Appearance	Clear liquid free of sedimentation or haze at 18.3 to 25.6°c	VISUAL
Copper corrosion	pass (1a or 1b)	STM D 849-11
Color Pt-Co scale	20 max. (expected value:10)	ASTM D 1209-11
Acid wash color	max.۶	ASTM D 848-09
Acidity	None detected	ASTM D 847-08
Specific Gravity at 15.56 °c	0.865-0.877	ASTM D 4052-11
S02/H2S	None detected	ASTM D 323-04
Vapor pressure (psi)	٠/١	ASTM D 323-08



PRODUCT & SPECIFICATION

Products	Final (ty)	Purity (%)
Benzene	56000	99.9 min
Toluene	72000	99.9 min
Ortho-Xylene	22000	98 min
Para-Xylene	44000	99.7 min
Mixed Xylene	75000	According to Relevant Standard
Phthalic Anhydride (PA)	40000	99.85 min
Raffinate I	20000	According to Relevant Standard
Raffinate I I	20000	According to Relevant Standard
Raffinate I I I	50000	According to Relevant Standard

THE TNE Holding Group

PHTHALIC ANHYDRIDE

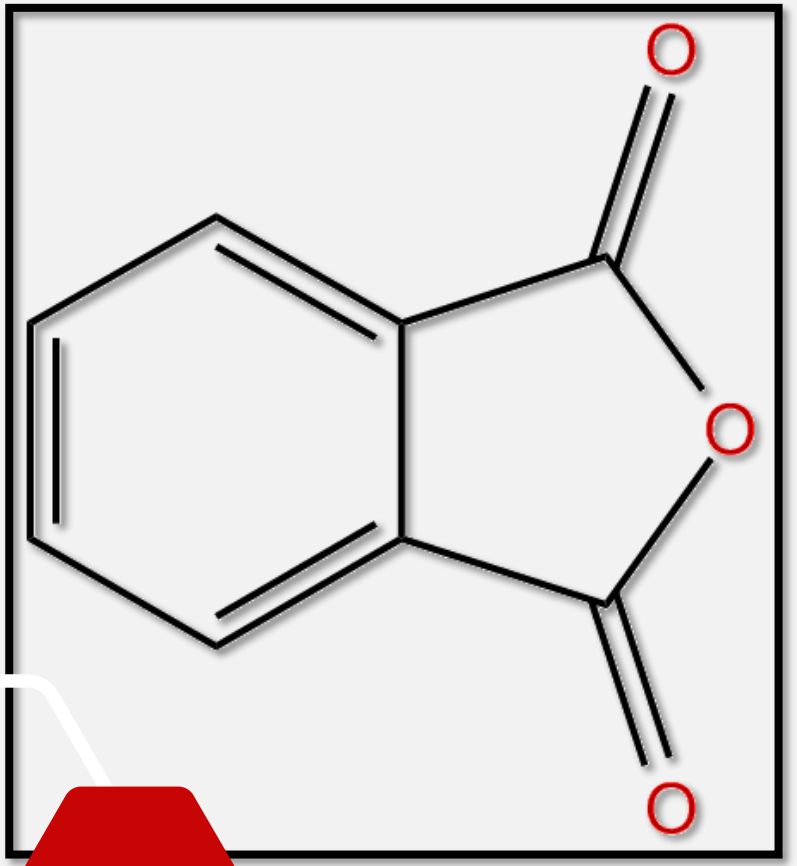
CAS NO: 85-44-9

THE TNE Holding Group

Isobenzofuran- 1, 3 Dione / C8H4O3

Manufacturer: EPC (under UOP,s License)

PROPERT	SPICIFFICATION VALUE	TEST METHOD
PA Content, wt.%	99.85 Min(expected value99.9)	ROLLECHIM PA/AM01/3
Melting point, °c	131.6 max	ASTM E-324-99 (WITHDROWN)
Maleic Anhydride Content wt. %	0.05 max	ROLLECHIM PA/AM01-3
Color Index to Hazen	20 max	ASTM D 3366-03
Color Index to Hazen After 90 min at 250 °°C 30 max	30 max	ASTM D 3366-03
Phthalate Content, wt.%	0.02 max	ASTM D 3366-03



RAFFINATE

Light Naphtha

Manufacturer: EPC (under UOP,s License)

