

SEMI E49.8-1103

GUIDE FOR HIGH PURITY AND ULTRAHIGH PURITY GAS DISTRIBUTION SYSTEMS IN SEMICONDUCTOR MANUFACTURING EQUIPMENT

This guide was technically approved by the Global Gases Committee and is the direct responsibility of the North American Gases Committee. Current edition approved by the North American Regional Standards Committee on September 3, 2003. Initially available at www.semi.org October 2003; to be published November 2003. Originally published in 1996; previously published February 1998.

NOTICE: This document was completely rewritten in 2003.

1 Purpose

1.1 This document specifies guidelines for high purity (HP) and ultrahigh purity (UHP) gas distribution systems in semiconductor manufacturing equipment.

2 Scope

2.1 This guide applies to gas distribution systems consisting of stainless steel components designed to supply the following types of gases to the process chamber:

2.1.1 *Specialty Gases* — Corrosive, flammable, pyrophoric, oxidizer, toxic, inert, and mixtures.

2.1.2 *Bulk Gases* — Nitrogen, oxygen, argon, hydrogen, and helium.

2.2 Typical processes include diffusion, anneal, plasma etch, chemical vapor deposition, physical vapor deposition, and ash.

NOTICE: This standard does not purport to address safety issues, if any, associated with its use. It is the responsibility of the users of this standard to establish appropriate safety health practices and determine the applicability or regulatory limitations prior to use.

3 Referenced Standards

3.1 SEMI Standards

SEMI E49 — Guide for Standard Performance, Practices, and Sub-Assembly for High Purity Piping Systems and Final Assembly for Semiconductor Manufacturing Equipment

SEMI E49.6 — Guide for Subsystem Assembly and Testing Procedures - Stainless Steel Systems

SEMI F1 — Specification for Leak Integrity of High-Purity Gas Piping Systems and Components

SEMI F17 — Specification for High Purity Quality Electroplished 316L Stainless Steel Tubing, Component Tube Stubs, and Fittings Made from Tubing

SEMI F19 — Specification for the Finish of the Wetted Surfaces of Electropolished 316L Stainless Steel Components

SEMI F20 — Specification for 316L Stainless Steel Bar, Extruded Shapes, Plate, and Investment Castings for Components Used in High Purity Semiconductor Manufacturing Applications

SEMI F37 — Method for Determination of Surface Roughness Parameters for Gas Distribution Components

SEMI F58 — Test Method for Determination of Moisture Dry-Down Characteristics of Surface-Mounted and Conventional Gas Distribution Systems by Atmospheric Pressure Ionization Mass Spectroscopy (APIMS)

SEMI F60 — Test Method for ESCA Evaluation of Surface Composition of Wetted Surfaces of Passivated 316L Stainless Steel Components

SEMI F70 — Test Method for Determination of Particle Contribution of Gas Delivery System

SEMI F73 — Test Method for Scanning Electron Microscopy (SEM) Evaluation of Wetted Surface Condition of Stainless Steel Components

SEMI F78 — Practice for Gas Tungsten Arc (GTA) Welding of Fluid Distribution Systems in Semiconductor Manufacturing Applications

SEMI F81 — Specification for Visual Inspection and Acceptance of Gas Tungsten Arc (GTA) Welds in Fluid Distribution Systems in Semiconductor Manufacturing Applications

SEMI S2 — Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment

3.2 ASTM Document¹

¹ American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, USA. Telephone: 610.832.9585, Fax: 610.832.9555, Website: www.astm.org

ASTM F 1397 — Test Method for Determination of Moisture Contribution for Gas Distribution System Components

NOTICE: Unless otherwise indicated, all documents cited shall be the latest published versions.

4 Terminology

4.1 See Section 4 in SEMI E49.

5 Design Guidelines

5.1 All weld joints should be automatically orbital butt-welded in accordance with SEMI F78 and SEMI F81.

5.2 Directional changes in the process flow path should be minimized. Required directional changes should be accomplished by butt-weld elbows or block components. Tube bends may be used on tubing $\leq \frac{1}{2}$ inch O.D. and should be formed using manual or CNC bending equipment. CNC tube bending is preferred to manual tube bending because during manual bending uniform deformation of the tubing is more difficult to control and reproducibility of bend geometries is much less than that achieved by bending using CNC methods. An internal mandrel must not be used during bending as it can contaminate and/or damage the internal surface. Recommended minimum bend radii are the following:

- For inert gas lines, a bend radius (as measured from the tube centerline) as small as $2 \times$ tube diameter may be used for 90 degree directional changes.
- For reactive gas lines, a bend radius (as measured from the tube centerline) as small as $5 \times$ tube diameter may be used for 90 degree directional changes; however, it is recommended that corrosion testing be performed to determine if bent tubing is suitable in each particular reactive gas application.

5.3 Components that may need to be removed or replaced should be installed with metal seal fittings.

5.4 Dead volumes should be minimized in the process gas stream. The system internal volume should be minimized.

5.5 All potentially pyrophoric or reactive gases should have upstream and downstream purge/vacuum capability for MFC maintenance. To speed the purge process and allow the system to be evacuated even if the MFC is clogged, the design should also have the ability to provide vacuum both upstream and downstream of the MFC. A gas is defined to be reactive

if it has a Hazardous Production Material (HPM) rating of 3 or 4 per SEMI S2.

5.6 Inert gases do not need an input for an independent purge gas. Inert gases can act as their own purge gas and only need to purge in the intended direction of flow. Inert gas lines do not need upstream vacuum capability or downstream purge capability. To speed the purge process, the design should have the ability to provide vacuum downstream of the MFC.

5.7 For low pressure equipment, the vacuum path from the MFC manifold to the pump should bypass the process chamber during purging or maintenance and should connect directly to the foreline.

5.8 For atmospheric pressure equipment, a vacuum Venturi to vent/exhaust method should be required for reactive gases.

5.9 Design should include a means of cycle purging upstream and downstream of removable components or subassemblies for reactive gases and should include a means of flow-through purging for all removable components.

5.10 Backflow/back pressure protection should be included for all purge gases in the system.

5.11 All incoming gas lines should have filters.

5.12 Any additional filters, located at point of use before a process chamber or loadlock, should have a means of isolation from atmosphere.

5.13 Test/sample ports should be located on each process chamber supply line or the designated purge/vent line.

5.14 For processes requiring additional purification of process gases, purifiers should be included in the gas system and located upstream of MFC's. The system should include a means of purging and removing purifiers in a safe manner.

6 Materials Guidelines

6.1 *Stainless Steel*

6.1.1 Components should be fabricated from electropolished 316L stainless steel per SEMI F17, or SEMI F20.

6.2 *Other Materials*

6.2.1 Materials for valve seals, diaphragms, gaskets, and O-rings should be chemically compatible with the process gas. All materials exposed to process gas should be reported.

Table 1 Summary of Requirements for High Purity and Ultrahigh Purity Components and SubAssemblies

| <i>Description</i> | <i>High Purity Value</i> | <i>Ultrahigh Purity Value</i> | <i>Units</i> |
|---|--|-------------------------------|--|
| Internal Surface Chemistry (ESCA) — Test method per SEMI F60 Total chromium to iron ratio including both reduced and oxidized states | refer to SEMI F19 | refer to SEMI F19 | value |
| Internal Surface Defects (SEM) — Test procedures per SEMI F73 Photos per test method Counts per photo | refer to SEMI F19 | refer to SEMI F19 | value value |
| Internal Surface Roughness — Test procedure per SEMI F37 Average surface roughness (Ra) Maximum surface roughness from an individual measurement | refer to SEMI F19 | refer to SEMI F19 | μm (μin.) μm (μin.) |
| Static Flow Particulate Contribution (valves, regulators, flow controllers) — Test procedures per SEMI F70 Particles ≥ 0.1 μm Particles ≥ 0.02 μm | ≤ 0.71 (≤ 20) ≤ 2.6 (≤ 75) | ≤ 0.18 (≤ 5) ≤ 0.71 (≤ 20) | ptc/L (ptc/ft ³) ptc/L (ptc/ft ³) |
| Internal Absorbed Moisture — Test procedures per ASTM F 1397 or SEMI F58 For low surface area component (valve, regulator), time to recover to baseline from a 2 ppm spike (ASTM F 1397) or 200 ppb spike (SEMI F58) For high surface area component (filters, tubing), time to recover to baseline from a 2 ppm spike (ASTM F 1397) or 200 ppb spike (SEMI F58) | ≤ 4 ≤ 6 | ≤ 1 ≤ 4 | hour hour |
| Cycle Life (valves, regulators, and MFC's) — sample at least 4 and no more than 10 components using a 90% confidence interval and exponential hazard function: Manual valves – MTTF of ≥ 25 K cycles Pneumatic valves, regulators, and MFC's – MTTF of ≥ 500 K cycles | Following cycling, components must meet the particulate contribution requirements in this table and the leak rate requirements in Sections 6.2, 7.2 and 7.3. | | |

7 Component Guidelines

7.1 Components in subassemblies should comply with the surface requirements listed in SEMI F19, and with additional requirements listed in Table 1.

7.2 All components should meet the inboard/outboard leak rate requirements of SEMI F1.

7.3 Valves should be springless, packless diaphragm type with all metal bonnet seals. All valves should meet the leak across the seat requirements of SEMI F1.

7.4 Valve flow coefficients (C_v) should be selected based on gas flow requirements and gas characteristics. The C_v should be determined using SEMI F32.

7.5 Regulators should be sized based on gas flow requirements and gas characteristics by examination of a droop curve that shows regulator pressure drop as a function of flow at the specific inlet pressure and set outlet pressure conditions.

7.6 Filters in the final line just upstream of the chamber that are intended to protect the chamber from upstream particulate contamination should be 9-LOG retention

for particles greater than or equal to 0.003 μm and should be tested per SEMI F38. The filters should be made of PTFE, stainless steel, nickel or ceramic media.

7.7 Pressure transducers should minimize the dead space below the diaphragm.

8 Subsystem Assembly Guidelines

8.1 See SEMI E49.6 for recommended stainless steel system assembly procedures.



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SEMI E51-0200

GUIDE FOR TYPICAL FACILITIES SERVICES AND TERMINATION MATRIX

This guide was technically approved by the Global Facilities Committee and is the direct responsibility of the North American Facilities Committee. Current edition approved by the North American Regional Standards Committee on December 15, 1999. Initially available at www.semi.org January 2000; to be published February 2000. Originally published in 1995; previously published February 1998.

1 Purpose

1.1 The objectives of this guide are to ensure a timely and cost-effective tool installation with minimum impact on the existing customer facilities, systems, and services, and to insure that the quality of facilities supplied (e.g., water, gases, chemicals, electricity) is not compromised once internal to the tool.

1.2 This guide provides the equipment supplier with an understanding of the facilities available at the point of connection (POC) at the “typical” customer site. If these typical facility services are considered by tool manufacturers during their tool design, additional cost and lead times associated with customizing each tool installation can be minimized resulting in reduced costs to build and install semiconductor equipment.

2 Scope

2.1 This document does not include site-specific conditions. The Typical Facilities Services and Termination Matrix Example—United States (see Table 1) identifies utilities, performance, and connections at typical semiconductor facilities. When site specifications differ, the user should create a Site-Specific Facilities Services and Termination Matrix (see Table 2) that is submitted with the request for a quote. Each tool should be supplied in a “facility ready” state. This document represents the range of conditions in which equipment should be capable of operating.

2.2 This guide does not purport to address safety issues, if any, associated with its use. It is the responsibility of the users of this guide to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

3 Impact

3.1 A reference to this guide and the Typical Facilities Services and Termination Matrix (see Table 1) or a completed Site-Specific Facilities Services and Termination Matrix (see Table 2) should be included with other applicable tool purchase specifications. When the supplier receives these documents, a dialogue can be established to resolve any installation issues prior to customer purchase or tool installation. Any

additional facility requirements not identified should be determined when the tool quote is reviewed.

4 Referenced Standards

4.1 SEMI Standards

SEMI E6 — Facilities Interface Specifications Guideline and Format

SEMI E7 — Specification for Electrical Interfaces for the U.S. Only

SEMI E30 — Generic Model for Communications and Control of Manufacturing Equipment (GEM)

SEMI E33 — Specification for Semiconductor Manufacturing Facility Electromagnetic Compatibility

SEMI E49 — Guide for Standard Performance, Practices, and Sub-Assembly for High Purity Piping Systems and Final Assembly for Semiconductor Manufacturing Equipment

SEMI F47 — Specification for Semiconductor Processing Equipment Voltage Sag Immunity

4.2 ANSI Standard¹

ANSI B16.5 — Steel Pipe Flanges, Flanged Valves and Fittings, as it refers to 150 lb. flanges

4.3 IEEE Standards²

IEEE 1100 — Recommended Practice for Powering and Grounding Sensitive Electronic Equipment (IEEE Emerald Book)

4.4 NFPA Document³

NFPA 70 — National Electrical Code

5 Terminology

5.1 Acronyms and Abbreviations

5.1.1 *amb* — ambient temperature conditions

1 American National Standards Institute (ANSI), 11 W. 42nd Street, New York, NY 10036

2 Institute of Electrical and Electronic Engineers (IEEE), 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331

3 National Fire Protection Association (NFPA), 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101

5.1.2 *atm* — atmospheric conditions, 14.7 psi at sea level

5.1.3 *CPVC* — chlorinated polyvinyl chloride

5.1.4 *Cu* — copper

5.1.5 *EP* — electropolished

5.1.6 *Galv.* — galvanized

5.1.7 *Hg* — mercury

5.1.8 *kPa* — kiloPascals

5.1.9 μ — micron

5.1.10 *NFPA* — National Fire Protection Association

5.1.11 *NPT* — National Pipe Thread (U.S. Standard)

5.1.11.1 *FNPT* — Female National Pipe Thread

5.1.11.2 *MNPT* — Male National Pipe Thread

5.1.12 *NW Flange* — ISO NW flange

5.1.13 *P. Flange* — ANSI B16.5 pipe flange (for the purpose of this guide)

5.1.14 *PFA* — Perfluoralkoy, resin

5.1.15 *POC* — point of connection (POC is the point where the facility utility connects to the exterior of the tool.)

5.1.16 *POU* — point of use

5.1.17 *PP* — Polypropylene

5.1.18 *psia* — pounds per square inch, absolute

5.1.19 *psig* — pounds per square inch, gauge

5.1.20 *PVC* — Polyvinyl Chloride

5.1.21 *PVDF* — Polyvinylidene Fluoride

5.1.22 *RES.* — resistivity

5.1.23 *S.M. Flange* — sheet metal flange

5.1.24 *SS* — stainless steel

5.1.25 *Stub* — pipe or tube stub

6 Typical Facilities Services and Termination Matrix

6.1 This section of the guide identifies utilities, performance and connections at typical semiconductor facilities. This includes a Typical Facilities Services and Termination Matrix Example—United States (see Table 1). The guide identifies typical utilities and is not intended to be limited to the listed utilities. A Site-Specific Facilities Services and Termination Matrix (see Table 2) is also provided to document differences from Table 1 utilities.

6.2 The following is an explanation of the table headings in the Typical Facilities Services and Termination Matrix.

6.2.1 *Utilities* — This is a list of process or process-related services typically found in semiconductor facilities. The list is divided into water service, gas service, drains, bulk chemical distribution, exhaust and electrical services.

6.2.2 *Supply Temperature* — Temperature and ranges are measured in °C (°F). Equipment or tool cooling systems should be sized to accommodate these ranges.

6.2.3 *Supply/Return Pressure* — Pressure and ranges are measured in kPa (psig). Where possible, equipment should be designed to operate at lower pressure which reduces energy and safety risks. Regulators should be specified by the customer and provided with the tool by the supplier.

6.2.4 *Filtration* — Filtration provides an indicator of particle size expectation at POC to the tool. The fabrication and quality of point of use (POU) filtration should be specified by the customer and provided with the tool by the supplier.

6.2.5 *Specification* — The specification column is a condensed version of typical customer specifications. The column should be used by customers to specify service quality at POC to the tool. Specified quality should not be compromised or lessened in any way internally by the supplier's tool. When the tool purchase specification is prepared, expanded, and detailed, quality requirements should be documented.

6.2.6 *POC Material* — Material that the facility typically uses for connections to tools. Additional material quality characteristics should be identified in the tool purchase specification. Interior piping or tubing should be specified by the customer and provided with the tool by the supplier to meet or exceed the facility POC material quality. (See SEMI E49.)

6.2.7 *POC Fitting* — Compatible connectors are critical to ensure that a tool is "facility ready" once it arrives at a customer site. It is recommended that equipment be supplied with matching connections as requested by customer.

