

Hydrogen bromide. HBr

Product information

Hydrogen bromide is used in combination with hydrogen chloride and chlorine for plasma etching of polysilicon as STI /Silicon fin etch in FinFET or Trigate, silicon gate stack etch, and small diameter TSV etch.

Characteristics

Highly corrosive. Liquefied gas with pungent odor. Forms white fumes in humid air. Highly corrosive under humid conditions. Gas density is heavier than air.

Physical data

Molecular weight	[g/mol]	80.912				
Boiling point	at 1.013 bar [°C]	-66.7	at 14.5 psi [°F]	-88.04		
Density	at 1.013 bar, 15 °C [kg/m³]	3.45	at 1 atm., 70 °F [lb/ft³]	0.211		
Vapor pressure	at 0 °C [bar]	13	at 32 °F [psi]	187.9		
	at 20 °C [bar]	21.8	at 70 °F [psi]	324.57		
Flammability range in	air (% volume)	Non-combustible				

Product specification

Purity grade	Typical purity	Typical impurities [ppm]							
		N ₂	0 ₂ +Ar	CO	CO ₂	H ₂ 0	CH ₄	HCl	
5.0N	≥99.999 %	≤3	≤1	_ ≤1	<u>≤1</u>	<u>≤</u> 1	<u>≤</u> 1	≤100	

Contact our team for higher grade or different specification products.

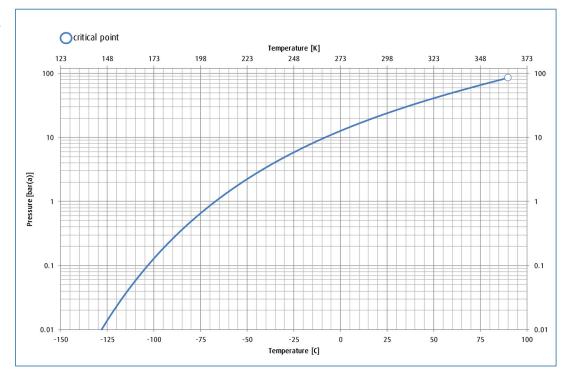
Shipping information

UN number	CAS number	EC number	DOT label	Hazard labels required
1048	10035-10-6	233-113-0	Poison gas, corrosive	ADR Class 2, 2TC DOT Class 2.3

Packaging information

ation	Package options	Cylinder designa- tion	Cylinder internal volume	Cylinder material	Cylinder diameter	Cylinder height to valve outlet	Cylinder tare weight	Fill contents	Pressure	Valve outlet	Valve material
US	Cylinder	209	44 L	Nickel plated steel (SS II)	9 in	52 in	130 lb	140 lb	320 (psig) @ 70°F	CGA 634	SS
	Cylinder	89	16 L	Nickel plated steel (SS II)	7 in	33.25 in	70 lb	40 lb	320 (psig) @ 70°F	CGA 634	SS
	Cylinder	39	8 L	Nickel plated steel (SS II)	9 in	7 in	19.5 lb	10 lb	320 (psig) @ 70°F	CGA 634	SS
EU	Cylinder	40L	40L	Stainless steel	230 mm	1400 mm	40 kg	50 kg	21 (bar) @ 20°C	DIN 8/ CGA 634	SS
China	Cylinder	44L	44L	Steel	237 mm	1500 mm	65 kg	64 kg	23 (bar) @ 20°C	CGA 634	SS
	Cylinder	10L	10L	Steel	140 mm	880 mm	12 kg	10 kg	23 (bar) @ 20°C	CGA 634	SS

Vapor pressure curve



Additional information

The information, recommendations, and data contained in this publication are intended to give basic guidance for safe handling and use of gases. For more information, please refer to Safety Data Sheets. You can locate these through the <u>Linde Safety Data Sheet Search</u>. It is essential for the safe use of gases that personnel are properly trained and are fully aware of the possible hazards. Further information and advice on any matter relating to the safe handling or use of these products may be obtained from the nearest Linde office.

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