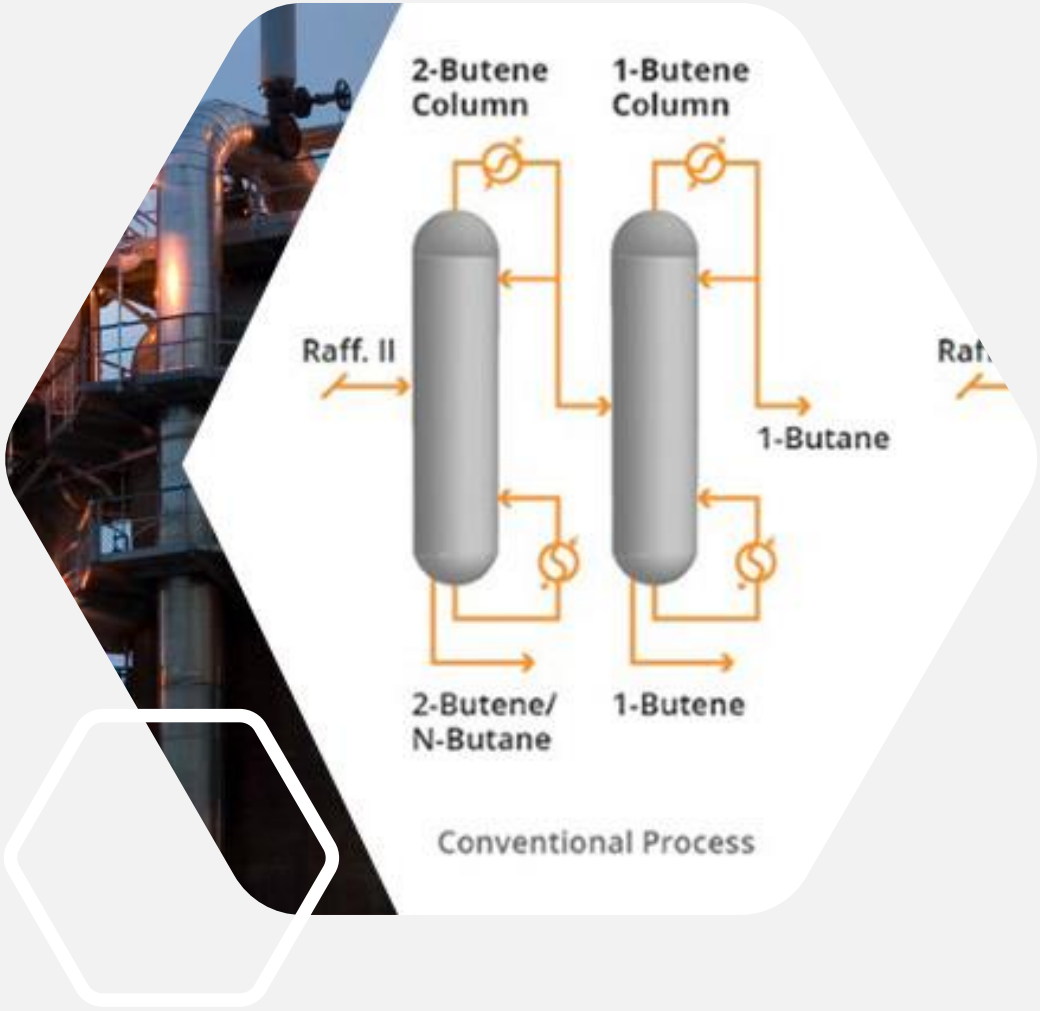
PROPERT	SPICIFFICATION VALUE	TEST METHOD
Normal Paraffin's wt.%	30 max	ASTM-5134-98
ISO paraffin's wt.%	70 max	ASTM-5134-98
Total Naphthenes wt.%	10 max	ASTM-5134-98
Total Olefins wt.%	1.5 max	ASTM-5134-98
Total Aromatics wt.%	1 max	ASTM-5134-98
RON	60 +2	ASTM D 2699
I.B.P ℃	35 min	ASTM D 850-02/ASTM D 86-05
F.B.P ℃	142 max	ASTM D 850-02/ASTM D 86-05
Specific Gravity at 15.56 ºc	0.67-0.69	ASTM D 4052-11
Vapor pressure (ps)	<8.3	ASTM D 323-08
Total sulfur wt ppm	2 max	ASTM D 4045-04

RAFFINATE II

Manufacturer: EPC (under UOP,s License)