6.2.8 *Notes* — Special conditions or exceptions.

7 General Considerations

7.1 In addition to typical utilities, other facility-related issues should be addressed prior to tool installation.

7.1.1 *Point of Connection Locations* — Due to age of construction or design, all semiconductor facilities are not the same. To interface with equipment or tool, three suggested POC locations have been determined.

(See Figure 1). The POC locations are the top, the bottom, or the back of the tool. The customer should identify a POC location in the tool purchase specification. Suppliers should design tools to allow for internal routing to all locations, to avoid customization for every installation.

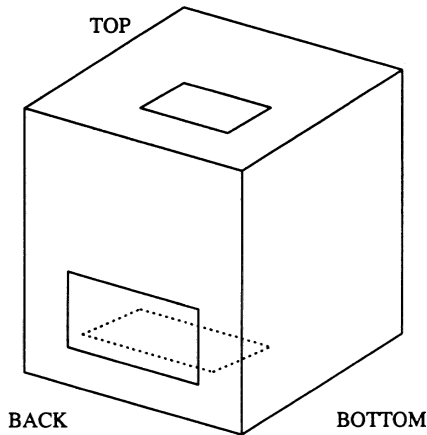


Figure 1

Three Point of Connection Locations

7.1.2 Seismic — The customer should specify the applicable earthquake zone for the installation site. The supplier should provide appropriate seismic restraints and installation instructions.

7.1.3 Vibration — The customer should specify that the supplier should provide the vibration sensitivity of the tool prior to purchase. (See SEMI E6.)

7.1.4 Control and Signal Circuits — The customer should specify and the supplier should provide control and signal circuits that when routed external to the tool are compliant with Article 725, Class 1, Class 2, and Class 3, Remote Control, Signaling and Power Limited — Control Circuits of the National Electrical Code. (See NFPA 70.)

Class 1 — No power limitation, 600 volts max.

Class 2 — Derived from listed Class 2 power supply.

Class 3 — Derived from listed Class 3 power supply.

7.1.5 Installation Requirements Provided by Suppliers — See SEMI E6.

7.1.6 High Purity Distribution Systems Recommendations — See SEMI E49.

7.1.7 POC Labeling — To ensure accurate connection of facility utilities to each tool POC, the customer should specify and the supplier should provide labeling for each POC. Service labeling should match descriptions listed in the supplier provided installation documentation. (See SEMI E6.)

7.1.7.1 If required, mechanical POC labels should include:

- Service purpose,
- Maximum pressure or pressure range, and
- Flow rate (if appropriate).

POC Label Example: Process Purge, Nitrogen, 80 psig Max.

7.1.7.2 If required, electrical power POC labels should include:

- Service purpose,
- Voltage & phase, and
- Current (Full load ampere continuous).

POC Label Example: Cryo Pump No. 2, 208 V, 1-phase, 28.2 FLA

7.1.7.3 If required, control and signaling POC labels should include:

- Purpose, and
- Class of control (see Section 7.1.4).

POC Label Example: Cryo Pump No. 2 Control, Class 2

Table 1 Typical Facilities Services and Termination Matrix Example — United States

| <i>Water Service</i> | <i>Supply Temp.</i> | <i>Supply Pressure (Return Pressure where noted)</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|--------------------------|---------------------------|---|----------------------------------|--------------------------|----------------------------------|--|--------------|
| Non-Potable Water | 4°C - amb (40°F - amb) | S = 258–552 kPa (40–80 psig) | N/A | non-human consumption | Cu/ PVC SCH 40/ PVC SCH 80 | NPT | |
| Ultra Pure Water | 20–24°C (68–76°F) | S = 310–379 kPa (45–55 psig) | < 0.1 µ | 18+ M ohms RES | PVDF/PFA | stub/p. flange ≥ 5 cm (2 in.) stub/union < 5 cm (2 in.) | |
| Deionized Water | 20–24°C (68–76°F) | S = 310–379 kPa (45–55 psig) | 0.1–0.2 µ | 17.5 M ohms RES | PVC SCH80/ PVDF/PFA | stub/p. flange ≥ 5 cm (2 in.) stub/union < 5 cm (2 in.) | |
| Hot Ultra Pure Water | 60–90°C (140–194°F) | S = 310–379 kPa (45–55 psig) | < 0.1 µ | site-specific | PVDF | stub/p. flange ≥ 5 cm (2 in.) stub/union < 5 cm (2 in.) | |
| Fire Protection | amb | NFPA 13 | N/A | NFPA 13 | N/A | Carbon Steel/SS | |
| Process Cooling Water | 10–16°C (50–60°F) | S = 310–552 kPa (45–80 psig) R = 0–207 kPa (0–30 psig) | 1.0–40 µ | 50 K ohms RES | PVC SCH80/ Cu/SS | NPT | |

| <i>Gas Service</i> | <i>Supply Temp.</i> | <i>Supply Pressure</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|---------------------------|---------------------|------------------------------|----------------------------------|--|---------------------|--------------------|----------------|
| Nitrogen, Ultra Pure | amb | 586–655 kPa (85–95 psig) | 0.01–0.1 µ | - | 316L EP SS | face seal | |
| Nitrogen, Process | amb | 552–621 kPa (80–90 psig) | 0.01–0.1 µ | - | 316L EP SS | face seal | |
| Nitrogen, Non- Process | amb | 552–655 kPa (80–95 psig) | 0.01–0.1 µ | - | Cu/SS | face seal | |
| Compressed Air | amb | 655–758 kPa (95–110 psig) | 0.1–5.0 µ | –73 to –40°C (–100 to –40°F) dew point | Cu/SS | compression | |
| Oxygen | amb | 552–586 kPa (80–85 psig) | 0.01–0.1 µ | - | 316L EP SS | face seal | |
| Hydrogen, Bulk | amb | 414–552 kPa (60–80 psig) | 0.01–0.1 µ | - | 316L EP SS | face seal | See NOTE 2. |
| Argon | amb | 448–586 kPa (65–85 psig) | 0.01–0.1 µ | - | 316L EP SS | face seal | |
| Helium | amb | 448–586 kPa (65–85 psig) | 0.01–0.1 µ | - | 316L EP SS | face seal | |

| <i>Gas Service</i> | <i>Supply Temp.</i> | <i>Supply Pressure</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|--------------------|---------------------|-------------------------------|------------------------------|----------------------|-------------------------|--------------------|--------------|
| Natural Gas | - | 7–21 kPa (1–3 psig) | - | - | - | NPT | |
| Process Vacuum | - | 53–58 cm Hg (21–23 in. Hg) | - | - | SS/Brass/ PVC SCH 80 | NPT | |
| Specialty Gases | - | site-specific | 0.01–0.1 μ | site-specific | site-specific | face seal | See NOTE 3. |

| <i>Drains</i> | <i>Waste Temp.</i> | <i>Pressure</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|--------------------------------|----------------------------------|-----------------|------------------------------|--------------------------------------|---|---------------------------|--------------|
| Acid Waste | < 43°C (110°F) See NOTE 1. | atm | - | - | CPVC SCH80/ PVC SCH 80 | stub | See NOTE 4. |
| H ₂ SO ₄ | See NOTE 1. | atm | - | - | PVDF/PVC SCH 80/CPVC SCH 80/ PP | flare type compression | See NOTE 4. |
| Solvent Waste | See NOTE 1. | atm | - | * Review Chemistry Flash Point | Carbon Steel / 304 SS | NPT or p. flange | See NOTE 4. |
| Industrial | < 43°C (110°F) See NOTE 1. | atm | - | - | PVC SCH 40/ PVC SCH 80 | stub | |
| DI Reclaim | Varies See NOTE 1. | atm | - | - | PVC SCH 40/ PVC SCH 80/ PVDF | stub | |
| Fluoride Waste | See NOTE 1. | atm | - | - | PP/PVC SCH 80/PVDF | stub | See NOTE 4. |
| HF Reclaim | See NOTE 1. | - | - | No water dilution | PVDF/PFA | stub | See NOTE 4. |
| Slurry | See NOTE 1. | - | - | - | PVC SCH 40 CLEAR/ PVC SCH 40/ PVC SCH 80/ PP | stub | |

| <i>Bulk Chemical Distribution</i> | <i>Supply Temp.</i> | <i>Supply Pressure (Return Pressure where noted)</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|-----------------------------------|---------------------|--|------------------------------|----------------------|---|--|---|
| Acids, Bases, Oxidizers | amb | - | 0.1 μ | PFA Filtration | PVC SCH 40 Clear/PP for secondary, PFA for primary | 5 cm (2 in.) FNPT for secondary, flare type compression for primary | Capability of secondary containment to tool interior |
| Solvents | amb | - | 0.1 μ | - | 316 SS | face seal/ compression | See NOTE 4. |

| <i>Exhaust</i> | <i>Temp.</i> | <i>Supply</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|----------------|--------------|---|----------------------------------|----------------------|----------------------------------|---------------------|---|
| Heat/General | - | -2.5 to -7.6 cm (-1 to -3 in H ₂ O) | - | - | 304 SS/Galv./Acid Res. SS | stub/s.m. flange | within -2.5 to -7.6 cm range (-1 to -3 in H ₂ O) ± 30% variability |
| Solvent | - | -2.5 to -7.6 cm (-1 to -3 in H ₂ O) | - | - | 304 SS/Galv. | stub/s.m. flange | within -2.5 to -7.6 cm range (-1 to -3 in H ₂ O) ± 30% variability |
| Vacuum Pump | - | -2.5 to -7.6 cm (-1 to -3 in H ₂ O) | - | - | 304 SS | NW flange | within -2.5 to -7.6 cm range (-1 to -3 in H ₂ O) ± 30% variability |
| Acid | - | -2.5 to -7.6 cm (-1 to -3 in H ₂ O) | - | - | Acid Res. SS/PVC SCH 40/PP | stub/p. flange | within -2.5 to -7.6 cm range (-1 to -3 in H ₂ O) ± 30% variability |

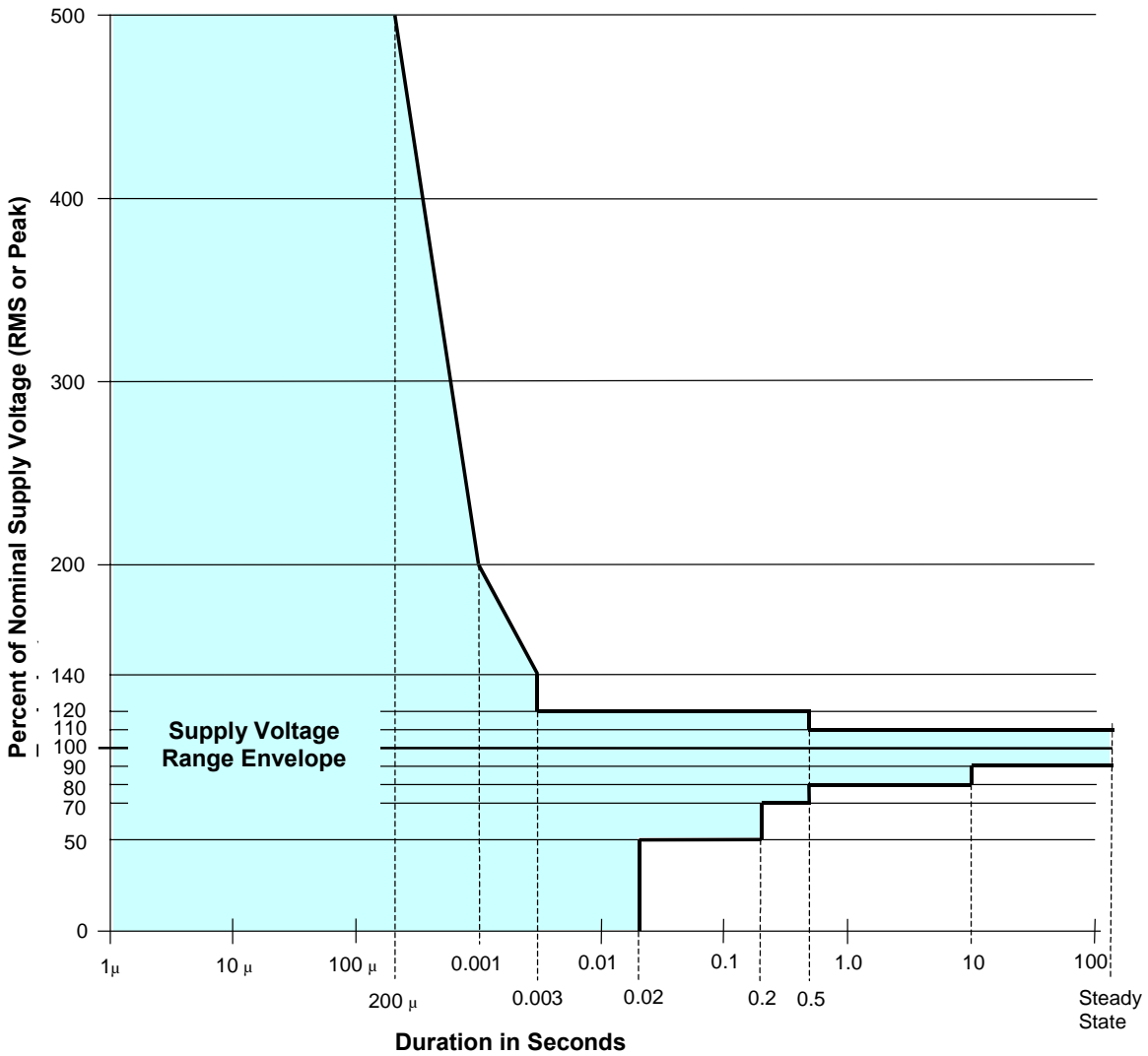
NOTE 1: Review waste composition, concentration, and temperature for material compatibility.

NOTE 2: Tool to have POC mechanical joint secondarily-contained and exhausted.

NOTE 3: Tool to have POC mechanical joint for toxic or hazardous gas POC mechanical joint secondarily-contained and exhausted.

NOTE 4: Tool to have POC mechanical joint secondarily-contained.

| <i>Electrical Services</i> | |
|------------------------------|---|
| Applicable Code | See NFPA 70 (National Electrical Code). |
| Supply Voltage, Nominal | 120/208V and 277/480V single-phase, 208/120V and 480/277V three-phase |
| Typical Supply Voltage Range | See Figure 2. |
| EMI Noise | See SEMI E33. |
| ESD Ambient | See SEMI E33. |
| Ground Currents | See IEEE 1100. |
| Computer Interfaces | See SEMI E30. |
| Electrical Interface | See SEMI E7. |
| UPS | Electrical standards as described by customer |



NOTE 1: For Equipment Voltage Sag Immunity Specification see SEMI F47.

