



**SOLVAY**

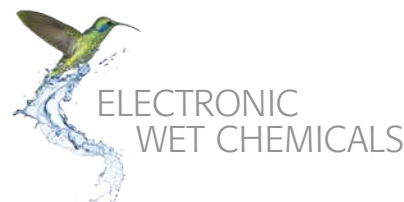
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# Electronic Wet Chemicals

# Hydrogen Peroxide

## Electronic Grade



Solvay INTEROX® Electronic Grade Hydrogen Peroxide is manufactured in Bernburg, Germany. It is tailored to the needs of the electronic industry with a focus on the wet processing steps in the manufacture of semiconductor wafers.

### European Standard Sales Specification

Parameter	SEMI reference	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
		EG-ST*	EG-10	EG-1	Pico	PicoPlus
Assay	% by weight	30 – 60	30 – 32	30 – 32	30 – 32	30 – 32
Free acid	mg/kg (ppm)	0.6 – 40	–	–	–	–
Stability	g/kg*h	–	4	4	4	4
TOC	mg/kg (ppm)	3 – 30	10	10	10	10
Chloride (Cl)	µg/kg (ppb)	200 – 1,000	200	200	30	30
Nitrate (NO <sub>3</sub> )		500 – 3,000	400	400	30	30
Sulfate (SO <sub>4</sub> )		200 – 1,000	200	200	30	30
Phosphate (PO <sub>4</sub> )		200 – 5,000	200	200	30	30
Aluminium (Al)	µg/kg (ppb)	10 – 100	10	1	0.1	0.01
Antimony (Sb)		10 – 100	10	1	0.1	0.01
Arsenic (As)		10 – 100	10	1	0.1	0.01
Barium (Ba)		–	10	1	0.1	0.01
Boron (B)		10 – 100	10	1	0.1	0.01
Cadmium (Cd)		–	10	1	0.1	0.01
Calcium (Ca)		10 – 100	10	1	0.1	0.01
Chromium (Cr)		10 – 100	10	1	0.1	0.01
Copper (Cu)		10 – 100	10	1	0.1	0.01
Iron (Fe)		10 – 100	10	1	0.1	0.01
Lead (Pb)		10 – 100	10	1	0.1	0.01
Lithium (Li)		–	10	1	0.1	0.01
Magnesium (Mg)		10 – 100	10	1	0.1	0.01
Manganese (Mn)		10 – 100	10	1	0.1	0.01
Nickel (Ni)		10 – 100	10	1	0.1	0.01
Potassium (K)		10 – 100	10	1	0.1	0.01
Sodium (Na)		100 – 2,000	10	1	0.1	0.01
Tin (Sn)		10 – 100	10	1	0.1	0.01
Titanium (Ti)		10 – 100	10	1	0.1	0.01
Vanadium (V)		–	10	1	0.1	0.01
Zinc (Zn)		10 – 100	10	1	0.1	0.01

\*EG-ST range includes stabilized as well as non-stabilized grades.

Solvay offers state of the art particle measurement as per customer specification.

### Storage

Solvay INTEROX® Electronic Grade Hydrogen Peroxide is delivered in bulk, containers (IBC) or drums.

### Further information

Please consult our MSDS for further information on storage, transport, and safe handling. Please visit [www.solvaywetchemicals.com](http://www.solvaywetchemicals.com) or contact your local supplier.

### Solvay Chemicals International SA

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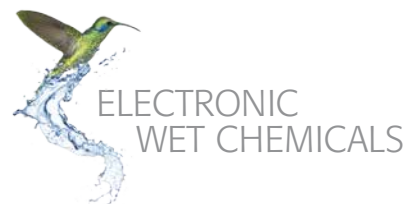
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# Hydrofluoric Acid

Electronic Grade



Solvay Electronic Grade Hydrofluoric Acid is manufactured in Quzhou, China. It is tailored to the requirements of the electronic industry focusing on the wet etching processes in the front end manufacture of semiconductors and integrated circuits.

## European Standard Sales Specification

Parameter	SEMI reference	Grade 2
		ULSI
Assay	% by weight	49 – 51
Chloride (Cl)	µg/kg (ppb)	5,000
Nitrate (NO <sub>3</sub> )		3,000
Sulfate (SO <sub>4</sub> )		5,000
Phosphate (PO <sub>4</sub> )		1,000
Aluminium (Al)	µg/kg (ppb)	10
Antimony (Sb)		10
Arsenic (As)		10
Barium (Ba)		10
Boron (B)		10
Cadmium (Cd)		10
Calcium (Ca)		10
Chromium (Cr)		10
Copper (Cu)		10
Iron (Fe)		10
Lead (Pb)		10
Lithium (Li)		10
Magnesium (Mg)		10
Manganese (Mn)		10
Nickel (Ni)		10
Potassium (K)		10
Sodium (Na)		10
Tin (Sn)		10
Titanium (Ti)		10
Vanadium (V)		10
Zinc (Zn)		10

## Storage

Solvay Hydrofluoric Acid Electronic Grade is delivered in containers (IBC) or drums.

## Further information

Please consult our MSDS for further information on storage, transport, and safe handling. Please visit [www.solvaywetchemicals.com](http://www.solvaywetchemicals.com) or contact your local supplier.

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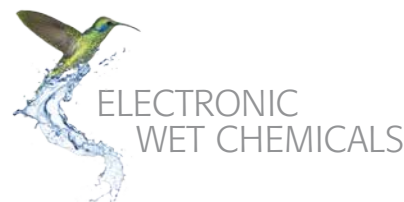
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# Phosphoric Acid

## Electronic Grade



Solvay offers electronic grade Phosphoric Acid from its site in Bernburg, Germany. It is tailored to the needs of the electronic industry with a focus on the wet processing steps in the manufacture of semiconductor wafers.

### European Standard Sales Specification

SEMI reference		Grade 1	Grade 2
Parameter			
Assay	% by weight	79 – 81 84 – 86	79 – 81 84 – 86
Chloride (Cl)	mg/kg (ppm)	1	1
Fluoride (F)		1	1
Nitrate (NO <sub>3</sub> )		5	5
Sulfate (SO <sub>4</sub> )		12	12
Aluminium (Al)	µg/kg (ppb)	1,000	500
Antimony (Sb)		10,000	3,500
Arsenic (As)		300	100
Barium (Ba)		–	–
Boron (B)		–	–
Cadmium (Cd)		–	450
Calcium (Ca)		1,500	1,100
Chromium (Cr)		200	200
Cobalt (Co)		–	50
Copper (Cu)		50	50
Iron (Fe)		2,000	700
Lead (Pb)		300	300
Lithium (Li)		100	100
Magnesium (Mg)		200	200
Manganese (Mn)		100	100
Nickel (Ni)		500	200
Potassium (K)		1,500	450
Sodium (Na)		2,500	500
Tin (Sn)		–	–
Titanium (Ti)		300	300
Vanadium (V)	–	–	
Zinc (Zn)	2,000	400	

### Storage

Solvay Phosphoric Acid Electronic Grade is delivered in containers (IBC) or drums.

### Further information

Please consult our MSDS for further information on storage, transport, and safe handling. Please visit [www.solvaywetchemicals.com](http://www.solvaywetchemicals.com) or contact your local supplier.

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