

Specification Sheet NF/EP/JP/BP

Detrex[®] NF/EP/JP/BP 22°

22° Baume NF/EP/BP/JP Grade Hydrochloric Acid

CAS No. 7647-01-0

<u>NF Parameter</u>	<u>Specification*</u>	<u>Detrex Typical</u>
Identification	Passes Test	Passes Test
Assay	34.2 – 36.2%	35.2%
Residue on Ignition	0.008%	< 0.001%
Bromide or Iodide	Passes Test	Passes Test
Free Bromine or Chlorine	Passes Test	Passes Test
Sulfate	Passes Test	Passes Test
Sulfite (SO ₃)	Passes Test	Passes Test

*Meets USP40-NF35 specifications, US Pharmacopeia Convention

*All analytical testing is performed in accordance with the monograph requirements or with validated alternative test methods.

<u>EP Parameter</u>	<u>Specification*</u>	<u>Detrex Typical</u>
Assay	34.2 – 36.2%	35.2%
Identification A	The solution is strongly acidic.	Passes Test
Identification B	Gives a reaction of chlorides.	Passes Test
Identification C	Complies with limits of assay.	Passes Test
Free Chlorine	NMT 4 ppm	< 1 ppm
Sulfates	NMT 20 ppm	< 0.3 ppm
Residue on Evaporation	0.01% max	< 0.001%

*Meets European Pharmacopoeia 9.2 Specifications

*All analytical testing is performed in accordance with the monograph requirements or with validated alternative test methods.

<u>JP Parameter</u>	<u>Specification*</u>	<u>Detrex Typical</u>
Assay	34.2 – 36.2%	35.2%
Identification 1	Passes Test	Passes Test
Identification 2	Passes Test	Passes Test
Sulfate	Passes Test	Passes Test
Sulfite	Passes Test	Passes Test
Bromine or Chlorine	Passes Test	Passes Test
Bromide or Iodide	Passes Test	Passes Test
Heavy Metals	NMT 5 ppm	< 0.001 ppm
Arsenic	NMT 1 ppm	< 0.001 ppm
Mercury	NMT 0.04 ppm	< 0.001 ppm
Residue on Ignition	NMT 100 ppm	< 1 ppm

*Meets Japanese Pharmacopoeia 17th Edition Specifications

*All analytical testing is performed in accordance with the monograph requirements or with validated alternative test methods.

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<u>BP Parameter</u>	<u>Specification*</u>	<u>Detrex Typical</u>
Assay	34.2 – 36.2%	35.2%
Appearance	Clear, Colorless fuming liquid.	Passes
Solubility	Miscible with water	Passes
Specific Gravity	1.1741 – 1.1836	1.1789
Identification A	The solution is strongly acidic.	Passes Test
Identification B	Gives a reaction of chlorides.	Passes Test
Identification C	Complies with limits of assay.	Passes Test
Free Chlorine	NMT 4 ppm	< 1 ppm
Sulfates	NMT 20 ppm	< 0.3 ppm
Residue on Evaporation	0.01% max	< 0.001%

*Meets British Pharmacopoeia 2017 Specifications

*All analytical testing is performed in accordance with the monograph requirements or with validated alternative test methods.