Figure 2
Typical Facilities Supply Voltage Range Envelope

Table 2 Site-Specific Facilities Services and Termination Matrix

| <i>Water Service</i> | <i>Supply Temp.</i> | <i>Supply Pressure (Return Pressure where noted)</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|-----------------------|---------------------|--|------------------------------|----------------------|---------------------|--------------------|--------------|
| Non-Potable Water | | | | | | | |
| Ultra Pure Water | | | | | | | |
| Deionized Water | | | | | | | |
| Hot Ultra Pure Water | | | | | | | |
| Fire Protection | | | | | | | |
| Process Cooling Water | | | | | | | |

| <i>Gas Service</i> | <i>Supply Temp.</i> | <i>Supply Pressure</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|-----------------------|---------------------|------------------------|------------------------------|----------------------|---------------------|--------------------|--------------|
| Nitrogen, Ultra Pure | | | | | | | |
| Nitrogen, Process | | | | | | | |
| Nitrogen, Non-Process | | | | | | | |
| Compressed Air | | | | | | | |
| Oxygen | | | | | | | |
| Hydrogen, Bulk | | | | | | | |
| Argon | | | | | | | |
| Helium | | | | | | | |
| Natural Gas | | | | | | | |
| Process Vacuum | | | | | | | |
| Specialty Gases | | | | | | | |

| <i>Drains</i> | <i>Waste Temp.</i> | <i>Pressure</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|--------------------------------|--------------------|-----------------|------------------------------|----------------------|---------------------|--------------------|--------------|
| Acid Waste | | | | | | | |
| H ₂ SO ₄ | | | | | | | |
| Solvent Waste | | | | | | | |
| Industrial | | | | | | | |
| DI Reclaim | | | | | | | |
| Fluoride Waste | | | | | | | |
| HF Reclaim | | | | | | | |
| Slurry | | | | | | | |

| <i>Bulk Chemical Distribution</i> | <i>Supply Temp.</i> | <i>Supply Pressure (Return Pressure where noted)</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|-----------------------------------|---------------------|--|------------------------------|----------------------|---------------------|--------------------|--------------|
| Acids, Bases, Oxidizers | | | | | | | |
| Solvents | | | | | | | |



| <i>Exhaust</i> | <i>Temp.</i> | <i>Supply</i> | <i>Filtration (absolute)</i> | <i>Specification</i> | <i>POC Material</i> | <i>POC Fitting</i> | <i>Notes</i> |
|----------------|--------------|---------------|----------------------------------|----------------------|---------------------|--------------------|--------------|
| Heat/General | | | | | | | |
| Solvent | | | | | | | |
| Vacuum Pump | | | | | | | |
| Acid | | | | | | | |

| <i>Electrical Services</i> | |
|----------------------------|--|
| Applicable Code | |
| Supply Voltage, Nominal | |
| Supply Voltage Range | |
| EMI Noise | |
| ESD Ambient | |
| Ground Currents | |
| Computer Interfaces | |
| Electrical Interface | |
| UPS | |

| <i>Site-Specific Notes:</i> | |
|----------------------------------|--|
| Freight Elevator: | |
| Height/Width/Depth | |
| Load Rating | |
| Bldg./Fab Restrictions: | |
| Cleanroom Parameters | |
| Noise Level | |
| Ceiling Heights | |
| Max. Clearances in Support Areas | |
| Other: | |
| | |
| | |

8 Related Documents

8.1 SEMI Standards

SEMI E4 — SEMI Equipment Communications
Standard 1 Message Transfer (SECS-I)

SEMI E5 — SEMI Equipment Communications
Standard 2 Message Content (SECS-II)

SEMI E37 — High-Speed SECS Message Services
(HSMS) Generic Services

SEMI E37.1 — High-Speed SECS Message Services
Single-Session Mode (HSMS-SS)

SEMI E37.2 — High-Speed SECS Message Services
General Session (HSMS-GS)

SEMI E76 — Guide for 300 mm Process Equipment
Points of Connection to Facility Services

SEMI S2 — Environmental, Health, and Safety
Guideline for Semiconductor Manufacturing Equipment

SEMI S6 — Safety Guideline for Ventilation



NOTICE: SEMI makes no warranties or representations as to the suitability of the guides set forth herein for any particular application. The determination of the suitability of the guide is solely the responsibility of the user. Users are cautioned to refer to manufacturer's instructions, product labels, product data sheets, and other relevant literature respecting any materials mentioned herein. These guides are subject to change without notice.

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SEMI E52-0703

PRACTICE FOR REFERENCING GASES AND GAS MIXTURES USED IN DIGITAL MASS FLOW CONTROLLERS

This practice was technically approved by the Global Gases Committee and is the direct responsibility of the North American Gases Committee. Current edition approved by the North American Regional Standard Committee on April 11, 2003. Initially available at www.semi.org May 2003; to be published July 2003. Originally published in 1995; previously published March 2002.

NOTICE: This document was completely rewritten in 2003.

1 Purpose

1.1 To provide a numerical index of gases and gas mixtures used in the semiconductor industry that will give an ordered reference for the gases and gas mixtures when used in mass flow devices. This index or list will facilitate the production and use of digital mass flow devices.

2 Scope

2.1 The list includes gases, gas mixtures, and vaporizable materials that can be used in mass flow devices. The list will supplement, not replace, existing DOT/OSHA or other identification systems. For ease of use, the list is presented sorted by gas code, gas name, and symbol for gases and vaporizable materials and by code and mixture percentage for gas mixtures.

NOTICE: This standard does not purport to address safety issues, if any, associated with its use. It is the responsibility of the users of this standard to establish appropriate safety health practices and determine the applicability of regulatory or other limitations prior to use.

3 Limitations

3.1 This list does not provide information related to the safe use and intended application of listed materials.

4 Referenced Standards

4.1 *NIST Standard*¹

NIST AD732-043 — JANAF Thermochemical Tables, 2nd Edition

4.2 *Miscellaneous Publications*

Dangerous Properties of Industrial Materials, 5th Edition, N. Irving Sax, © 1979²

1 National Institute of Standards and Technology, 100 Bureau Drive, Stop 3460, Gaithersburg, MD 20899-3460, USA. Telephone: 301.975.6478, Website: www.nist.gov

2 CRC Press LLC, (Headquarters) 2000 Corporate Blvd., NW, Boca Raton, FL 33431, 561.994.0555

Encyclopedia of Gas, Air Liquide, © 1976³

Matheson Gas Data Book, 6th Edition, © 1980⁴

The Merck Manual Index, 6th Edition⁵

4.3 *Data Sheets*

Air Products & Chemicals Data Sheet, © 1991⁶

American Cyanamid Data Sheet⁷

Callery Chemical Borazine Data Sheet, © 1984⁸

DuPont Data Sheet⁹

Schumacher Material Safety Data Sheet, No. R&D 49.3 JN, Revision Date 1/95¹⁰

Schumacher Product Data Sheet, No. 23, Revision 3

4.4 *Handbooks*

Chemical Engineers' Handbook, 5th Edition¹¹

CRC Handbook of Chemistry and Physics, 75th Edition, © 1994¹²

4.5 *Other Standard*

Nomenclature of Organic Chemistry, authored by International Union of Pure and Applied Chemistry (IUPAC), edited by J. Rigaudy, © 1979¹³

3 Litton Publishing

4 Matheson Gas Products, Inc., 959 Route 46 East, P.O. Box 624, Parsippany, NJ 07054, 973.257.1100

5 This publication is available from Franklin Electronic Publishers, 1 Franklin Plaza, Burlington, NJ 08060, 1.800.266.5626

6 Air Products & Chemicals Inc.-PA, Rural Route 1, Tamaqua, PA 18252, 717.467.2981

7 American Cyanamid Company, CALI Corporation Center, 50 Tice Blvd., Woodcliff Lake, NJ 07675, 201.930.0455

8 Callery Chemical Company, P.O. Box 429, Pittsburgh, PA 15230, 412.967.4100

9 E.I. du Pont de Nemours and Company, 1007 Market St., Wilmington, DE 19898, 302.774.1000

10 Schumacher, 1969 Palomar Oaks Way, Carlsbad, CA 92009-1307, 619.931.9555

11 McGraw-Hill Inc., Princeton Rd., Hightstown, NJ 08520, 609.426.5934

12 CRC Press LLC Headquarters, 2000 NW Corporate Blvd, Boca Raton, FL 33431, USA, Phone: 1(800)272-7737 or (561)994-0555 Fax: 1(800)374-3401 or (561)989-9732

13 This publication is available from Franklin Book Company, 7804 Montgomery Ave., Elkon's Park, PA 19027, 215.635.5252

NOTICE: Unless otherwise indicated, all documents cited shall be the latest published versions.

5 Terminology

5.1 Definitions

5.1.1 *formula* — the structural representation of a gas, indicating the molecular groupings. Formulas are unique and unambiguous except in the case of isomers.

5.1.2 *gas code* — an integer that is uniquely associated with a particular gas.

5.1.3 *gas name* — the accepted name for a gas as specified in *Nomenclature of Organic Chemistry*.

5.1.4 *symbol* — commonly accepted, unambiguous, and unique identification using ASCII characters with no subscripts, superscripts, or parenthesis.

6 Gas Table Sorted by Code

Table 1 Gases Sorted by Code

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-------------------|---------------|-----------------------------|----------------|------------|
| 1 | Helium | He | He | | 1 |
| 2 | Neon | Ne | Ne | | 1 |
| 3 | Radon | Rn | Rn | | 2 |
| 4 | Argon | Ar | Ar | | 1 |
| 5 | Krypton | Kr | Kr | | 1 |
| 6 | Xenon | Xe | Xe | | 1 |
| 7 | Hydrogen | H2 | H ₂ | | 1 |
| 8 | Air | Air | | | 1 |
| 9 | Carbon Monoxide | CO | CO | | 1 |
| 10 | Hydrogen Bromide | HBr | HBr | | 1 |
| 11 | Hydrogen Chloride | HCl | HCl | | 1 |
| 12 | Hydrogen Fluoride | HF | HF | | 1 |
| 13 | Nitrogen | N2 | N ₂ | | 1 |
| 14 | Deuterium | D2 | H ₂ ² | D2 | 2 |
| 15 | Oxygen | O2 | O ₂ | | 1 |
| 16 | Nitric Oxide | NO | NO | | 2 |
| 17 | Hydrogen Iodide | HI | HI | | 1 |
| 18 | Fluorine | F2 | F ₂ | | 1 |
| 19 | Chlorine | Cl2 | Cl ₂ | | 1 |
| 20 | Water Vapor | H2O | H ₂ O | | 2 |
| 21 | Bromine | Br2 | Br ₂ | | 2 |
| 22 | Hydrogen Sulfide | H2S | H ₂ S | | 1 |
| 23 | Hydrogen Selenide | H2Se | H ₂ Se | | 1 |
| 24 | Hydrogen Cyanide | HCN | HCN | | 1 |
| 25 | Carbon Dioxide | CO2 | CO ₂ | | 1 |
| 26 | Nitrogen Dioxide | NO2 | NO ₂ | | 1 |
| 27 | Nitrous Oxide | N2O | N ₂ O | | 1 |
| 28 | Methane | CH4 | CH ₄ | | 1 |
| 29 | Ammonia | NH3 | NH ₃ | | 1 |
| 30 | Ozone | O3 | O ₃ | | 1 |
| 31 | Phosphine | PH3 | PH ₃ | | 1 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-------------------------|--|------------------------------------|--|------------|
| 32 | Sulfur Dioxide | SO ₂ | SO ₂ | | 1 |
| 33 | Methyl Fluoride | CH ₃ F | CH ₃ F | Fluoromethane or Methane, Fluoro | 1 |
| 34 | Carbonyl Sulfide | COS | COS | | 1 |
| 35 | Arsine | AsH ₃ | AsH ₃ | | 1 |
| 36 | Methyl Chloride | CH ₃ Cl | CH ₃ Cl | Chloromethane or Methane, Chloro | 1 |
| 37 | Cyanogen Chloride | ClCN | ClCN | | 1 |
| 38 | Ethylene | C ₂ H ₄ | CH ₂ =CH ₂ | Ethene | 1 |
| 39 | Silane | SiH ₄ | SiH ₄ | | 1 |
| 40 | Carbon Disulfide | CS ₂ | CS ₂ | | 2 |
| 41 | Oxygen Difluoride | OF ₂ | OF ₂ | | 1 |
| 42 | Acetylene | C ₂ H ₂ | HC≡CH | Ethyne | 1 |
| 43 | Germane | GeH ₄ | GeH ₄ | | 1 |
| 44 | Methyl Bromide | CH ₃ Br | CH ₃ Br | Bromomethane or Methane, Bromo | 1 |
| 45 | Ethylene Oxide | C ₂ H ₄ O | C ₂ H ₄ O | Acetaldehyde | 1 |
| 46 | Carbonyl Fluoride | CF ₂ O | CF ₂ O | | 1 |
| 47 | Methyl Mercaptan | CH ₄ S | CH ₃ SH | | 1 |
| 48 | Boron Trifluoride | BF ₃ | BF ₃ | | 1 |
| 49 | Fluoroform | CHF ₃ | CHF ₃ | Trifluoromethane or Methane, Trifluoro, F-23, R-23 | 1 |
| 50 | Hydrazine | N ₂ H ₄ | H ₂ NNH ₂ | | 2 |
| 51 | Vinyl Fluoride | C ₂ H ₃ F | H ₂ C=CHF | | 1 |
| 52 | Methylamine | CH ₅ N | CH ₃ NH ₂ | Amino Methane, Monomethylamine | 2 |
| 53 | Nitrogen Trifluoride | NF ₃ | NF ₃ | | 1 |
| 54 | Ethane | C ₂ H ₆ | CH ₃ CH ₃ | | 1 |
| 55 | Vinyl Chloride | C ₂ H ₃ Cl | CH ₂ =CHCl | Chloroethylene | 1 |
| 56 | Vinyl Bromide | C ₂ H ₃ Br | CH ₂ =CHBr | | 1 |
| 57 | Chlorodifluoromethane | CHClF ₂ | CClHF ₂ | F-22, R-22 | 1 |
| 58 | Diborane | B ₂ H ₆ | B ₂ H ₆ | | 1 |
| 59 | Cyanogen | C ₂ N ₂ | NCCN | Oxalodinitrile | 1 |
| 60 | Phosgene | CCl ₂ O | CCl ₂ O | Carbonyl Chloride | 1 |
| 61 | Cyclopropane | C ₃ H ₆ | C ₃ H ₆ | | 1 |
| 62 | Phosphorus Trifluoride | PF ₃ | PF ₃ | | 1 |
| 63 | Carbon Tetrafluoride | CF ₄ | CF ₄ | Tetrafluoromethane or Methane, Tetrafluoro | 1 |
| 64 | Difluoroethylene | C ₂ H ₂ F ₂ | CH ₂ =CF ₂ | G-1132A, Vinylidene fluoride | 1 |
| 65 | Dichlorodifluoromethane | CHCl ₂ F | CHCl ₂ F | F-21, R-21 | 1 |
| 66 | Allene | C ₃ H ₄ | CH ₂ =C=CH ₂ | Propadiene | 1 |
| 67 | Dichlorosilane | SiH ₂ Cl ₂ | SiH ₂ Cl ₂ | | 1 |
| 68 | Methyl Acetylene | C ₃ H ₄ | CH ₃ C≡CH | Propyne | 1 |
| 69 | Propylene | C ₃ H ₆ | CH ₃ CH=CH ₂ | Propene | 1 |
| 70 | Boron Trichloride | BCl ₃ | BCl ₃ | | 1 |
| 71 | Chloroform | CHCl ₃ | CHCl ₃ | Trichloromethane or Methane, Trichloro | 2 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|--------------------------|--|--|--|------------|
| 72 | Perchloryl Fluoride | ClO ₃ F | ClO ₃ F | | 1 |
| 73 | Dimethyl Ether | C ₂ H ₆ O | CH ₃ OCH ₃ | Methylether | 1 |
| 74 | Chlorotrifluoromethane | CClF ₃ | ClCF ₃ | F-13, R-13 | 1 |
| 75 | Ethyl Chloride | C ₂ H ₅ Cl | C ₂ H ₅ Cl | Chloroethane or Ethane, Chloro or Ethyl Chloride | 1 |
| 76 | Bromine Trifluoride | BrF ₃ | BrF ₃ | | 1 |
| 77 | Chlorine Trifluoride | ClF ₃ | ClF ₃ | | 1 |
| 78 | Nitrogen Trioxide | N ₂ O ₃ | N ₂ O ₃ | | 1 |
| 79 | Boron Tribromide | BBr ₃ | BBr ₃ | | 1 |
| 80 | Bromotrifluoromethane | CBrF ₃ | BrCF ₃ | F-13B1, R-13B1 | 1 |
| 81 | Methyl Vinyl Ether | C ₃ H ₆ O | CH ₃ OCH=CH ₂ | | 1 |
| 82 | Difluoroethane | C ₂ H ₄ F ₂ | CH ₃ CHF ₂ | Ethylidene Fluoride, R-152A | 1 |
| 83 | Tribromomethane | CHBr ₃ | CHBr ₃ | | 2 |
| 84 | Dichlorodifluoromethane | CCl ₂ F ₂ | CCl ₂ F ₂ | F-12, R-12 | 1 |
| 85 | Dimethylamine | C ₂ H ₇ N | (CH ₃) ₂ NH | | 1 |
| 86 | Sulfur Tetrafluoride | SF ₄ | SF ₄ | | 1 |
| 87 | Sulfuryl Fluoride | SO ₂ F ₂ | SO ₂ F ₂ | | 1 |
| 88 | Silicon Tetrafluoride | SiF ₄ | SiF ₄ | | 1 |
| 89 | Propane | C ₃ H ₈ | CH ₃ CH ₂ CH ₃ | | 1 |
| 90 | Intentionally Left Blank | | | | |
| 91 | Trichlorofluoromethane | CCl ₃ F | CCl ₃ F | F-11, R-11 | 1 |
| 92 | Intentionally Left Blank | | | | |
| 93 | Ethyl Acetylene | C ₄ H ₆ | CH ₃ CH ₂ C≡CH | | 1 |
| 94 | Tetrafluoroethylene | C ₂ F ₄ | F ₂ C=CF ₂ | | 1 |
| 95 | Nitrogen Tetroxide | N ₂ O ₄ | N ₂ O ₄ | Dinitrogenoxide | 2 |
| 96 | Arsenic Pentafluoride | AsF ₅ | AsF ₅ | | 2 |
| 97 | Disilane | Si ₂ H ₆ | Si ₂ H ₆ | | 2 |
| 98 | Transbutene | C ₄ H ₈ | CH ₃ CH=CHCH ₃ | | 2 |
| 99 | Germanium Tetrafluoride | GeF ₄ | GeF ₄ | Tetrafluorogermane | 2 |
| 100 | Butadiene | C ₄ H ₆ | CH ₂ =C=CHCH ₃ | Methylallene | 1 |
| 101 | Carbon Tetrachloride | CCl ₄ | CCl ₄ | Tetrachloromethane or Methane, Tetrachloro | 2 |
| 102 | Phosphorous Oxychloride | POCl ₃ | POCl ₃ | | 2 |
| 103 | Difluorochloroethane | C ₂ H ₃ ClF ₂ | CF ₂ ClCH ₃ | F-142B, R-142B | 1 |
| 104 | Butene | C ₄ H ₈ | CH ₃ CH ₂ CH=CH ₂ | 1-Butene | 1 |
| 105 | Bromotrifluoroethylene | C ₂ BrF ₃ | CF ₂ CFBr | | 1 |
| 106 | Isobutene | C ₄ H ₈ | (CH ₃) ₂ C=CH ₂ | Isobutylene, Methylpropene | 2 |
| 107 | Cisbutene | C ₄ H ₈ | CH ₃ CH=CHCH ₃ | Cis-2-Butene | 2 |
| 108 | Silicon Tetrachloride | SiCl ₄ | SiCl ₄ | Tetrachlorosilane | 2 |
| 109 | Trimethylamine | C ₃ H ₉ N | (CH ₃) ₃ N | Methylamine | 1 |
| 110 | Sulfur Hexafluoride | SF ₆ | SF ₆ | | 1 |
| 111 | Isobutane | C ₄ H ₁₀ | (CH ₃) ₂ CHCH ₃ | 2-Methylpropane or Propane, 2-Methyl | 1 |
| 112 | Trichloroethane | C ₂ H ₃ Cl ₃ | CH ₃ CCl ₃ | TCA, Methylchloroform | 2 |
| 113 | Germanium Tetrachloride | GeCl ₄ | GeCl ₄ | Tetrachlorogermane | 2 |
| 114 | Titanium Tetrachloride | TiCl ₄ | TiCl ₄ | | 2 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|--------------------------------|---|--|--|------------|
| 115 | Iodine Pentafluoride | IF ₅ | IF ₅ | | 1 |
| 116 | Bromine Pentafluoride | BrF ₅ | BrF ₅ | | 1 |
| 117 | Butane | C ₄ H ₁₀ | CH ₃ (CH ₂) ₂ CH ₃ | | 1 |
| 118 | Hexafluoroethane | C ₂ F ₆ | F ₃ CCF ₃ | F-116, Perfluoroethane | 1 |
| 119 | Chloropentafluoroethane | C ₂ ClF ₅ | ClCF ₂ CF ₃ | F-115, R-115 | 1 |
| 120 | Methylbutene | C ₅ H ₁₀ | CH ₃ CH ₂ CCH ₃ =CH ₂ | 2-Methyl-1-Butene | 1 |
| 121 | Tungsten Hexafluoride | WF ₆ | WF ₆ | | 2 |
| 122 | Dimethylpropane | C ₅ H ₁₂ | (CH ₃) ₄ C | Neopentane | 2 |
| 123 | Uranium Hexafluoride | UF ₆ | UF ₆ | | 2 |
| 124 | Molybdenum Hexafluoride | MoF ₆ | MoF ₆ | | 2 |
| 125 | Dichlorotetrafluoroethane | C ₂ Cl ₂ F ₄ | F ₃ CCCl ₂ F | F-114, R-114 | 1 |
| 126 | Trichlorotrifluoroethane | C ₂ Cl ₃ F ₃ | CF ₂ ClCCl ₂ F | F-113, R-113 | 1 |
| 127 | Hexane | C ₆ H ₁₄ | CH ₃ (CH ₂) ₄ CH ₃ | | 2 |
| 128 | Perfluoropropane | C ₃ F ₈ | CF ₂ (CF ₃) ₂ | | 1 |
| 129 | Octafluorocyclobutane | C ₄ F ₈ | (CF ₂) ₄ | Perfluorocyclobutane or Cyclobutane, Perfluoro | 1 |
| 130 | Dibromotetrafluoroethane | C ₂ Br ₂ F ₄ | BrF ₂ CCF ₂ Br | F-114B2, R-114B2 | 1 |
| 131 | Trimethoxyborine | C ₃ H ₉ BO ₃ | B(OCH ₃) ₃ | TMB, Trimethylborate | 2 |
| 132 | Trimethylphosphorous | C ₃ H ₉ P | (CH ₃) ₃ P | Trimethylphosphine, TMP | 2 |
| 133 | Trimethylphosphite | C ₃ H ₉ PO ₃ | (CH ₃ O) ₃ P | TMPI, Trimethoxyphosphine | 2 |
| 134 | Difluorosilane | SiH ₂ F ₂ | SiH ₂ F ₂ | | 10 |
| 135 | Dimethylzinc | C ₂ H ₆ Zn | (CH ₃) ₂ Zn | | 3 |
| 136 | Ethanol | C ₂ H ₆ O | CH ₃ CH ₂ OH | | 2 |
| 137 | Halothane | C ₂ HBrClF ₃ | BrClHCCF ₃ | | 6 |
| 138 | Hexafluoropropylene | C ₃ F ₆ | CF ₃ CF=CF ₂ | Perfluoropropylene or Propylene, Perfluoro | 1 |
| 139 | Hexamethyldisilane | C ₆ H ₁₈ Si ₂ | (CH ₃) ₃ Si ₂ (CH ₃) ₃ | HMDSi, HMDS | 3 |
| 140 | Nickel Carbonyl | C ₄ O ₄ Ni | Ni(CO) ₄ | | 1 |
| 141 | Nitrosyl Chloride | NOCl | NOCl | | 1 |
| 142 | Pentaborane | B ₅ H ₉ | B ₅ H ₉ | | 2 |
| 143 | Phosphorus Pentafluoride | PF ₅ | PF ₅ | | 1 |
| 144 | Tetraethoxysilane | C ₈ H ₂₀ O ₄ Si | (C ₂ H ₅ O) ₄ Si | TEOS | 2 |
| 145 | Tin Tetrachloride | SnCl ₄ | SnCl ₄ | Tetrachlorostannane | 2 |
| 146 | Tributylaluminum | C ₁₂ H ₂₇ Al | (CH ₃ CH ₂ CH ₂ CH ₂) ₃ Al | TBAI | 3 |
| 147 | Trichlorosilane | SiHCl ₃ | SiHCl ₃ | | 5 |
| 148 | Triethylgallium | C ₆ H ₁₅ Ga | (C ₂ H ₅) ₃ Ga | TEGa | 4 |
| 149 | Trimethylaluminum | C ₃ H ₉ Al | Al(CH ₃) ₃ | TMA, TMAI | 4 |
| 150 | Trimethylantimony | C ₃ H ₉ Sb | (CH ₃) ₃ Sb | Trimethylstibene | 2 |
| 151 | Trimethylarsenic | C ₃ H ₉ As | (CH ₃) ₃ As | Trimethylarsine, TMAs | 2 |
| 152 | Trimethylgallium | C ₃ H ₉ Ga | Ga(CH ₃) ₃ | TMGa | 4 |
| 153 | Trimethylindium | C ₃ H ₉ In | (CH ₃) ₃ In | TMIn | 3 |
| 154 | Diethylsilane | C ₄ H ₁₂ Si | (C ₂ H ₅) ₂ SiH ₂ | | 2 |
| 155 | Pentafluoroethane | C ₂ HF ₅ | CF ₃ CHF ₂ | F-125, R-125 | 9 |
| 156 | Tetrafluoroethane | C ₂ H ₂ F ₄ | CH ₂ FCF ₃ | R-134A, F-134A | 2 |
| 157 | Tetrafluorohydrazine | N ₂ F ₄ | F ₂ NNF ₂ | Dinitrogen Tetrafluoride | 1 |
| 158 | Tetramethylcyclotetra-siloxane | C ₄ H ₁₆ Si ₄ O ₄ | (CH ₃) ₄ H ₄ (SiO) ₄ | TOMCATS | 7 |