C9 AROMATICS

PROPERT	SPICIFFICATION VALUE	TEST METHOD
Non Aromatics wt.%	3 max	UOP 744-86
Benzene wt.%	0.1 max	UOP 744-86
Toluene wt.%	0.1 max	UOP 744-86
EB+PX+MX+OX	4 max	UOP 744-86
C9 Aromatics wt.%	75 min	UOP 744-86
C10+ Aromatics wt.%	25 max	UOP 744-86
Specific Gravity at 15.56 %C	0.88-0.89	ASTM D 4052-11
I.B.P ◦c	160	ASTM D 850-02/ASTM D 86-05
F.B.P ◦c	220 max	ASTM D 850-02/ASTM D 86-05
RON	>105	ASTM D 2699-04
Corrosion	1a	ASTM D 130-04
Gum mg /100ml	wash: 4.2-unwash: 10.4	ASTM D 381
Induction period, min	> 700	ASTM D 525
Total sulfur wt.ppm	1 mox	ASTM D 4045-99
Vapor pressure (psi)	0.1	ASTM D 323-99A
Color, pt-co scale	-16	ASTM D 1209-11
Flosh point c	38	ASTM D 92-05A

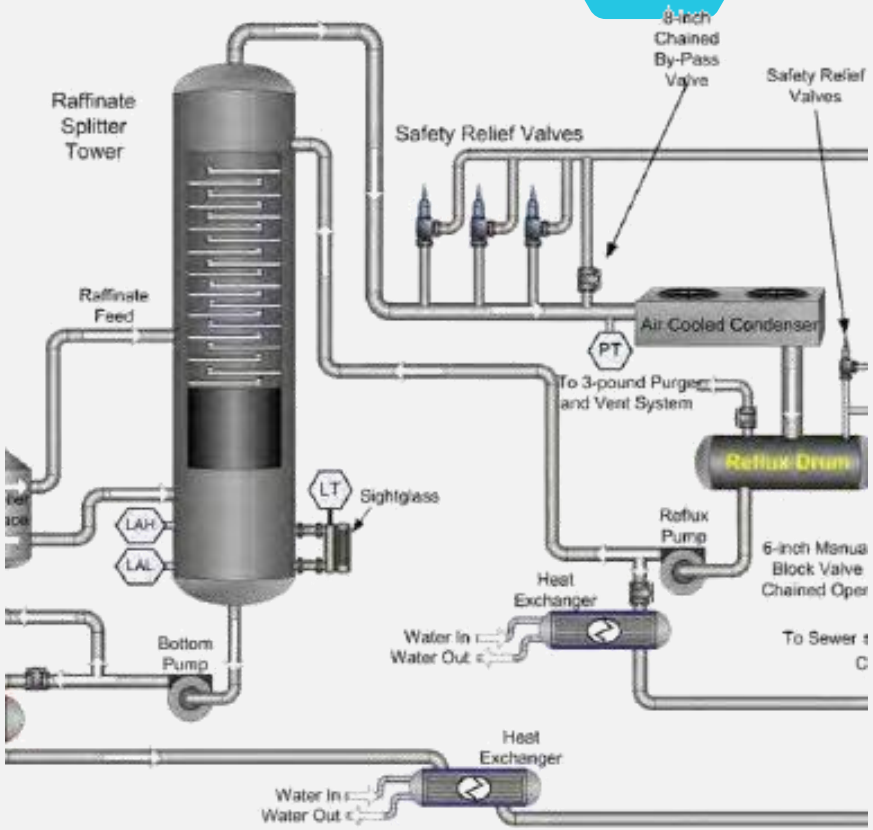


RAFFINATE III

Manufacturer: EPC (under UOP,s License)

A – 80

PROPERT	SPICIFFICATION VALUE	TEST METHOD
Normal Paraffin's wt%	20 max	ASTM D 5134-98
Iso Paraffin's wt%	50 max	ASTM D 5134-98
Total Naphthenes wt%	8 max	ASTM D 5134-98
Total Olefins wt%	0.7 max	ASTM D 5134-98
Total Aromatics wt%	30 max	ASTM D 5134-98
RON	80 min	ASTM D 2699
I.B.P ℃	35	ASTM D 850-02/ASTM D 86-05
F.B.P ◦C	220 max	ASTM D 850-02/ASTM D 86-05
Total sulfur wt.ppm	10 mox	ASTM D 4045 04
Specific Gravity at 15.56 °c	0.7-0.75	ASTM D 4052-11
Corrosion	1a	ASTM D 130-04
Gum mg/100ml	Wash: 0.5-unwash: 6.6	ASTM D 381
Induction period, min	>700	ASTM D 525
Vapor pressure (psi)	6-8	ASTM D 323 08



RAFFINATE III

Manufacturer: EPC (under UOP,s License)

