



**NANO CHEM® Gas Types Purification Summary Table**

GASES PURIFIED	CHEMICAL FORMULA	PURIFICATION MEDIUM	PURIFICATION MEDIUM DESCRIPTION	IMPURITIES REMOVED	EFFICIENCY	END POINT DETECTION
<b>Inerts</b>						
Nitrogen Argon Helium Xenon Krypton Neon	N <sub>2</sub> Ar He	OMX-Plus™	Reactive agents on a polymeric support w/ inorganic agent for NMHC removal	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub> , THC except CH <sub>4</sub>	< 100 ppt, LDL	AC or DC
				Halocarbons except CF <sub>4</sub>		
				CO at Low Flow		
	Xe Kr Ne	HCX™	High surface area inorganic medium	Hydrocarbons except CH <sub>4</sub>	< 100 ppt, LDL	Not available
				Halocarbons except CF <sub>4</sub>		
<b>Flammables - Partial List</b>						
Methane Ethane Cyclopropane Propane Butane	CH <sub>4</sub> C <sub>2</sub> H <sub>6</sub> C <sub>3</sub> H <sub>6</sub>	OMX-Plus™	Reactive agents on a polymeric support w/ inorganic agent for NMHC removal	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub> , THC except CH <sub>4</sub>	< 100 ppt, LDL	DC only
				Halocarbons except CF <sub>4</sub>		
				CO at Low Flow		
	C <sub>3</sub> H <sub>8</sub> C <sub>4</sub> H <sub>10</sub>	OMX™	Reactive agents on a polymeric support	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub>	< 100 ppt, LDL	DC only
				CO at Low Flow	< 1 ppb	
Hydrogen Deuterium	H <sub>2</sub> D <sub>2</sub>	OMX-Plus™	Reactive agents on a polymeric support w/ inorganic agent for NMHC removal	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub> , THC except CH <sub>4</sub>	< 100 ppt, LDL	DC only
				Halocarbons except CF <sub>4</sub>		
		HCX™	High surface area inorganic medium	Hydrocarbons except CH <sub>4</sub>	< 100 ppt, LDL	Not available
				Halocarbons except CF <sub>4</sub>		
<i>Please contact customer service for other flammables, that can be purified.</i>						
<b>Halocarbons - Partial List</b>						
Carbon Tetrafluoride	CF <sub>4</sub>	OMX-Plus™	Reactive agents on a polymeric support w/ inorganic agent for NMHC removal	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub> , THC except CH <sub>4</sub> & Other Halocarbons	< 100 ppt, LDL	AC or DC
				CO at Low Flow	< 1 ppb	
Hexafluoroethane	C <sub>2</sub> F <sub>6</sub>	OMX™	Reactive agents on a polymeric support	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub>	< 100 ppt, LDL	AC or DC
				CO	< 1 ppb	
Perfluoropropane	C <sub>3</sub> F <sub>8</sub>	OMX™	Reactive agents on a polymeric support	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub>	< 100 ppt, LDL	AC or DC
<i>Please contact customer service for other halocarbons, that can be purified.</i>						
<b>Hydrides</b>						
Ammonia	NH <sub>3</sub>	NHX-Plus™	Reactive agents on an inorganic support	H <sub>2</sub> O	< 45 ppb, LDL	Not available
				CO <sub>2</sub>	< 11 ppb, LDL	
				O <sub>2</sub>	< 50 ppb, LDL	
				GeH <sub>4</sub>	< 0.5 ppb, LDL	
				SiH <sub>4</sub>	< 3 ppb, LDL	
				TEOS	< 40 ppb, LDL	
		OMA™	Reactive agents on a polymeric support	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub> in inert gas, LDL	< 100 ppt, LDL	DC only
			H <sub>2</sub> O in ammonia, LDL	< 100 ppb, LDL		
Silane	SiH <sub>4</sub>	OMX™	Reactive agents on a polymeric support	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub> , CO	< 100 ppt, LDL	DC only
Arsine	AsH <sub>3</sub>	ASX-II™	High surface are inorganic medium	< 75 ppb H <sub>2</sub> O in AsH <sub>3</sub> , LDL		Not available
Phosphine	PH <sub>3</sub>	PHX™	Reactive agents on an inorganic support	< 33 ppb H <sub>2</sub> O in PH <sub>3</sub> , LDL		Not available

THC = Total Hydrocarbons

LDL = Lower Limit of Detection by state-of-the-art analytical instrumentation.

Please contact customer service for other gases not included in this list



## Purification Media – Gases Purified and Specifications

### NANOCHEM® Gas Types Purification Summary Table (continued)

GASES PURIFIED	CHEMICAL FORMULA	PURIFICATION MEDIUM	PURIFICATION MEDIUM DESCRIPTION	IMPURITIES REMOVED	EFFICIENCY	END POINT DETECTION
<b>Hydride/Inert Mixes (N<sub>2</sub>, Ar, He, Xe, Kr, Ne, &amp; H<sub>2</sub>)</b>						
1-10% Arsine	AsH <sub>3</sub>	OMX™	Reactive agents on a polymeric support	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub>	< 1 ppb	Not available
1-10% Germane	GeH <sub>4</sub>					
1-10% Phosphine	PH <sub>3</sub>					
<b>Corrosives</b>						
Boron Trichloride	BCl <sub>3</sub>	Metal-X™	High purity high surface area inorganic medium	H <sub>2</sub> O < 100 ppb, LDL Volatile Metals-Fe, Mo, Cr, Ti, Ni, Mn		Not available
Chlorine	Cl <sub>2</sub>					
Silicon Tetrachloride	SiCl <sub>4</sub>					
Trichlorosilane	SiHCl <sub>3</sub>					
Dichlorosilane	SiH <sub>2</sub> Cl <sub>2</sub>					
Hydrogen Bromide	HBr					
Hydrogen Chloride	HCl					
<b>Others</b>						
Carbon Monoxide	CO	Metal-X™	High purity high surface area inorganic medium	H <sub>2</sub> O < 100 ppb, LDL Volatile Metals-Fe, Mo, Cr, Ti, Ni, Mn		Not available
Nitric Oxide	NO					
Carbon Dioxide	CO <sub>2</sub>	OPX™	High surface area inorganic medium	H <sub>2</sub> O	< 10 ppb	Not available
		HGX™	High surface area inorganic medium	Hydrocarbons except CH <sub>4</sub> Halocarbons except CF <sub>4</sub>	< 100 ppt, LDL	Not available
Nitrous Oxide	N <sub>2</sub> O					
Oxygen	O <sub>2</sub>	OPX	High surface area inorganic medium	H <sub>2</sub> O	< 10 ppb	Not available
Dimethyl Ether	(CH <sub>3</sub> ) <sub>2</sub> O	OMX™	Reactive agents on a polymeric support	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub>	< 100 ppt, LDL	DC only
Sulfur Hexafluoride	SF <sub>6</sub>	OMS™	Reactive agents on a polymeric support	H <sub>2</sub> O, O <sub>2</sub>	< 10 ppb, LDL	AC or DC

THC = Total Hydrocarbons

LDL = Lower Limit of Detection by state-of-the-art analytical instrumentation.

Please contact customer service for other gases not included in this list