| Code | Gas Name | Symbol | Formula | Synonym | Ref |
|------|------------------------------------|-----------|--|---|-----|
| 159 | Tritium | T2 | H ₃ ² | T2 | 2 |
| 160 | Difluoromethane | CH2F2 | CH ₂ F ₂ | Methylene Fluoride | 2 |
| 161 | Tertiarybutylarsine | C4H11As | C(CH ₃) ₃ AsH ₂ | TBA | 8 |
| 162 | Tertiarybutylphosphine | C4H11P | C(CH ₃) ₃ PH ₂ | TBP | 8 |
| 163 | Triethylborate | C6H15O3B | B(OC ₂ H ₅) ₃ | TEB, Triethoxyborane | 2 |
| 164 | Dimethylaluminum-hydride | C2H7Al | (CH ₃) ₂ AlH | DMAH | 13 |
| 165 | Trimethylaminealane | C3H12AlN | (CH ₃) ₃ NAlH ₃ | TMAA | 11 |
| 166 | Dimethylethylaminealane | C4H14NAI | (CH ₃) ₂ C ₂ H ₅ NAlH ₃ | DMEAA | 14 |
| 167 | Nitric Acid | HNO3 | HNO ₃ | | 2 |
| 168 | Tetrachloroethylene | C2Cl4 | Cl ₂ C=CCl ₂ | Perchloroethylene orEthylene, Perchloro | 2 |
| 169 | Ethyleneglycol | C2H6O2 | HOCH ₂ CH ₂ OH | Ehtanediol, Glycol | 2 |
| 170 | Hexanediol-1,6 | C6H14O2 | HO(CH ₂) ₆ OH | Hexyleneglycol, Hexamethyleneglycol | 2 |
| 171 | Sulfuric Acid | H2SO4 | H ₂ SO ₄ | | 2 |
| 172 | Chlorobenzene | C6H5Cl | C ₆ H ₅ Cl | Chlorobenzol, Phenylchloride | 2 |
| 173 | Acetonitrile | C2H3N | CH ₃ CN | | 2 |
| 174 | Ethylbenzene | C8H10 | C ₆ H ₅ C ₂ H ₅ | | 2 |
| 175 | Intentionally Left Blank | | | | |
| 176 | Methanol | CH4O | CH ₃ OH | Methyl Alcohol | 2 |
| 177 | Methylcyclohexane | C7H14 | CH ₃ C ₆ H ₁₁ | Hexahydrotoluene | 2 |
| 178 | 4-Methyl, 1-Pentene | C6H12 | (CH ₃) ₂ CHCH ₂ CH=CH ₂ | | 2 |
| 179 | o-Xylene | C8H10 | 1,2-(CH ₃) ₂ C ₆ H ₄ | 1,2-Dimethylbenzene | 2 |
| 180 | Phenol | C6H6O | C ₆ H ₅ OH | | 2 |
| 181 | Toluene | C7H8 | C ₆ H ₅ CH ₃ | Methylbenzene | 2 |
| 182 | Tetrahydrofuran | C4H8O | C ₄ H ₈ O | | 2 |
| 183 | Methyltrichlorosilane | CH3Cl3Si | CH ₃ SiCl ₃ | MTS | 2 |
| 184 | Acetone | C3H6O | CH ₃ COCH ₃ | | 2 |
| 185 | Methylsilane | CH6Si | CH ₃ SiH ₃ | Monomethylsilane | 2 |
| 186 | 2,2 Dichloro 1,1,1 Trifluoroethane | C2HCl2F3 | CHCl ₂ -CF ₃ | Freon 123, Suva 123 | 2 |
| 187 | Isopropal Alcohol | C3H8O | (CH ₃) ₂ CHOH | 2-Propanol | 2 |
| 188 | Diethoxy Dimethyl Silane | C6H16O2Si | (C ₂ H ₅ O) ₂ Si(CH ₃) ₂ | | 2 |
| 189 | Sulfur Monochloride | S2Cl2 | S ₂ Cl ₂ | | 2 |
| 190 | Trimethyl Silane | C3H10Si | (CH ₃) ₃ SiH | | 2 |
| 191 | Dichloroethylene -trans | C2H2Cl2 | CHCl=CHCl | | 2 |
| 192 | Hexafluorobenzene | C6F6 | C ₆ F ₆ | | 2 |
| 193 | Phosphorus Trichloride | PCL3 | PCl ₃ | | 2 |
| 194 | Titanium Tetraisopropoxide | C12H28OTi | Ti(OC ₃ H ₇) ₄ | | 1 |
| 195 | Arsenic Trifluoride | AsF3 | AsF ₃ | | 2 |
| 196 | Arsenic Triiodine | AsI3 | AsI ₃ | | 2 |
| 197 | Benzene | C6H6 | C ₆ H ₆ | | 2 |
| 198 | Borazine | B3N3H6 | H ₃ B ₃ N ₃ H ₃ | | 14 |
| 199 | Bromochlorodifluoromethane | CBrClF2 | BrClCF ₂ | | 2 |
| 200 | Carbon Tetrabromide | CBr4 | CBr ₄ | | 2 |
| 201 | Chlorine Dioxide | ClO2 | ClO ₂ | | 2 |
| 202 | Chlorine Pentafluoride | ClF5 | ClF ₅ | | 2 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-------------------------|---------------|---|--------------------------------|------------|
| 203 | Chlorodifluoroethane | C2H3ClF2 | CH ₃ -CF ₂ Cl | R-142b | 4 |
| 204 | Chlorodifluoroethylene | C2HClF2 | CF ₂ =CHCl | R-1122, FREON-1122 | 4 |
| 205 | Chlorosilane | SiH3Cl | SiH ₃ Cl | | 2 |
| 206 | Chlorotrifluoroethylene | C2ClF3 | FCCl=CF ₂ | R-1113, FREON-1113 | 2 |
| 207 | Cyclobutane | C4H8 | C ₄ H ₈ | Tetramethylene | 2 |
| 208 | Diazomethane | CH2N2 | CH ₂ N ₂ | Acomethylene | 2 |
| 209 | Dibromodifluoromethane | CBr2F2 | Br ₂ CF ₂ | R-12B2, FREON-12B2 | 2 |
| 210 | Dichloroethylene | C2H2Cl2 | CH ₂ =CCl ₂ | Vinylidene Chloride | 2 |
| 211 | Dichloroethylene -cis | C2H2Cl2 | CHCl=CHCl | | 2 |
| 212 | Dichlorodimethylsilane | C2H6SiCl2 | (CH ₃) ₂ SiCl ₂ | | 2 |
| 213 | Diethylamine | C4H11N | (C ₂ H ₅) ₂ NH | | 2 |
| 214 | Diethylzinc | C4H10Zn | Zn(C ₂ H ₅) ₂ | | 2 |
| 216 | Arsenic Trichloride | AsCl3 | AsCl ₃ | | 2 |
| 217 | Digermane | Ge2H6 | Ge ₂ H ₆ | | 2 |
| 218 | Dimethylcadmium | C2H6Cd | (CH ₃) ₂ Cd | | 2 |
| 219 | Dimethylsilane | C2H8Si | (CH ₃) ₂ SiH ₂ | | 2 |
| 220 | Dimethyltellurium | C2H6Te | (CH ₃) ₂ Te | | 2 |
| 221 | Ethyl Fluoride | C2H5F | CH ₃ CH ₂ F | Fluoroethane, R-161, FREON-161 | 2 |
| 222 | Ethylene Dichloride | C2H4Cl2 | ClCH ₂ CH ₂ Cl | 1,2 Dichloroethane | 2 |
| 223 | Fluoroacetylene | C2HF | FC≡CH | | 2 |
| 224 | Fluorotriethoxysilane | C6H15OSiF | (C ₂ H ₅ O) ₃ SiF | | 2 |
| 225 | Hexafluoroacetone | C3F6O | (CF ₃) ₂ CO | | 2 |
| 226 | Aluminum Trifluoride | AlF3 | AlF ₃ | | 2 |
| 227 | Hexamethyldisilazane | C6H19Si2N | (CH ₃) ₆ Si ₂ NH | | 2 |
| 228 | Hexamethyldisiloxane | C6H18Si2O | (CH ₃) ₆ Si ₂ O | | 2 |
| 229 | Hydrogen telluride | H2Te | H ₂ Te | | 2 |
| 230 | Iron Carbonyl | C5O5Fe | Fe(CO) ₅ | | 2 |
| 231 | Isopentane | C5H12 | CH ₃ CH ₂ CH(CH ₃) ₂ | 2-Methylbutane | 2 |
| 232 | Difluoroamidogen | NF2 | NF ₂ | | 2 |
| 233 | Monoethylamine | C2H7N | C ₂ H ₅ NH ₂ | | 2 |
| 234 | Monomethyl hydrazine | CH6N2 | CH ₃ N ₂ H ₃ | | 2 |
| 235 | Nitromethane | CH3NO2 | CH ₃ NO ₂ | | 2 |
| 236 | Octafluorobutane | C4F8 | C ₄ F ₈ | | 3 |
| 237 | Octane | C8H18 | CH ₃ (CH ₂) ₆ CH ₃ | | 2 |
| 238 | Oxygen Dichloride | OCl2 | OCl ₂ | | 2 |
| 239 | Pentaborane(11) | B5H11 | B ₅ H ₁₁ | | 2 |
| 240 | Pentane | C5H12 | CH ₃ (CH ₂) ₃ CH ₃ | | 2 |
| 241 | Perfluorobutane | C4F10 | C ₄ F ₁₀ | | 3 |
| 242 | Arsenic Tribromide | AsBr3 | AsBr ₃ | | 2 |
| 243 | Rhenium Hexafluoride | ReF6 | ReF ₆ | | 2 |
| 244 | Deuteriumsiline | SiD4 | SiH ₂ ² ₄ | | 2 |
| 245 | Stibine | SbH3 | SbH ₃ | | 2 |
| 246 | Sulfur Trioxide | SO3 | SO ₃ | | 2 |
| 247 | Tellurium Hexafluoride | TeF6 | TeF ₆ | | 2 |

