



### Granulled sulphur

Amount	Content	ROW
min 99.5	PURITY(wt%)	1
min 90% 2-7 mm	PARTICLE SIZE	2
max 500	ASH (PPM)	3
max 0.5	H2O (wt%)	4
Max 0.05	Hydrocarbon (wt%)	5
Max 0.02	Acidity (wt%)	6
Commercially free	As/Te/Se (wt%)	7
Bright yellow	colour	8

### Phosphoric Acid

Amount	Content	ROW
Min 48	P2O5(wt%)	1
1.8-4	SO4(wt%)	2
1-5	SOLID (wt%)	3
1.57-1.67	sp. gr.	4

### Sulphuric acid

Amount	Content	ROW
Min 97	PURITY(wt%)	1
Max 100	Fe (ppm)	2
Max 100	TURBIDITY(ntu)	3

### D.A.P.

Amount	Content	ROW
44-48	P2O5(wt%)	1
18-19.5	N2(wt%)	2
Max 1.5	H2O (wt%)	3
min 85%(1-4 mm)	PARTICLE SIZE	4
0.92-0.98 gr/cc	Density	5



## Urea

Product  Physical & chemical  Property	GRANULATED UREA
	Standard Size (2-4mm)
	Actual
Biuret (wt%) MAX	1.0(max)
Water (wt%) MAX	0.5 (max)
Formaldehyde (wt%) MAX	0.6
Total nitrogen (wt%)	46.1(min)
NH3 (wt%)	0.015(max)
Total nitrogen (min wt%)	46
Urea (wt%)	97.93
Bulk density (g / lit)	0.73 – 0.77
Physical state	White granules solid
Ave. MW	59.20
Size distribution	2-4mm 90%wt (Min)
Crushing strength (kg / granule)	3.0 kg min On 3.15 mm dia. Granule size



## Gas Liquids

TEST	Unit	Test Method	Spec	Result
DENSITY 15.6 C°	gr/ml	ASTM D-4052	0.76 - 0.82	0.7816
SULFUR AS H <sub>2</sub> S	ppm	UOP 163-67	< 2000	718
SULFUR AS RSH	ppm	ASTM D-3227	< 4000	3100
TOTAL SULFUR	ppm	ASTM D-3120	< 15000	10300
VISCOSITY @20°C	Cst	---	---	---
IBP	C°	ASTM D-86	70 - 90	86
5 VOL %	C°	ASTM D-86	120 - 125	120.1
10 VOL %	C°	ASTM D-86	130 - 140	127.2
20 VOL %	C°	ASTM D-86	140 - 150	135.1
30 VOL %	C°	ASTM D-86	150 - 160	141.4
40 VOL %	C°	ASTM D-86	160 - 170	147.6
50 VOL %	C°	ASTM D-86	180 - 190	153.1
60 VOL %	C°	ASTM D-86	200 - 210	159.3
70 VOL %	C°	ASTM D-86	220 - 230	166.6
80 VOL %	C°	ASTM D-86	245 - 255	176
90 VOL %	C°	ASTM D-86	285 - 295	193
95 VOL %	C°	ASTM D-86	320 - 330	219
FBP	C°	ASTM D-86	330 - 340	220
TOTAL RECOVERY	wt %	ASTM D-86	97 - 99 %	97.7
RESIDUE	wt %	ASTM D-86	1 - 1.5	1.1
LOSS	wt %	ASTM D-86	0.5 - 3	2.3
RVP	PSI	ASTM D-323	2 - 4	3.8
Flash Point	C°	ASTM D93	38 - 42	<40
POUR POINT	C°	--	--	--
AROMATICS CONTENT	Vol %	GC	30 -- 35	32.78
OLEFINS CONTENT	Vol %	GC	0.04 -- 0.08	0.06
PARAFFINES CONTENT	Vol %	GC	20 -- 30	25.57
NAPHTHENES CONTENT	Vol %	GC	4 -- 8	6.96



## Ammonia

آمونیاك		
PROPERTY		SPEC. VALUE
NH <sub>3</sub>	Wt%	99.9 Min
H <sub>2</sub> O	Wt%	0.1 Max
Oil	ppm	5 Max
Nitrogen	Wt%	82