

Measuring gas (Toxic)

Measuring gas	Chemical formula	TLV value				Riken standard	
		ACGIH			Japan Hygien	Measuring range	Alarm
		TWA	STEL	C	OEL		
Arsine	AsH3	0.05ppm	-	-	0.01ppm	0-0.2ppm	0.05ppm
Phosphine	PH3	0.3ppm	1ppm	-	*0.3ppm	0-1ppm	0.3ppm
Diborane	B2H6	0.1ppm	-	-	-	0-0.3ppm	0.1ppm
Silane	SiH4	5ppm	-	-	*100ppm	0-15ppm	5ppm
Disilane	Si2H6	-	-	-	-	0-15ppm	5ppm
Germane	GeH4	0.2ppm	-	-	-	0-0.8ppm	0.2ppm
Hydrogen Selenide	H2Se	0.05ppm	-	-	0.05ppm	0-0.2ppm	0.05ppm
Nitrogen Trifluoride	NF3	10ppm	-	-	-	0-30ppm	10ppm
Boron Tribromide	BBr3	Generate HBr by hydrolysis				HBr 0-6ppm	HBr 2ppm
Arsenic Trichloride	AsCl3	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Arsenic Pentachloride	AsCl5	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Boron Trichloride	BCL3	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Germanium Tetrachloride	GeCl4	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Molybdenum Pentachloride	MoCl5	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Phosphorous Trichloride	PCL3	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Phosphorous Pentachloride	PCL5	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Phosphorous Oxychloride	POCL3	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Antimony Pentachloride	SbCl5	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Silicone Tetrachloride	SiCl4	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Dichlorosilane	SiH2CL2	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Trichlorosilane	SiHCL3	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Tin Tetrachloride	SnCl4	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Tungsten Hexachloride	WCL6	Generate HCL by hydrolysis				HCL 0-6ppm	HCL 2ppm
Tungsten Hexafluoride	WF6	Generate HF by hydrolysis				HF 0-9ppm	HF 3ppm
Arsenic Trifluoride	AsF3	Generate HF by hydrolysis				HF 0-9ppm	HF 3ppm
Arsenic Pentafluoride	AsF5	Generate HF by hydrolysis				HF 0-9ppm	HF 3ppm
Boron Trifluoride	BF3	Generate HF by hydrolysis				HF 0-9ppm	HF 3ppm
Molybdenum Hexafluoride	MoF6	Generate HF by hydrolysis				HF 0-9ppm	HF 3ppm
Phosphorous Pentafluoride	PF5	Generate HF by hydrolysis				HF 0-9ppm	HF 3ppm
Sulfur Tetrafluoride	SF4	Generate HF by hydrolysis				HF 0-9ppm	HF 3ppm
Silicone Tetrafluoride	SiF4	Generate HF by hydrolysis				HF 0-9ppm	HF 3ppm
Hydrogen Chloride	HCL	-	-	2ppm	5ppm	0-6ppm	2ppm
Hydrogen Fluoride	HF	0.5ppm	-	2ppm	3ppm	0-9ppm	3ppm
Hydrogen Bromide	HBr	-	-	2ppm	-	0-6ppm	2ppm
Hydrogen Iodine	HI	-	-	-	-	0-5ppm	2ppm
Chlorine	CL2	0.5ppm	1ppm	-	*0.5ppm	0-1.5ppm	0.5ppm
Fluorine	F2	1ppm	2ppm	-	-	0-6ppm	1ppm
Bromine	Br2	0.1ppm	0.2ppm	-	0.1ppm	0-1ppm	0.2ppm
Chlorine Trifluoride	CLF3	-	-	0.1ppm	-	0-0.6ppm	0.1ppm
Ozone	O3	0.1ppm	-	-	0.1ppm	0-0.6ppm	0.1ppm
Nitrogen Oxide	NO	25ppm	-	-	-	0-100ppm	25ppm
Nitrogen Dioxide	NO2	3ppm	5ppm	-	pending	0-15ppm	5ppm
Sulfur Dioxide	SO2	2ppm	5ppm	-	pending	0-6ppm	2ppm
Hydrogen Sulfide	H2S	10ppm	15ppm	-	5ppm	0-30ppm	10ppm
Carbon Monoxide	CO	25ppm	-	-	50ppm	0-75ppm	25ppm
Ammonia	NH3	25ppm	35ppm	-	25ppm	0-75ppm	25ppm
Monomethyl amine	CH3NH2	5ppm	15ppm	-	10ppm	0-15ppm	5ppm
Dimethyl amine	(CH3)2NH	5ppm	15ppm	-	10ppm	0-15ppm	5ppm
Trimethyl amine	(CH3)3N	5ppm	15ppm	-	-	0-15ppm	5ppm
Diethyl amine	(CH3CH2)2NH	5ppm	15ppm	-	10ppm	0-15ppm	5ppm
Hydrogen Cyanide	HCN	-	-	4.7ppm	5ppm	0-15ppm	5ppm
Nitric Acid	HNO3	2ppm	4ppm	-	2ppm	0-20ppm	4ppm
Hydrogen Peroxide	H2O2	1ppm	-	-	-	0-3ppm	1ppm
Phosgene	COCL2	0.1ppm	-	-	0.1ppm	0-0.6ppm	0.1ppm

Each numerical value of ACGIH (American Conference of Governmental Industrial Hygienists) for 2005.

OEL value of Japan Hygien for 2004-2005.

TWA : Time Weighted Average

STEL : Short Term Exposure Limit

C : Ceiling

OEL : Occupational Exposure Limit