| Code | Gas Name | Symbol | Formula | Synonym | Ref |
|------|----------------------------------|---|--|---|-----|
| 248 | Tetrachlorodiborane | B ₂ Cl ₄ | B ₂ Cl ₄ | | 2 |
| 249 | Tetrafluorodiborane | B ₂ F ₄ | B ₂ F ₄ | | 2 |
| 250 | Tetramethylgermanium | C ₄ H ₁₂ Ge | (CH ₃) ₄ Ge | | 2 |
| 251 | Tetramethylsilane | C ₄ H ₁₂ Si | (CH ₃) ₄ Si | | 2 |
| 252 | Tetramethyl Tin | C ₄ H ₁₂ Sn | (CH ₃) ₄ Sn | | 2 |
| 253 | Tetrasilane | Si ₄ H ₁₀ | Si ₄ H ₁₀ | | 2 |
| 254 | Titanium Tetraiodide | TiI ₄ | TiI ₄ | | 2 |
| 255 | Tribromostibine | SbBr ₃ | SbBr ₃ | | 2 |
| 256 | Trichlorostibine | SbCl ₃ | SbCl ₃ | | 2 |
| 257 | Triethylaluminum | C ₆ H ₁₅ Al | (C ₂ H ₅) ₃ Al | | 2 |
| 258 | Triethylantimony | C ₆ H ₁₅ Sb | (C ₂ H ₅) ₃ Sb | | 2 |
| 259 | Trifluoroacetic Acid | CF ₃ CO ₂ H | CF ₃ CO ₂ H | | 2 |
| 260 | Trifluoroacetonitrile | C ₂ F ₃ N | F ₃ CCN | | 2 |
| 261 | Trifluorosilane | SiHF ₃ | SiHF ₃ | | 2 |
| 262 | Triisobutylaluminum | C ₁₂ H ₂₇ Al | (C ₄ H ₉) ₃ Al | | 2 |
| 263 | Xylene m- | C ₈ H ₁₀ | 1,3-(CH ₃) ₂ C ₆ H ₄ | 1,3 Dimethyl Benzene | 3 |
| 264 | Xylene p- | C ₈ H ₁₀ | 1,4-(CH ₃) ₂ C ₆ H ₄ | 1,4 Dimethyl Benzene | 3 |
| 265 | Dichloromethane | CH ₂ Cl ₂ | CH ₂ Cl ₂ | | |
| 266 | Octafluorocyclopentene | C ₅ F ₈ | CF ₂ =C(CF ₃)-CF=CF ₂ | | 3 |
| 267 | Hexafluoro Propane | C ₃ H ₂ F ₆ | CH ₂ FCF ₂ CF ₃ | 1,1,1,2,2,3-Hexafluoropropane | 2 |
| 268 | Methylene Bromide | CH ₂ Br ₂ | CH ₂ Br ₂ | UN 2664; Methyl dibromide, Dibromomethane | 1 |
| 269 | Hydrazoic Acid | HN ₃ | HN ₃ | | 1 |
| 270 | Hexafluoro-2-Butyne | C ₄ F ₆ | CF ₃ C≡CCF ₃ | Bis(trifluoromethyl)acetylene; Perfluoro-2-butyne | 3 |
| 271 | Butanol-1 | C ₄ H ₁₀ O | CH ₃ CH ₂ CH ₂ CH ₂ OH | | 3 |
| 272 | Hexafluoro Acetylacetone | C ₅ H ₂ F ₆ O ₂ | C ₅ H ₂ F ₆ O ₂ | | 1 |
| 273 | Tungsten Hexacarbonyl | C ₆ O ₆ W | W(CO) ₆ | | 1 |
| 274 | TEAsat | C ₆ H ₁₅ O ₄ As | (C ₂ H ₅ O) ₃ AsO | | 1 |
| 275 | Hafnium Tetranitrate | HfN ₄ O ₁₂ | Hf(NO ₃) ₄ | | 1 |
| 276 | Acrylonitrile | C ₃ H ₃ N | CH ₂ =CHCN | Acrylon; Propenenitrile | 3 |
| 277 | Trimethylborane | C ₃ H ₉ B | (CH ₃) ₃ B | | 2 |
| 278 | Silicon tetrabromide | Br ₄ Si | Br ₄ Si | SiBr ₄ ; Tetrabromosilane; Silicon (IV) bromide | 2 |
| 279 | Tantalum (V) ethoxide | C ₁₀ H ₂₅ O ₅ Ta | C ₁₀ H ₂₅ O ₅ Ta | Ta(Oet) ₅ | 2 |
| 280 | Diphenylmethylenediamine | C ₁₃ H ₁₄ N ₂ | C ₁₃ H ₁₄ N ₂ | | 2 |
| 281 | Diphenylmethan-4,4' -diisocyanat | C ₁₅ H ₁₀ N ₂ O | C ₁₅ H ₁₀ N ₂ O | UN 2489; Benzene,1,1' -methylenebis(isocyanatophenyl) | 2 |
| 282 | Tetrakis(diethylamino)titanium | C ₁₆ H ₄₀ N ₄ Ti | C ₁₆ H ₄₀ N ₄ Ti | | 2 |
| 283 | Acetic acid | C ₂ H ₄ O ₂ | CH ₃ COOH | Ethanoic acid; UN 2789; | 2 |
| 284 | Dimethyl selenide | C ₂ H ₆ Se | C ₂ H ₆ Se | (CH ₃) ₂ Se; Selenium dimethyl; Dimethylselenium | 2 |
| 285 | Ethoxy silane | C ₂ H ₈ OSi | C ₂ H ₈ OSi | | 2 |
| 286 | Hexafluoropropylene oxide | C ₃ F ₆ O | C ₃ F ₆ O | Hexafluoroepoxypropane | 2 |
| 287 | Trimethoxy silane | C ₃ H ₁₀ O ₃ Si | C ₃ H ₁₀ O ₃ Si | | 2 |
| 288 | Pentafluoropropanol | C ₃ H ₃ F ₅ O | C ₂ F ₅ CH ₂ OH | Perfluorodihydropropanol, 1,1,1,2,2-Pentafluoropropane | 2 |

| Code | Gas Name | Symbol | Formula | Synonym | Ref |
|------|-----------------------------------|-----------|--|--|-----|
| 289 | Acrylic acid | C3H4O2 | C ₃ H ₄ O ₂ | 2-Propenoic acid; CH ₂ =CHCOOH | 2 |
| 290 | Trifluoropropane | C3H5F3 | C ₃ H ₅ F ₃ | 1,1,1-Trifluoropropane; CH ₃ CH ₂ CF ₃ | 2 |
| 291 | Ethyl Formate | C3H6O2 | HCO ₂ C ₂ H ₅ | Ethyl ester formic acid; HC00C2H5 | 3 |
| 292 | Methyl acetate | C3H6O2 | CH ₃ CO ₂ CH ₃ | Methyl ester acetic acid; UN 1231 | 3 |
| 293 | Propenamine | C3H7N | C ₃ H ₇ N | Allylamine; Monoallylamine; UN 2334 | 2 |
| 294 | Trimethyl ester phosphoric acid | C3H9O4P | C ₃ H ₉ O ₄ P | Methyl phosphate; Trimethoxyphosphine oxide | 2 |
| 295 | Heptafluoropropane | C3HF7 | C ₃ HF ₇ | 1,1,1,2,3,3,3-Heptafluoropropane, Freon 227 | 2 |
| 296 | Hexafluorocyclobutene | C4F6 | C ₄ F ₆ | Perfluorocyclobutene; 1,2,3,3,4,4- Hexafluorocyclobutene | 3 |
| 297 | Hexafluoro butadiene-1,3 | C4F6 | CF ₂ =CF-CF=CF ₂ | Perfluorobutadiene-1,3; | 3 |
| 298 | Diethyl sulfide | C4H10S | C ₄ H ₁₀ S | UN 2375; Ethyl sulfide; | 2 |
| 299 | Tetramethoxygermanium | C4H12GeO4 | (CH ₃ O) ₄ Ge | Ge(OMe) ₄ | 2 |
| 300 | Dimethoxydimethyl silane | C4H12O2Si | (CH ₃ O) ₂ Si(CH ₃) ₂ | KBM 22 | 2 |
| 301 | Tetramethoxy silane | C4H12O4Si | (CH ₃ O) ₄ Si | Silicic Acid (H ₄ SiO ₄); Tetramethyl ester; Tetramethyl silicate | 2 |
| 302 | Tetramethyl lead | C4H12Pb | (CH ₃) ₄ Pb | (CH ₃) ₄ Pb; Plumbane, tetramethyl; | 2 |
| 303 | Trimethylvinylsilane | C5H12Si | C ₅ H ₁₂ Si | Vinyltrimethylsilane; CH ₂ =CHSi(CH ₃) ₃ | 2 |
| 304 | Pyridine | C5H5N | C ₅ H ₅ N | Azabenzene; Azine | 2 |
| 305 | Methyl methacrylate polymer | C5H8O2 | C ₅ H ₈ O ₂ | Poly(methyl methacrylate); 2- Methyl-2-propenoic acid | 2 |
| 306 | Triethyl arsine | C6H15As | (C ₂ H ₅) ₃ As | Arsine; Triethylarsenic | 2 |
| 307 | Triethoxy arsine | C6H15AsO3 | (C ₂ H ₅ O) ₃ As | Triethyl ester arsenous acid; Triethyl arsenite | 2 |
| 308 | Triethoxyborane | C6H15BO3 | (C ₂ H ₅ O) ₃ B | Boron triethoxide | 2 |
| 309 | Triethylindium | C6H15In | (C ₂ H ₅) ₃ In | Indium triethyl | 2 |
| 310 | Triethylamine | C6H15N | (C ₂ H ₅) ₃ N | UN 1296; Ethanamine | 2 |
| 311 | Triethoxyphosphine | C6H15O3P | (C ₂ H ₅ O) ₃ P | Triethyl phosphite; UN 2323; Phosphorous acid, triethyl ester | 2 |
| 312 | Triethoxy silane | C6H16O3Si | (C ₂ H ₅ O) ₃ SiH | | 2 |
| 313 | Triethyl silane | C6H16Si | (C ₂ H ₅) ₃ SiH | (C ₂ H ₅) ₃ SiH | 2 |
| 314 | Trimethylisoxazole | C6H9NO | CH ₃ CH=CHCH=CHCON H ₂ | 3,4,5-Trimethylisoxazole, Sorbamide | 3 |
| 315 | Tetraethylgermane | C8H20Ge | (C ₂ H ₅) ₄ Ge | (C ₂ H ₅) ₄ Ge; Germanium tetraethyl | 2 |
| 316 | Tetraethyl lead | C8H20Pb | (C ₂ H ₅) ₄ Pb | Plumbane, tetraethyl; UN 1649 | 2 |
| 317 | Tetraethyl silane | C8H20Si | C ₈ H ₂₀ Si | Tetraethylsilane; Tetraethylsilicon; (C ₂ H ₅) ₄ Si | 2 |
| 318 | Tetrakis(dimethylamino)titanium | C8H24N4Ti | C ₈ H ₂₄ N ₄ Ti | | 2 |
| 319 | Styrene | C8H8 | C ₈ H ₈ | Ethenylbenzene; UN 2055 | 2 |
| 320 | Triallylamine | C9H15N | C ₉ H ₁₅ N | | 2 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|------------------------------|--|---|--|------------|
| 321 | Trifluoromethylhypofluorite | CF ₄ O | CF ₄ O | CF ₃ OF; Hypofluorous acid; trifluoromethyl ester | 2 |
| 322 | Formaldehyde | CH ₂ O | CH ₂ O | H ₂ CO; UN 1198; BFV | 2 |
| 323 | Iodomethane | CH ₃ I | CH ₃ I | Methyl iodide; Un 2644 | 2 |
| 324 | Xenon difluoride | XeF ₂ | XeF ₂ | F ₂ Xe; Xenon fluoride | 2 |
| 325 | Selenium hexafluoride | SeF ₆ | SeF ₆ | UN 2194; Selenium fluoride | 2 |
| 326 | Disilane hexafluoride | SiF ₆ | SiF ₆ | F ₆ Si ₂ ; Hexafluorodisilane | 2 |
| 327 | Fluoro silane | SiH ₃ F | SiH ₃ F | H ₃ FSi | 2 |
| 328 | Trisilane | Si ₃ H ₈ | Si ₃ H ₈ | Silicopropane; Trisilicane; H ₈ Si ₃ | 2 |
| 329 | Mercury | Hg | Hg | UN 2809 | 2 |
| 330 | Zinc | Zn | Zn | UN 1383 | 2 |
| 331 | Acetaldehyde methoxy | C ₃ H ₆ O ₂ | CH ₃ OCH ₂ CHO | | 3 |
| 332 | Acetone,hydroxy | C ₃ H ₆ O ₂ | CH ₃ COCH ₂ OH | Acetol | 3 |
| 333 | Glycol methylene ether | C ₃ H ₆ O ₂ | C ₃ H ₆ O ₂ | 1,3 - Dioxolane | 3 |
| 334 | Propanoic acid | C ₃ H ₆ O ₂ | CH ₃ CH ₂ CO ₂ H | Propionic acid | 3 |
| 335 | Glycidol | C ₃ H ₆ O ₂ | CH ₂ CHCH ₂ OH | 1-Propanol, 2,3 epoxy | 3 |
| 336 | Butanol-2 | C ₄ H ₁₀ O | CH ₃ CH ₂ CH(OH)CH ₃ | | 3 |
| 337 | Tertiary Butyl Alcohol | C ₄ H ₁₀ O | (CH ₃) ₃ COH | | 3 |
| 338 | Diethyl ether | C ₄ H ₁₀ O | C ₂ H ₅ OC ₂ H ₅ | | 3 |
| 339 | Methyl propyl ether | C ₄ H ₁₀ O | CH ₃ OC ₃ H ₇ | | 3 |
| 340 | Methyl isopropyl ether | C ₄ H ₁₀ O | (CH ₃) ₂ CHOCH ₃ | | 3 |
| 341 | Isobutyl Alcohol | C ₄ H ₁₀ O | (CH ₃) ₂ CHCH ₂ OH | | 3 |
| 342 | 3-one-2,5-dimethyl hexadiene | C ₈ H ₁₀ | CH ₂ =C(CH ₃)C≡CC(CH ₃)CH ₂ | | 3 |
| 343 | 1,7-Octadiyne | C ₈ H ₁₀ | HC≡C(CH ₂) ₄ C≡CH | | 3 |
| 344 | 2,6-Octadiyne | C ₈ H ₁₀ | CH ₃ C≡CCH ₂ CH ₂ C≡CCH ₃ | | 3 |
| 345 | 1,3,5,7-Octatetraene | C ₈ H ₁₀ | CH ₂ =CHCH=CHCH=CHCH=CH ₂ | | 3 |
| 346 | Niobium Pentachloride | NbCl ₅ | NbCl ₅ | | 3 |
| 347 | Disilabutane | Si ₂ C ₂ H ₁₀ | Si ₂ C ₂ H ₁₀ | | 3 |
| 348 | Ethane,1,1,1-Trifluoro | C ₂ H ₃ F ₃ | C ₂ H ₃ F ₃ | HFC-143a | 3 |
| 349 | Diselenium Dichloride | Se ₂ Cl ₂ | Se ₂ Cl ₂ | | 3 |
| 350 | Deuterium Ammonia | ND ₃ | ND ₃ | | 3 |
| 351 | Perfluoro (Oxacyclopentane) | C ₄ F ₈ O | C ₄ F ₈ O | | 3 |

