

SPECIFICATION OF HYDROCHLORIC ACID 32 %

32 % HCL —Technical Grade

Parameter	Specification
Hydrochloric Acid (HCL)	32 % Min.
Color	20 A PHA Max.
Iron (Fe)	3 mg/L Max.
Specific Gravity	1.16 — 1.18 @ 60F
Oxidizers as CL <sub>2</sub>	30-wt ppm Max.
Reducing Substances as SO <sub>3</sub>	1.16 – 1.18 @ 60F
Heavy Metals, as Pb	1 mg/L Max.
Sulphate	20 mg/ L Max.

SPECIFICATION OF HYDROCHLORIC ACID 33 %

33 % HCL —Technical Grade

Parameter	Specification
Appearance	CLEAR COLOURLESS LIQUID
Total acidity (as HCL) percentage by mass (min.)	33 % Min
specific gravity (@ 20 Deg. C)	1.16 TO 1.17
Free chlorine and bromine content (max.)	100 PPM MAX
Sulphates (as h <sub>2</sub> so <sub>4</sub> ) percentage by mass	50 PPM
Residue on ignition percentage by mass (max.)	0.005%
Iron content (as fe <sup>++</sup> ) (max.)	10 PPM MAX

## Specification of Hydrochloric Acid 33-35%

### 33-35 % HCL –Technical Grade

Parameter	Specification
Hydrochloric Acid (HCL)	33-35 %
Color	20 APHA Max
Iron (Fe)	3 mg/L Max
Specific Gravity	1.16 – 1.18 @ 60F
Oxidizers as CL <sub>2</sub>	30 wt ppm Max
Reducing Substances as SO <sub>3</sub>	70 wt ppm Max
Heavy Metals, as Pb	1 mg/L Max
Sulphate	20 mg/L Max

### Specification of Hydrochloric Acid 35%

#### 35 % HCL –Technical Grade

Parameter	Specification
Hydrochloric Acid (HCL)	35 % Min
Color	20 APHA Max
Iron (Fe)	3 mg/L Max
Specific Gravity	1.17 To 1.185 @ 25 Deg C
Heavy Metals, as Pb	1 mg/L Max