A – 92

PROPERT	SPICIFFICATION VALUE	TEST METHOD
Non Aromatics (wt.%)	59 min	UOP-744-86
Total Aromatics (wt%)	35 max	ASTM D 5134-98
Benzene	0.1 max	UOP-744-86
Toluene	15 max	UOP-744-86
RON	92 min	ASTM D 2699
I.B.P°c at 760 mmHg	35	ASTM D 850-02/ASTM D 86-05
F.B.Pºc	220 max	ASTM D 850-02/ASTM D 86-05
Specific Gravity at 15.56 °C	0.73-0.76	ASTM D 4052-11
Total sulfur (wt.ppm)	10 max	ASTM D 4045-04
Vapor pressure (psi)	<6	ASTM D 323-08
Corrosion	1a	ASTM D 130-04
Gum mg/100ml	Wash: 05-unwash: 6.6	ASTM D 381
Induction period, min	>700	ASTM D 525

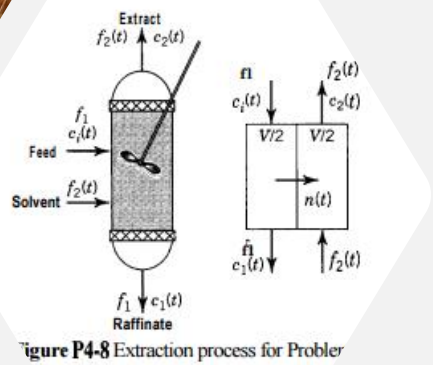


Figure P4-8 Extraction process for Probler

RAFFINATE III

Manufacturer: EPC (under UOP,s License)

A – 97

PROPERT	SPICIFFICATION VALUE	TEST METHOD
Non Aromatics (wt.%)	65 max	UOP-744-86
Total Aromatics (wt%)	35 min	ASTM D 5134-98
RON	97 min	ASTM D 2699
L.B.P%C	35	ASTM D 850-02/ASTM D 86-05
D.P°c	220 max	ASTM D 850-02/ASTM D 86-05
Total sulfur (wt.ppm)	10 max	ASTM D 4045-04
Specific Gravity at 15.56%c	0.73-0.76	ASTM D 4052-11
Corrosion	1a	ASTM D 130-04
Gum mg/100ml	Wash: 0.5-unwash: 6.6	ASTM D 381
Induction	>700	ASTM D 525
Vapor pressure (psi)	<6	ASTM D 323-08

NRK-103 White Spirit Hydrocarbon

PROPERTY	UNIT	METHOD	MIN	MAX	TYPICAL VALUE
Specific Gravity@15.86/15.56˚c	---	ASTM D 4052	0.770	0.795	0.788
Appearance	--	ASTM D-4176	---	----	Clear &Bright
Distillation					
	UNIT	METHOD	MAX		TYPICAL VALUE
IBP	˚C	ASTM D86	162		160
10 %		ASTM D86	168		165
20 %		ASTM D86	170		167
30 %v	˚C	ASTM D86	173		170
40 %		ASTM D86	177		174
50 %v	˚C	ASTM D86	180		177
60 %v	˚C	ASTM D86	185		182
70 %		ASTM D86	189		186
80 %		ASTM D86	197		194
90 %v	˚C	ASTM D86	207		204
95 %v	˚C	ASTM D86	214		211
Dry Point	˚C	ASTM D86	235		230
Sulphur Content	Wppm	ASTM D-4294	.....	800	622
Mercaptane	wppm	ASTM D-3227	.....	15	6.78
Flash point	˚C	Closed	50	58	54

NRK-202 LIGHT HYDROCABON (A92)

PROPERTY	UNIT	METHOD	MIN	MAX	TYPICAL VALUE
Specific Gravity@15.86/15.56˚c	---	ASTM D 4052	0.750	0.783	0.775
Appearance	--	ASTM D-4176	---	----	Clear &Bright
Distillation					
	UNIT	METHOD	MAX		TYPICAL VALUE
IBP	˚C	ASTM D86	51		48
10 %v	˚C	ASTM D86	70		67
30 %v	˚C	ASTM D86	105		102
50 %v	˚C	ASTM D86	130		127
70 %v	˚C	ASTM D86	150		144
90 %v	˚C	ASTM D86	180		174
95 %v	˚C	ASTM D86	185		180
Dry Point	˚C	ASTM D86	190		182
			MIN	MAX	Typical
Research Octane No.(RON)	.....	.....	90	97	93
Motor Octane No.(MON)	.....	.....	81	93	83
Benzene	vol%	ASTM D-6277	0.0	0.9	TRACE
Aromatic Content	vol%	ASTM D-6277	20	35	27
Olefins Content	vol%	ASTM D-6277	.....	.....	0.3
Oxygen Content	wt%	ASTM D-5845	.....	.....	2.84
Toluene	˚C	ASTM D-6277	.....	.....	1.61
MTBE	vol%	ASTM D-5845	.....	.....	0
Sulphur Content	wppm	ASTM D-6277	.....	360	260
Ethanol	vol%	ASTM D-6277	.....	2	1.69
Methanol	vol%	ASTM D-6277	.....	4	3.68

THE
TONE
Holding Group

British Chambers of Commerce
Under No : CMC/0260

R600 Titanium Dioxide

R600 is produced by sulphate process. It is a rutile one for universal use. R600 has excellent
hiding power and tinting strength. It is recommended in primer coatings, industrial coatings and
road marking paints.