7 Gas Table Sorted by Name

Table 2 Gases Sorted by Name

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|------------------------------------|--|---|---------------------|------------|
| 345 | 1,3,5,7-Octatetraene | C ₈ H ₁₀ | CH ₂ =CHCH=CHCH=CHCH=CH ₂ | | 3 |
| 343 | 1,7-Octadiyne | C ₈ H ₁₀ | HC≡C(CH ₂) ₄ C≡CH | | 3 |
| 186 | 2,2 Dichloro 1,1,1 Trifluoroethane | C ₂ HCl ₂ F ₃ | CHCl ₂ -CF ₃ | Freon 123, Suva 123 | 2 |
| 344 | 2,6-Octadiyne | C ₈ H ₁₀ | CH ₃ C≡CCH ₂ CH ₂ C≡CCH ₃ | | 3 |
| 342 | 3-one-2,5-dimethyl hexadiene | C ₈ H ₁₀ | CH ₂ =C(CH ₃)C≡CC(CH ₃)CH ₂ | | 3 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|----------------------------|--|--|---|------------|
| 178 | 4-Methyl, 1-Pentene | C ₆ H ₁₂ | (CH ₃) ₂ CHCH ₂ CH=CH ₂ | | 2 |
| 331 | Acetaldehyde methoxy | C ₃ H ₆ O ₂ | CH ₃ OCH ₂ CHO | | 3 |
| 283 | Acetic acid | C ₂ H ₄ O ₂ | CH ₃ COOH | Ethanoic acid; UN 2789 | 2 |
| 184 | Acetone | C ₃ H ₆ O | CH ₃ COCH ₃ | | 2 |
| 332 | Acetone, hydroxy | C ₃ H ₆ O ₂ | CH ₃ COCH ₂ OH | Acetol | 3 |
| 173 | Acetonitrile | C ₂ H ₃ N | CH ₃ CN | | 2 |
| 42 | Acetylene | C ₂ H ₂ | HC≡CH | Ethyne | 1 |
| 289 | Acrylic acid | C ₃ H ₄ O ₂ | C ₃ H ₄ O ₂ | 2-Propenoic acid; CH ₂ =CHCOOH | 2 |
| 276 | Acrylonitrile | C ₃ H ₃ N | CH ₂ =CHCN | Acrylon; Propenenitrile | 3 |
| 8 | Air | Air | | | 1 |
| 66 | Allene | C ₃ H ₄ | CH ₂ =C=CH ₂ | Propadiene | 1 |
| 226 | Aluminum Trifluoride | AlF ₃ | AlF ₃ | | 2 |
| 29 | Ammonia | NH ₃ | NH ₃ | | 1 |
| 4 | Argon | Ar | Ar | | 1 |
| 96 | Arsenic Pentafluoride | AsF ₅ | AsF ₅ | | 2 |
| 242 | Arsenic Tribromide | AsBr ₃ | AsBr ₃ | | 2 |
| 216 | Arsenic Trichloride | AsCl ₃ | AsCl ₃ | | 2 |
| 195 | Arsenic Trifluoride | AsF ₃ | AsF ₃ | | 2 |
| 196 | Arsenic Triiodine | AsI ₃ | AsI ₃ | | 2 |
| 35 | Arsine | AsH ₃ | AsH ₃ | | 1 |
| 197 | Benzene | C ₆ H ₆ | C ₆ H ₆ | | 2 |
| 198 | Borazine | B ₃ N ₃ H ₆ | H ₃ B ₃ N ₃ H ₃ | | 14 |
| 79 | Boron Tribromide | BBr ₃ | BBr ₃ | | 1 |
| 70 | Boron Trichloride | BCl ₃ | BCl ₃ | | 1 |
| 48 | Boron Trifluoride | BF ₃ | BF ₃ | | 1 |
| 21 | Bromine | Br ₂ | Br ₂ | | 2 |
| 116 | Bromine Pentafluoride | BrF ₅ | BrF ₅ | | 1 |
| 76 | Bromine Trifluoride | BrF ₃ | BrF ₃ | | 1 |
| 199 | Bromochlorodifluoromethane | CBrClF ₂ | BrClCF ₂ | | 2 |
| 105 | Bromotrifluoroethylene | C ₂ BrF ₃ | CF ₂ CFBr | | 1 |
| 80 | Bromotrifluoromethane | CBrF ₃ | BrCF ₃ | F-13B1, R-13B1 | 1 |
| 100 | Butadiene | C ₄ H ₆ | CH ₂ =C=CHCH ₃ | Methylallene | 1 |
| 117 | Butane | C ₄ H ₁₀ | CH ₃ (CH ₂) ₂ CH ₃ | | 1 |
| 271 | Butanol-1 | C ₄ H ₁₀ O | CH ₃ CH ₂ CH ₂ CH ₂ OH | | 3 |
| 336 | Butanol-2 | C ₄ H ₁₀ O | CH ₃ CH ₂ CH(OH)CH ₃ | | 3 |
| 104 | Butene | C ₄ H ₈ | CH ₃ CH ₂ CH=CH ₂ | 1-Butene | 1 |
| 25 | Carbon Dioxide | CO ₂ | CO ₂ | | 1 |
| 40 | Carbon Disulfide | CS ₂ | CS ₂ | | 2 |
| 9 | Carbon Monoxide | CO | CO | | 1 |
| 200 | Carbon Tetrabromide | CBr ₄ | CBr ₄ | | 2 |
| 101 | Carbon Tetrachloride | CCl ₄ | CCl ₄ | Tetrachloromethane or Methane, Tetrachloro | 2 |
| 63 | Carbon Tetrafluoride | CF ₄ | CF ₄ | Tetrafluoromethane or Methane, Tetrafluoro | 1 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|---------------------------|--|--|--|------------|
| 46 | Carbonyl Fluoride | CF ₂ O | CF ₂ O | | 1 |
| 34 | Carbonyl Sulfide | COS | COS | | 1 |
| 19 | Chlorine | Cl ₂ | Cl ₂ | | 1 |
| 201 | Chlorine Dioxide | ClO ₂ | ClO ₂ | | 2 |
| 202 | Chlorine Pentafluoride | ClF ₅ | ClF ₅ | | 2 |
| 77 | Chlorine Trifluoride | ClF ₃ | ClF ₃ | | 1 |
| 172 | Chlorobenzene | C ₆ H ₅ Cl | C ₆ H ₅ Cl | Chlorobenzol, Phenylchloride | 2 |
| 203 | Chlorodifluoroethane | C ₂ H ₃ ClF ₂ | CH ₃ -CF ₂ Cl | R-142b | 4 |
| 204 | Chlorodifluoroethylene | C ₂ HClF ₂ | CF ₂ =CHCl | R-1122, FREON-1122 | 4 |
| 57 | Chlorodifluoromethane | CHClF ₂ | CClHF ₂ | F-22, R-22 | 1 |
| 71 | Chloroform | CHCl ₃ | CHCl ₃ | Trichloromethane or Methane, Trichloro | 2 |
| 119 | Chloropentafluoroethane | C ₂ ClF ₅ | ClCF ₂ CF ₃ | F-115, R-115 | 1 |
| 205 | Chlorosilane | SiH ₃ Cl | SiH ₃ Cl | | 2 |
| 206 | Chlorotrifluoroethylene | C ₂ ClF ₃ | FCCl=CF ₂ | R-1113, FREON-1113 | 2 |
| 74 | Chlorotrifluoromethane | CClF ₃ | ClCF ₃ | F-13, R-13 | 1 |
| 107 | Cisbutene | C ₄ H ₈ | CH ₃ CH=CHCH ₃ | Cis-2-Butene | 2 |
| 59 | Cyanogen | C ₂ N ₂ | NCCN | Oxalodinitrile | 1 |
| 37 | Cyanogen Chloride | ClCN | ClCN | | 1 |
| 207 | Cyclobutane | C ₄ H ₈ | C ₄ H ₈ | Tetramethylene | 2 |
| 61 | Cyclopropane | C ₃ H ₆ | C ₃ H ₆ | | 1 |
| 14 | Deuterium | D ₂ | H ₂ ² | D ₂ | 2 |
| 350 | Deuterium Ammonia | ND ₃ | ND ₃ | | 3 |
| 244 | Deuteriumsilane | SiD ₄ | SiH ₄ ² | | 2 |
| 208 | Diazomethane | CH ₂ N ₂ | CH ₂ N ₂ | Acomethylene | 2 |
| 58 | Diborane | B ₂ H ₆ | B ₂ H ₆ | | 1 |
| 209 | Dibromodifluoromethane | CB ₂ F ₂ | Br ₂ CF ₂ | R-12B2, FREON-12B2 | 2 |
| 130 | Dibromotetrafluoroethane | C ₂ Br ₂ F ₄ | BrF ₂ CCF ₂ Br | F-114B2, R-114B2 | 1 |
| 84 | Dichlorodifluoromethane | CCl ₂ F ₂ | CCl ₂ F ₂ | F-12, R-12 | 1 |
| 212 | Dichlorodimethylsilane | C ₂ H ₆ SiCl ₂ | (CH ₃) ₂ SiCl ₂ | | 2 |
| 210 | Dichloroethylene | C ₂ H ₂ Cl ₂ | CH ₂ =CCl ₂ | Vinylidene Chloride | 2 |
| 211 | Dichloroethylene -cis | C ₂ H ₂ Cl ₂ | CHCl=CHCl | | 2 |
| 191 | Dichloroethylene -trans | C ₂ H ₂ Cl ₂ | CHCl=CHCl | | 2 |
| 65 | Dichlorofluoromethane | CHCl ₂ F | CHCl ₂ F | F-21, R-21 | 1 |
| 265 | Dichloromethane | CH ₂ Cl ₂ | CH ₂ Cl ₂ | | |
| 67 | Dichlorosilane | SiH ₂ Cl ₂ | SiH ₂ Cl ₂ | | 1 |
| 125 | Dichlorotetrafluoroethane | C ₂ Cl ₂ F ₄ | F ₃ CCCl ₂ F | F-114, R-114 | 1 |
| 188 | Diethoxy Dimethyl Silane | C ₆ H ₁₆ O ₂ Si | (C ₂ H ₅ O) ₂ Si(CH ₃) ₂ | | 2 |
| 338 | Diethyl ether | C ₄ H ₁₀ O | C ₂ H ₅ OC ₂ H ₅ | | 3 |
| 298 | Diethyl sulfide | C ₄ H ₁₀ S | C ₄ H ₁₀ S | UN 2375; Ethyl sulfide; | 2 |
| 213 | Diethylamine | C ₄ H ₁₁ N | (C ₂ H ₅) ₂ NH | | 2 |
| 154 | Diethylsilane | C ₄ H ₁₂ Si | (C ₂ H ₅) ₂ SiH ₂ | | 2 |
| 214 | Diethylzinc | C ₄ H ₁₀ Zn | Zn(C ₂ H ₅) ₂ | | 2 |
| 232 | Difluoroamidogen | NF ₂ | NF ₂ | | 2 |

| Code | Gas Name | Symbol | Formula | Synonym | Ref |
|------|----------------------------------|-----------|---|--|-----|
| 103 | Difluorochloroethane | C2H3ClF2 | CF ₂ ClCH ₃ | F-142B, R-142B | 1 |
| 82 | Difluoroethane | C2H4F2 | CH ₃ CHF ₂ | Ethylidene Fluoride, R-152A | 1 |
| 64 | Difluoroethylene | C2H2F2 | CH ₂ =CF ₂ | G-1132A, Vinylidene fluoride | 1 |
| 160 | Difluoromethane | CH2F2 | CH ₂ F ₂ | Methylene Fluoride | 2 |
| 134 | Difluorosilane | SiH2F2 | SiH ₂ F ₂ | | 10 |
| 217 | Digermane | Ge2H6 | Ge ₂ H ₆ | | 2 |
| 300 | Dimethoxydimethyl silane | C4H12O2Si | (CH ₃ O) ₂ Si(CH ₃) ₂ | KBM 22 | 2 |
| 73 | Dimethyl Ether | C2H6O | CH ₃ OCH ₃ | Methylether | 1 |
| 284 | Dimethyl selenide | C2H6Se | C ₂ H ₆ Se | (CH ₃) ₂ Se; Selenium dimethyl; Dimethylselenium | 2 |
| 164 | Dimethylaluminum-hydride | C2H7Al | (CH ₃) ₂ AlH | DMAH | 13 |
| 85 | Dimethylamine | C2H7N | (CH ₃) ₂ NH | | 1 |
| 218 | Dimethylcadmium | C2H6Cd | (CH ₃) ₂ Cd | | 2 |
| 166 | Dimethylethylaminealane | C4H14NAI | (CH ₃) ₂ C ₂ H ₅ NAIH ₃ | DMEAA | 14 |
| 122 | Dimethylpropane | C5H12 | (CH ₃) ₄ C | Neopentane | 2 |
| 219 | Dimethylsilane | C2H8Si | (CH ₃) ₂ SiH ₂ | | 2 |
| 220 | Dimethyltellurium | C2H6Te | (CH ₃) ₂ Te | | 2 |
| 135 | Dimethylzinc | C2H6Zn | (CH ₃) ₂ Zn | | 3 |
| 281 | Diphenylmethan-4,4' -diisocyanat | C15H10N2O | C ₆ H ₅ CH ₂ N ₂ O | UN 2489; Benzene, 1,1' - methylenebis(isocyanatophenyl) | 2 |
| 280 | Diphenylmethylenediamine | C13H14N2 | C ₆ H ₅ CH ₂ N ₂ | | 2 |
| 349 | Diselenium Dichloride | Se2Cl2 | Se ₂ Cl ₂ | | 3 |
| 347 | Disilabutane | Si2C2H10 | Si ₂ C ₂ H ₁₀ | | 3 |
| 97 | Disilane | Si2H6 | Si ₂ H ₆ | | 2 |
| 326 | Disilane hexafluoride | SiF6 | SiF ₆ | F ₆ Si ₂ ; Hexafluorodisilane | 2 |
| 54 | Ethane | C2H6 | CH ₃ CH ₃ | | 1 |
| 348 | Ethane, 1,1,1-Trifluoro | C2H3F3 | C ₂ H ₃ F ₃ | HFC-143a | 3 |
| 136 | Ethanol | C2H6O | CH ₃ CH ₂ OH | | 2 |
| 285 | Ethoxy silane | C2H8OSi | C ₂ H ₈ OSi | | 2 |
| 93 | Ethyl Acetylene | C4H6 | CH ₃ CH ₂ C≡CH | | 1 |
| 75 | Ethyl Chloride | C2H5Cl | C ₂ H ₅ Cl | Chloroethane or Ethane, Chloro or Ethyl Chloride | 1 |
| 221 | Ethyl Fluoride | C2H5F | CH ₃ CH ₂ F | Fluoroethane, R-161, FREON- 161 | 2 |
| 291 | Ethyl Formate | C3H6O2 | HCO ₂ C ₂ H ₅ | Ethyl ester formic acid; HC00C2H5 | 3 |
| 174 | Ethylbenzene | C8H10 | C ₆ H ₅ C ₂ H ₅ | | 2 |
| 38 | Ethylene | C2H4 | CH ₂ =CH ₂ | Ethene | 1 |
| 222 | Ethylene Dichloride | C2H4Cl2 | ClCH ₂ CH ₂ Cl | 1,2 Dichloroethane | 2 |
| 45 | Ethylene Oxide | C2H4O | C ₂ H ₄ O | Acetaldehyde | 1 |
| 169 | Ethyleneglycol | C2H6O2 | HOCH ₂ CH ₂ OH | Ehtanediol, Glycol | 2 |
| 18 | Fluorine | F2 | F ₂ | | 1 |
| 327 | Fluoro silane | SiH3F | SiH ₃ F | H ₃ FSi | 2 |
| 223 | Fluoroacetylene | C2HF | FC≡CH | | 2 |
| 49 | Fluoroform | CHF3 | CHF ₃ | Trifluoromethane or Methane, Trifluoro, F-23, R-23 | 1 |

| Code | Gas Name | Symbol | Formula | Synonym | Ref |
|------|---------------------------|---|---|---|-----|
| 224 | Fluorotriethoxysilane | C ₆ H ₁₅ OSiF | (C ₂ H ₅ O) ₃ SiF | | 2 |
| 322 | Formaldehyde | CH ₂ O | CH ₂ O | H ₂ CO; UN 1198; BFV | 2 |
| 43 | Germane | GeH ₄ | GeH ₄ | | 1 |
| 113 | Germanium Tetrachloride | GeCl ₄ | GeCl ₄ | Tetrachlorogermane | 2 |
| 99 | Germanium Tetrafluoride | GeF ₄ | GeF ₄ | Tetrafluorogermane | 2 |
| 335 | Glycidol | C ₃ H ₆ O ₂ | CH ₂ CHCH ₂ OH | 1-Propanol, 2,3 epoxy | 3 |
| 333 | Glycol methylene ether | C ₃ H ₆ O ₂ | C ₃ H ₆ O ₂ | 1,3 - Dioxolane | 3 |
| 275 | Hafnium Tetranitrate | HfN ₄ O ₁₂ | Hf(NO ₃) ₄ | | 1 |
| 137 | Halothane | C ₂ HBrClF ₃ | BrClHCCF ₃ | | 6 |
| 1 | Helium | He | He | | 1 |
| 295 | Heptafluoropropane | C ₃ HF ₇ | C ₃ HF ₇ | 1,1,1,2,3,3,3-Heptafluoropropane, Freon 227 | 2 |
| 272 | Hexafluoro Acetylacetone | C ₅ H ₂ F ₆ O ₂ | C ₅ H ₂ F ₆ O ₂ | | 1 |
| 297 | Hexafluoro butadiene-1,3 | C ₄ F ₆ | CF ₂ =CF-CF=CF ₂ | Perfluorobutadiene-1,3; | 3 |
| 267 | Hexafluoro Propane | C ₃ H ₂ F ₆ | CH ₂ FCF ₂ CF ₃ | 1,1,1,2,2,3-Hexafluoropropane | 2 |
| 270 | Hexafluoro-2-Butyne | C ₄ F ₆ | CF ₃ C≡CCF ₃ | Bis(trifluoromethyl)acetylene; Perfluoro-2-butyne | 3 |
| 225 | Hexafluoroacetone | C ₃ F ₆ O | (CF ₃) ₂ CO | | 2 |
| 192 | Hexafluorobenzene | C ₆ F ₆ | C ₆ F ₆ | | 2 |
| 296 | Hexafluorocyclobutene | C ₄ F ₆ | C ₄ F ₆ | Perfluorocyclobutene; 1,2,3,3,4,4-Hexafluorocyclobutene | 3 |
| 118 | Hexafluoroethane | C ₂ F ₆ | F ₃ CCF ₃ | F-116, Perfluoroethane | 1 |
| 138 | Hexafluoropropylene | C ₃ F ₆ | CF ₃ CF=CF ₂ | Perfluoropropylene or Propylene, Perfluoro | 1 |
| 286 | Hexafluoropropylene oxide | C ₃ F ₆ O | C ₃ F ₆ O | Hexafluoroepoxypropane | 2 |
| 139 | Hexamethyldisilane | C ₆ H ₁₈ Si ₂ | (CH ₃) ₃ Si ₂ (CH ₃) ₃ | HMDSi, HMDS | 3 |
| 227 | Hexamethyldisilazane | C ₆ H ₁₉ Si ₂ N | (CH ₃) ₆ Si ₂ NH | | 2 |
| 228 | Hexamethyldisiloxane | C ₆ H ₁₈ Si ₂ O | (CH ₃) ₆ Si ₂ O | | 2 |
| 127 | Hexane | C ₆ H ₁₄ | CH ₃ (CH ₂) ₄ CH ₃ | | 2 |
| 170 | Hexanediol-1,6 | C ₆ H ₁₄ O ₂ | HO(CH ₂) ₆ OH | Hexyleneglycol, Hexamethyleneglycol | 2 |
| 50 | Hydrazine | N ₂ H ₄ | H ₂ NNH ₂ | | 2 |
| 269 | Hydrazoic Acid | HN ₃ | HN ₃ | | 1 |
| 7 | Hydrogen | H ₂ | H ₂ | | 1 |
| 10 | Hydrogen Bromide | HBr | HBr | | 1 |
| 11 | Hydrogen Chloride | HCl | HCl | | 1 |
| 24 | Hydrogen Cyanide | HCN | HCN | | 1 |
| 12 | Hydrogen Fluoride | HF | HF | | 1 |
| 17 | Hydrogen Iodide | HI | HI | | 1 |
| 23 | Hydrogen Selenide | H ₂ Se | H ₂ Se | | 1 |
| 22 | Hydrogen Sulfide | H ₂ S | H ₂ S | | 1 |
| 229 | Hydrogen telluride | H ₂ Te | H ₂ Te | | 2 |
| 90 | Intentionally Left Blank | | | | |
| 92 | Intentionally Left Blank | | | | |
| 175 | Intentionally Left Blank | | | | |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-----------------------------|---------------|---|--|------------|
| 115 | Iodine Pentafluoride | IF5 | IF ₅ | | 1 |
| 323 | Iodomethane | CH3I | CH ₃ I | Methyl iodide; Un 2644 | 2 |
| 230 | Iron Carbonyl | C5O5Fe | Fe(CO) ₅ | | 2 |
| 111 | Isobutane | C4H10 | (CH ₃) ₂ CHCH ₃ | 2-Methylpropane or Propane, 2-Methyl | 1 |
| 106 | Isobutene | C4H8 | (CH ₃) ₂ C=CH ₂ | Isobutylene, Methylpropene | 2 |
| 341 | Isobutyl Alcohol | C4H10O | (CH ₃) ₂ CHCH ₂ OH | | 3 |
| 231 | Isopentane | C5H12 | CH ₃ CH ₂ CH(CH ₃) ₂ | 2-Methylbutane | 2 |
| 187 | Isopropal Alcohol | C3H8O | (CH ₃) ₂ CHOH | 2-Propanol | 2 |
| 5 | Krypton | Kr | Kr | | 1 |
| 329 | Mercury | Hg | Hg | UN 2809 | 2 |
| 28 | Methane | CH4 | CH ₄ | | 1 |
| 176 | Methanol | CH4O | CH ₃ OH | Methyl Alcohol | 2 |
| 292 | Methyl acetate | C3H6O2 | CH ₃ CO ₂ CH ₃ | Methyl ester acetic acid; UN 1231 | 3 |
| 68 | Methyl Acetylene | C3H4 | CH ₃ C≡CH | Propyne | 1 |
| 44 | Methyl Bromide | CH3Br | CH ₃ Br | Bromomethane or Methane, Bromo | 1 |
| 36 | Methyl Chloride | CH3Cl | CH ₃ Cl | Chloromethane or Methane, Chloro | 1 |
| 33 | Methyl Fluoride | CH3F | CH ₃ F | Fluoromethane or Methane, Fluoro | 1 |
| 340 | Methyl isopropyl ether | C4H10O | (CH ₃) ₂ CHOCH ₃ | | 3 |
| 47 | Methyl Mercaptan | CH4S | CH ₃ SH | | 1 |
| 305 | Methyl methacrylate polymer | C5H8O2 | C ₅ H ₈ O ₂ | Poly(methyl methacrylate); 2-Methyl-2-propenoic acid | 2 |
| 339 | Methyl propyl ether | C4H10O | CH ₃ OC ₃ H ₇ | | 3 |
| 81 | Methyl Vinyl Ether | C3H6O | CH ₃ OCH=CH ₂ | | 1 |
| 52 | Methylamine | CH5N | CH ₃ NH ₂ | Amino Methane, Monomethylamine | 2 |
| 120 | Methylbutene | C5H10 | CH ₃ CH ₂ CCH ₃ =CH ₂ | 2-Methyl-1-Butene | 1 |
| 177 | Methylcyclohexane | C7H14 | CH ₃ C ₆ H ₁₁ | Hexahydrotoluene | 2 |
| 268 | Methylene Bromide | CH2Br2 | CH ₂ Br ₂ | UN 2664; Methyl dibromide, Dibromomethane | 1 |
| 185 | Methylsilane | CH6Si | CH ₃ SiH ₃ | Monomethylsilane | 2 |
| 183 | Methyltrichlorosilane | CH3Cl3Si | CH ₃ SiCl ₃ | MTS | 2 |
| 124 | Molybdenum Hexafluoride | MoF6 | MoF ₆ | | 2 |
| 233 | Monoethylamine | C2H7N | C ₂ H ₅ NH ₂ | | 2 |
| 234 | Monomethyl hydrazine | CH6N2 | CH ₃ N ₂ H ₃ | | 2 |
| 2 | Neon | Ne | Ne | | 1 |
| 140 | Nickel Carbonyl | C4O4Ni | Ni(CO) ₄ | | 1 |
| 346 | Niobium Pentachloride | NbCl5 | NbCl ₅ | | 3 |
| 167 | Nitric Acid | HNO3 | HNO ₃ | | 2 |
| 16 | Nitric Oxide | NO | NO | | 2 |
| 13 | Nitrogen | N2 | N ₂ | | 1 |
| 26 | Nitrogen Dioxide | NO2 | NO ₂ | | 1 |
| 95 | Nitrogen Tetroxide | N2O4 | N ₂ O ₄ | Dinitrogenoxide | 2 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-----------------------------|---------------|---|--|------------|
| 53 | Nitrogen Trifluoride | NF3 | NF ₃ | | 1 |
| 78 | Nitrogen Trioxide | N2O3 | N ₂ O ₃ | | 1 |
| 235 | Nitromethane | CH3NO2 | CH ₃ NO ₂ | | 2 |
| 141 | Nitrosyl Chloride | NOC1 | NOC1 | | 1 |
| 27 | Nitrous Oxide | N2O | N ₂ O | | 1 |
| 236 | Octafluorobutane | C4F8 | C ₄ F ₈ | | 3 |
| 129 | Octafluorocyclobutane | C4F8 | (CF ₂) ₄ | Perfluorocyclobutane or Cyclobutane, Perfluoro | 1 |
| 266 | Octafluorocyclopentene | C5F8 | CF ₂ =C(CF ₃)-CF=CF ₂ | | 3 |
| 237 | Octane | C8H18 | CH ₃ (CH ₂) ₆ CH ₃ | | 2 |
| 15 | Oxygen | O2 | O ₂ | | 1 |
| 238 | Oxygen Dichloride | OC12 | OC1 ₂ | | 2 |
| 41 | Oxygen Difluoride | OF2 | OF ₂ | | 1 |
| 179 | o-Xylene | C8H10 | 1,2-(CH ₃) ₂ C ₆ H ₄ | 1,2-Dimethylbenzene | 2 |
| 30 | Ozone | O3 | O ₃ | | 1 |
| 142 | Pentaborane | B5H9 | B ₅ H ₉ | | 2 |
| 239 | Pentaborane(11) | B5H11 | B ₅ H ₁₁ | | 2 |
| 155 | Pentafluoroethane | C2HF5 | CF ₃ CHF ₂ | F-125, R-125 | 9 |
| 288 | Pentafluoropropanol | C3H3F5O | C ₂ F ₅ CH ₂ OH | Perfluorodihydropropanol, 1,1,1,2,2-Pentafluoropropane | 2 |
| 240 | Pentane | C5H12 | CH ₃ (CH ₂) ₃ CH ₃ | | 2 |
| 72 | Perchloryl Fluoride | ClO3F | ClO ₃ F | | 1 |
| 351 | Perfluoro (Oxacyclopentane) | C4F8O | C ₄ F ₈ O | | 3 |
| 241 | Perfluorobutane | C4F10 | C ₄ F ₁₀ | | 3 |
| 128 | Perfluoropropane | C3F8 | CF ₂ (CF ₃) ₂ | | 1 |
| 180 | Phenol | C6H6O | C ₆ H ₅ OH | | 2 |
| 60 | Phosgene | CCl2O | CCl ₂ O | Carbonyl Chloride | 1 |
| 31 | Phosphine | PH3 | PH ₃ | | 1 |
| 102 | Phosphorous Oxychloride | POCl3 | POCl ₃ | | 2 |
| 143 | Phosphorus Pentafluoride | PF5 | PF ₅ | | 1 |
| 193 | Phosphorus Trichloride | PCL3 | PCl ₃ | | 2 |
| 62 | Phosphorus Trifluoride | PF3 | PF ₃ | | 1 |
| 89 | Propane | C3H8 | CH ₃ CH ₂ CH ₃ | | 1 |
| 334 | Propanoic acid | C3H6O2 | CH ₃ CH ₂ CO ₂ H | Propionic acid | 3 |
| 293 | Propenamine | C3H7N | C ₃ H ₇ N | Allylamine; Monoallylamine; UN 2334 | 2 |
| 69 | Propylene | C3H6 | CH ₃ CH=CH ₂ | Propene | 1 |
| 304 | Pyridine | C5H5N | C ₅ H ₅ N | Azabenzene; Azine | 2 |
| 3 | Radon | Rn | Rn | | 2 |
| 243 | Rhenium Hexafluoride | ReF6 | ReF ₆ | | 2 |
| 325 | Selenium hexafluoride | SeF6 | SeF ₆ | UN 2194; Selenium fluoride | 2 |
| 39 | Silane | SiH4 | SiH ₄ | | 1 |
| 278 | Silicon tetrabromide | Br4Si | Br ₄ Si | SiBr ₄ ; Tetrabromosilane; Silicon (IV) bromide | 2 |
| 108 | Silicon Tetrachloride | SiCl4 | SiCl ₄ | Tetrachlorosilane | 2 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-----------------------------------|---|---|--|------------|
| 88 | Silicon Tetrafluoride | SiF ₄ | SiF ₄ | | 1 |
| 245 | Stibine | SbH ₃ | SbH ₃ | | 2 |
| 319 | Styrene | C ₈ H ₈ | C ₈ H ₈ | Ethenylbenzene; Un 2055 | 2 |
| 32 | Sulfur Dioxide | SO ₂ | SO ₂ | | 1 |
| 110 | Sulfur Hexafluoride | SF ₆ | SF ₆ | | 1 |
| 189 | Sulfur Monochloride | S ₂ Cl ₂ | S ₂ Cl ₂ | | 2 |
| 86 | Sulfur Tetrafluoride | SF ₄ | SF ₄ | | 1 |
| 246 | Sulfur Trioxide | SO ₃ | SO ₃ | | 2 |
| 171 | Sulfuric Acid | H ₂ SO ₄ | H ₂ SO ₄ | | 2 |
| 87 | Sulfuryl Fluoride | SO ₂ F ₂ | SO ₂ F ₂ | | 1 |
| 279 | Tantalum (V) ethoxide | C ₁₀ H ₂₅ O ₅ Ta | C ₁₀ H ₂₅ O ₅ Ta | Ta(Oet) ₅ | 2 |
| 274 | TEAsat | C ₆ H ₁₅ O ₄ As | (C ₂ H ₅ O) ₃ AsO | | 1 |
| 247 | Tellurium Hexafluoride | TeF ₆ | TeF ₆ | | 2 |
| 337 | Tertiary Butyl Alcohol | C ₄ H ₁₀ O | (CH ₃) ₃ COH | | 3 |
| 161 | Tertiarybutylarsine | C ₄ H ₁₁ As | C(CH ₃) ₃ AsH ₂ | TBA | 8 |
| 162 | Tertiarybutylphosphine | C ₄ H ₁₁ P | C(CH ₃) ₃ PH ₂ | TBP | 8 |
| 248 | Tetrachlorodiborane | B ₂ Cl ₄ | B ₂ Cl ₄ | | 2 |
| 168 | Tetrachloroethylene | C ₂ Cl ₄ | Cl ₂ C=CCl ₂ | Perchloroethylene or Ethylene, Perchloro | 2 |
| 144 | Tetraethoxysilane | C ₈ H ₂₀ O ₄ Si | (C ₂ H ₅ O) ₄ Si | TEOS | 2 |
| 316 | Tetraethyl lead | C ₈ H ₂₀ Pb | (C ₂ H ₅) ₄ Pb | Plumbane, tetraethyl; UN 1649 | 2 |
| 317 | Tetraethyl silane | C ₈ H ₂₀ Si | C ₈ H ₂₀ Si | Tetraethylsilane; Tetraethylsilicon; (C ₂ H ₅) ₄ Si | 2 |
| 315 | Tetraethylgermane | C ₈ H ₂₀ Ge | (C ₂ H ₅) ₄ Ge | (C ₂ H ₅) ₄ Ge; Germanium tetraethyl | 2 |
| 94 | Tetrafluoroethylene | C ₂ F ₄ | F ₂ C=CF ₂ | | 1 |
| 249 | Tetrafluorodiborane | B ₂ F ₄ | B ₂ F ₄ | | 2 |
| 156 | Tetrafluoroethane | C ₂ H ₂ F ₄ | CH ₂ FCF ₃ | R-134A, F-134A | 2 |
| 157 | Tetrafluorohydrazine | N ₂ F ₄ | F ₂ NNF ₂ | Dinitrogen Tetrafluoride | 1 |
| 182 | Tetrahydrofuran | C ₄ H ₈ O | C ₄ H ₈ O | | 2 |
| 282 | Tetrakis(diethylamino)titanium | C ₁₆ H ₄₀ N ₄ Ti | C ₁₆ H ₄₀ N ₄ Ti | | 2 |
| 318 | Tetrakis(dimethylamino)titanium | C ₈ H ₂₄ N ₄ Ti | C ₈ H ₂₄ N ₄ Ti | | 2 |
| 301 | Tetramethoxy silane | C ₄ H ₁₂ O ₄ Si | (CH ₃ O) ₄ Si | Silicic Acid (H ₄ SiO ₄); Tetramethyl ester; Tetramethyl silicate | 2 |
| 299 | Tetramethoxygermanium | C ₄ H ₁₂ GeO ₄ | (CH ₃ O) ₄ Ge | Ge(OMe) ₄ | 2 |
| 302 | Tetramethyl lead | C ₄ H ₁₂ Pb | (CH ₃) ₄ Pb | (CH ₃) ₄ Pb; Plumbane, tetramethyl; | 2 |
| 252 | Tetramethyl Tin | C ₄ H ₁₂ Sn | (CH ₃) ₄ Sn | | 2 |
| 158 | Tetramethylcyclotetra-siloxane | C ₄ H ₁₆ Si ₄ O ₄ | (CH ₃) ₄ H ₄ (SiO) ₄ | TOMCATS | 7 |
| 250 | Tetramethylgermanium | C ₄ H ₁₂ Ge | (CH ₃) ₄ Ge | | 2 |
| 251 | Tetramethylsilane | C ₄ H ₁₂ Si | (CH ₃) ₄ Si | | 2 |
| 253 | Tetrasilane | Si ₄ H ₁₀ | Si ₄ H ₁₀ | | 2 |
| 145 | Tin Tetrachloride | SnCl ₄ | SnCl ₄ | Tetrachlorostannane | 2 |
| 114 | Titanium Tetrachloride | TiCl ₄ | TiCl ₄ | | 2 |
| 254 | Titanium Tetraiodide | TiI ₄ | TiI ₄ | | 2 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|---------------------------------|--|--|--|------------|
| 194 | Titanium Tetraisopropoxide | C12H28OTi | Ti(OC ₃ H ₇) ₄ | | 1 |
| 181 | Toluene | C ₇ H ₈ | C ₆ H ₅ CH ₃ | Methylbenzene | 2 |
| 98 | Transbutene | C ₄ H ₈ | CH ₃ CH=CHCH ₃ | | 2 |
| 320 | Triallylamine | C ₉ H ₁₅ N | C ₉ H ₁₅ N | | 2 |
| 83 | Tribromomethane | CHBr ₃ | CHBr ₃ | | 2 |
| 255 | Tribromostibine | SbBr ₃ | SbBr ₃ | | 2 |
| 146 | Tributylaluminum | C12H27Al | (CH ₃ CH ₂ CH ₂ CH ₂) ₃ Al | TBAI | 3 |
| 112 | Trichloroethane | C ₂ H ₃ Cl ₃ | CH ₃ CCl ₃ | TCA, Methylchloroform | 2 |
| 91 | Trichlorofluoromethane | CCl ₃ F | CCl ₃ F | F-11, R-11 | 1 |
| 147 | Trichlorosilane | SiHCl ₃ | SiHCl ₃ | | 5 |
| 256 | Trichlorostibine | SbCl ₃ | SbCl ₃ | | 2 |
| 126 | Trichlorotrifluoroethane | C ₂ Cl ₃ F ₃ | CF ₂ ClCCl ₂ F | F-113, R-113 | 1 |
| 312 | Triethoxy silane | C ₆ H ₁₆ O ₃ Si | (C ₂ H ₅ O) ₃ SiH | | 2 |
| 308 | Triethoxyborane | C ₆ H ₁₅ BO ₃ | (C ₂ H ₅ O) ₃ B | Boron triethoxide; | 2 |
| 311 | Triethoxyphosphine | C ₆ H ₁₅ O ₃ P | (C ₂ H ₅ O) ₃ P | Triethyl phosphite; UN 2323; Phosphorous acid, triethyl ester | 2 |
| 306 | Triethyl arsine | C ₆ H ₁₅ As | (C ₂ H ₅) ₃ As | Arsine; Triethylarsenic | 2 |
| 313 | Triethyl silane | C ₆ H ₁₆ Si | (C ₂ H ₅) ₃ SiH | (C ₂ H ₅) ₃ SiH | 2 |
| 257 | Triethylaluminum | C ₆ H ₁₅ Al | (C ₂ H ₅) ₃ Al | | 2 |
| 310 | Triethylamine | C ₆ H ₁₅ N | (C ₂ H ₅) ₃ N | UN 1296; Ethanamine | 2 |
| 258 | Triethylantimony | C ₆ H ₁₅ Sb | (C ₂ H ₅) ₃ Sb | | 2 |
| 163 | Triethylborate | C ₆ H ₁₅ O ₃ B | B(OC ₂ H ₅) ₃ | TEB, Triethoxyborane | 2 |
| 148 | Triethylgallium | C ₆ H ₁₅ Ga | (C ₂ H ₅) ₃ Ga | TEGa | 4 |
| 309 | Triethylindium | C ₆ H ₁₅ In | (C ₂ H ₅) ₃ In | Indium triethyl | 2 |
| 307 | Trietoxy arsine | C ₆ H ₁₅ AsO ₃ | (C ₂ H ₅ O) ₃ As | Triethyl ester arsenous acid; Triethyl arsenite | 2 |
| 259 | Trifluoroacetic Acid | CF ₃ CO ₂ H | CF ₃ CO ₂ H | | 2 |
| 260 | Trifluoroacetonitrile | C ₂ F ₃ N | F ₃ CCN | | 2 |
| 321 | Trifluoromethylhypofluorite | CF ₄ O | CF ₄ O | CF ₃ OF; Hypofluorous acid; trifluoromethyl ester | 2 |
| 290 | Trifluoropropane | C ₃ H ₅ F ₃ | C ₃ H ₅ F ₃ | 1,1,1-Trifluoropropane; CH ₃ CH ₂ CF ₃ | 2 |
| 261 | Trifluorosilane | SiHF ₃ | SiHF ₃ | | 2 |
| 262 | Triisobutylaluminum | C12H27Al | (C ₄ H ₉) ₃ Al | | 2 |
| 287 | Trimethoxy silane | C ₃ H ₁₀ O ₃ Si | C ₃ H ₁₀ O ₃ Si | | 2 |
| 131 | Trimethoxyborine | C ₃ H ₉ BO ₃ | B(OCH ₃) ₃ | TMB, Trimethylborate | 2 |
| 294 | Trimethyl ester phosphoric acid | C ₃ H ₉ O ₄ P | C ₃ H ₉ O ₄ P | Methyl phosphate; Trimethoxyphosphine oxide | 2 |
| 190 | Trimethyl Silane | C ₃ H ₁₀ Si | (CH ₃) ₃ SiH | | 2 |
| 149 | Trimethylaluminum | C ₃ H ₉ Al | Al(CH ₃) ₃ | TMA, TMAI | 4 |
| 109 | Trimethylamine | C ₃ H ₉ N | (CH ₃) ₃ N | Methylamine | 1 |
| 165 | Trimethylaminealane | C ₃ H ₁₂ AlN | (CH ₃) ₃ NAlH ₃ | TMAA | 11 |
| 150 | Trimethylantimony | C ₃ H ₉ Sb | (CH ₃) ₃ Sb | Trimethylstibene | 2 |
| 151 | Trimethylarsenic | C ₃ H ₉ As | (CH ₃) ₃ As | Trimethylarsine, TMAs | 2 |
| 277 | Trimethylborane | C ₃ H ₉ B | (CH ₃) ₃ B | | 2 |
| 152 | Trimethylgallium | C ₃ H ₉ Ga | Ga(CH ₃) ₃ | TMGa | 4 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-----------------------|---------------|---|---|------------|
| 153 | Trimethylindium | C3H9In | (CH ₃) ₃ In | TMIn | 3 |
| 314 | Trimethylisoxazole | C6H9NO | CH ₃ CH=CHCH=CHCON H ₂ | 3,4,5-Trimethylisoxazole, Sorbamide | 3 |
| 133 | Trimethylphosphite | C3H9PO3 | (CH ₃ O) ₃ P | TMPI, Trimethoxyphosphine | 2 |
| 132 | Trimethylphosphorous | C3H9P | (CH ₃) ₃ P | Trimethylphosphine, TMP | 2 |
| 303 | Trimethylvinylsilane | C5H12Si | C ₅ H ₁₂ Si | Vinyltrimethylsilane; CH ₂ =CHSi(CH ₃) ₃ | 2 |
| 328 | Trisilane | Si3H8 | Si ₃ H ₈ | Silicopropane; Trisilicane; H ₈ Si ₃ | 2 |
| 159 | Tritium | T2 | H ₃ ² | T2 | 2 |
| 273 | Tungsten Hexacarbonyl | C6O6W | W(CO) ₆ | | 1 |
| 121 | Tungsten Hexafluoride | WF6 | WF ₆ | | 2 |
| 123 | Uranium Hexafluoride | UF6 | UF ₆ | | 2 |
| 56 | Vinyl Bromide | C2H3Br | CH ₂ =CHBr | | 1 |
| 55 | Vinyl Chloride | C2H3Cl | CH ₂ =CHCl | Chloroethylene | 1 |
| 51 | Vinyl Fluoride | C2H3F | H ₂ C=CHF | | 1 |
| 20 | Water Vapor | H2O | H ₂ O | | 2 |
| 6 | Xenon | Xe | Xe | | 1 |
| 324 | Xenon difluoride | XeF2 | XeF ₂ | F ₂ Xe; Xenon fluoride | 2 |
| 263 | Xylene m- | C8H10 | 1,3-(CH ₃) ₂ C ₆ H ₄ | 1,3 Dimethyl Benzene | 3 |
| 264 | Xylene p- | C8H10 | 1,4-(CH ₃) ₂ C ₆ H ₄ | 1,4 Dimethyl Benzene | 3 |
| 330 | Zinc | Zn | Zn | UN 1383 | 2 |