Features:
◇outstanding hiding power; ◇excellent tinting strength; ◇good weather ability;
◇fine particle size and particle distribution.

Application:
◇Latex paint; ◇Industrial coatings;
◇Automotive refinish primer; ◇powder coatings;

Packing:
25kgs woven bag, 500/1000kgs plastic woven bag (or by customer's option).

Items Technical specifications
Inorganic surface treatment Al2O3, SiO2
Organic surface treatment Yes
TiO2 content % (m/m) ≥93
Rutile content, % ≥ 98
Tint reducing power, TCS ≥ 1850
Oil absorption value, % (m/m) ≤ 22
pH value of water suspension 6.5～8.0
Electrical resistance of aqueous extract, Ωm ≥ 80
Volatile at 105 ℃, %（g/100g） ≤ 0.5
Water soluble, % ≤ 0.5
Residue on sieve (45 ≤μm mesh), % (m/m ） ≤ 0.1

R603 Titanium Dioxide

R600 is produced by sulphate process. It is a rutile one for universal use. R600 has excellent
hiding power and tinting strength. It is recommended in primer coatings, industrial coatings and
road marking paints.

Features:
◇outstanding hiding power; ◇excellent tinting strength; ◇good weather ability; ◇fine particle size and particle distribution.

Application:
◇Latex paint; ◇Industrial coatings; ◇Automotive refinish primer; ◇powder coatings;

Packing:
25kgs woven bag, 500/1000kgs plastic woven bag (or by customer's option).

Items Technical specifications
Inorganic surface treatment Al2O3
Organic surface treatment Yes
TiO2 content % (m/m) ≥94
Rutile content, % ≥ 98
Tint reducing power, TCS ≥ 1850
Oil absorption value, % (m/m) ≤ 18
pH value of water suspension 6.0～8.5
Electrical resistance of aqueous extract, Ωm ≥ 80
Volatile at 105 ℃, %（g/100g） ≤ 0.5
Water soluble, % ≤ 0.5
Residue on sieve (45 ≤μm mesh), % (m/m） ≤ 0.05

Oil Terminal and Bunkering

One of the special services of Tone Holding in the Middle East is the provision of oil bunkering services.

+44 795 867 9424 | +90 536 546 1256

connectto@drfarham.com

www.TONEHOLDING.com | www.DRFARHAM.com

Oil Terminal and Bunkering

The oil terminal project of Petrolipar Company affiliated to Tone Holding Group is being implemented in Shahid Beheshti Port, located in Chabahar(Iran) Free Zone of Sistan and Baluchestan Province, under the supervision of the Senior Consultant of the Port of Tadvin Tosei Paydar Company. The terminal is designed to store and transport a variety of petroleum products through storage tanks by road, ship, and rail to storage tanks and vice versa. This terminal contains all the ancillary facilities required for operation and safety and environmental requirements.
This project is ready for operation by the end of July 2022

Oil Terminal and Bunkering

Number of Reservoirs	Nominal reservoir capacity	Medium-density	Nominal operating volume	Operating height	Nominal diameter	Product type
1	7730	0.73	10600	14.5	30.57	Light
2	4380	0.73	6000	14.5	22.92	Light
1	9010	0.85	10600	14.5	30.57	heavy
2	5100	0.85	6000	14.5	22.92	heavy

For more details please visit our website at :

http://toneholding.com/oil-bunkering/

ThankYou

Dr. Hamed Farham

+44 795 867 9424 | +90 536 546 1256

connectto@drfarham.com

Farham888@gmail.com

www.TONEHOLDING.com | www.DRFARHAM.com

THE TONE Holding Group

UK: 17, Teal Drive Morley Leeds West Yorkshire United Kingdom

Estonia: Harju maakond, Tallinn, Kesklinna linnaosa, Tartu mnt 67/1-13b,

Turkey: EMAAR AVM, Ünalan, Libadlye cd no1708, Üsküdar/ Istanbul

WWW.DRFARHAM.COM | WWW.TONEHOLDING.COM