8 Gas Table Sorted by Symbol

Table 3 Gases Sorted by Symbol

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-----------------------|---------------|---|----------------|------------|
| 8 | Air | Air | | | 1 |
| 226 | Aluminum Trifluoride | AlF3 | AlF ₃ | | 2 |
| 4 | Argon | Ar | Ar | | 1 |
| 242 | Arsenic Tribromide | AsBr3 | AsBr ₃ | | 2 |
| 216 | Arsenic Trichloride | AsCl3 | AsCl ₃ | | 2 |
| 195 | Arsenic Trifluoride | AsF3 | AsF ₃ | | 2 |
| 96 | Arsenic Pentafluoride | AsF5 | AsF ₅ | | 2 |
| 35 | Arsine | AsH3 | AsH ₃ | | 1 |
| 196 | Arsenic Triiodine | AsI3 | AsI ₃ | | 2 |
| 248 | Tetrachlorodiborane | B2Cl4 | B ₂ Cl ₄ | | 2 |
| 249 | Tetrafluorodiborane | B2F4 | B ₂ F ₄ | | 2 |
| 58 | Diborane | B2H6 | B ₂ H ₆ | | 1 |
| 198 | Borazine | B3N3H6 | H ₃ B ₃ N ₃ H ₃ | | 14 |
| 239 | Pentaborane(11) | B5H11 | B ₅ H ₁₁ | | 2 |
| 142 | Pentaborane | B5H9 | B ₅ H ₉ | | 2 |
| 79 | Boron Tribromide | BBr3 | BBr ₃ | | 1 |
| 70 | Boron Trichloride | BCl3 | BCl ₃ | | 1 |
| 48 | Boron Trifluoride | BF3 | BF ₃ | | 1 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-----------------------------------|---|--|--|------------|
| 21 | Bromine | Br ₂ | Br ₂ | | 2 |
| 278 | Silicon tetrabromide | Br ₄ Si | Br ₄ Si | SiBr ₄ ; Tetrabromosilane; Silicon (IV) bromide | 2 |
| 76 | Bromine Trifluoride | BrF ₃ | BrF ₃ | | 1 |
| 116 | Bromine Pentafluoride | BrF ₅ | BrF ₅ | | 1 |
| 279 | Tantalum (V) ethoxide | C ₁₀ H ₂₅ O ₅ Ta | C ₁₀ H ₂₅ O ₅ Ta | Ta(Oet) ₅ | 2 |
| 146 | Tributylaluminum | C ₁₂ H ₂₇ Al | (CH ₃ CH ₂ CH ₂ CH ₂) ₃ Al | TBAI | 3 |
| 262 | Triisobutylaluminum | C ₁₂ H ₂₇ Al | (C ₄ H ₉) ₃ Al | | 2 |
| 194 | Titanium Tetraisopropoxide | C ₁₂ H ₂₈ O ₄ Ti | Ti(OC ₃ H ₇) ₄ | | 1 |
| 280 | Diphenylmethylenediamine | C ₁₃ H ₁₄ N ₂ | C ₁₃ H ₁₄ N ₂ | | 2 |
| 281 | Diphenylmethan-4,4' - diisocyanat | C ₁₅ H ₁₀ N ₂ O | C ₁₅ H ₁₀ N ₂ O | UN 2489; Benzene,1,1' - methylenebis(isocyanatophenyl) | 2 |
| 282 | Tetrakis(diethylamino)titanium | C ₁₆ H ₄₀ N ₄ Ti | C ₁₆ H ₄₀ N ₄ Ti | | 2 |
| 130 | Dibromotetrafluoroethane | C ₂ Br ₂ F ₄ | BrF ₂ CCF ₂ Br | F-114B2, R-114B2 | 1 |
| 105 | Bromotrifluoroethylene | C ₂ BrF ₃ | CF ₂ CFBr | | 1 |
| 125 | Dichlorotetrafluoroethane | C ₂ Cl ₂ F ₄ | F ₃ CCl ₂ F | F-114, R-114 | 1 |
| 126 | Trichlorotrifluoroethane | C ₂ Cl ₃ F ₃ | CF ₂ ClCCl ₂ F | F-113, R-113 | 1 |
| 168 | Tetrachloroethylene | C ₂ Cl ₄ | Cl ₂ C=CCl ₂ | Perchloroethylene or Ethylene, Perchloro | 2 |
| 206 | Chlorotrifluoroethylene | C ₂ ClF ₃ | FCCl=CF ₂ | R-1113, FREON-1113 | 2 |
| 119 | Chloropentafluoroethane | C ₂ ClF ₅ | ClCF ₂ CF ₃ | F-115, R-115 | 1 |
| 260 | Trifluoroacetonitrile | C ₂ F ₃ N | F ₃ CCN | | 2 |
| 94 | Tetrafluoroethylene | C ₂ F ₄ | F ₂ C=CF ₂ | | 1 |
| 118 | Hexafluoroethane | C ₂ F ₆ | F ₃ CCF ₃ | F-116, Perfluoroethane | 1 |
| 42 | Acetylene | C ₂ H ₂ | HC≡CH | Ethyne | 1 |
| 191 | Dichloroethylene -trans | C ₂ H ₂ Cl ₂ | CHCl=CHCl | | 2 |
| 210 | Dichloroethylene | C ₂ H ₂ Cl ₂ | CH ₂ =CCl ₂ | Vinylidene Chloride | 2 |
| 211 | Dichloroethylene -cis | C ₂ H ₂ Cl ₂ | CHCl=CHCl | | 2 |
| 64 | Difluoroethylene | C ₂ H ₂ F ₂ | CH ₂ =CF ₂ | G-1132A, Vinylidenefluoride | 1 |
| 156 | Tetrafluoroethane | C ₂ H ₂ F ₄ | CH ₂ FCF ₃ | R-134A, F-134A | 2 |
| 56 | Vinyl Bromide | C ₂ H ₃ Br | CH ₂ =CHBr | | 1 |
| 55 | Vinyl Chloride | C ₂ H ₃ Cl | CH ₂ =CHCl | Chloroethylene | 1 |
| 112 | Trichloroethane | C ₂ H ₃ Cl ₃ | CH ₃ CCl ₃ | TCA, Methylchloroform | 2 |
| 103 | Difluorochloroethane | C ₂ H ₃ ClF ₂ | CF ₂ ClCH ₃ | F-142B, R-142B | 1 |
| 203 | Chlorodifluoroethane | C ₂ H ₃ ClF ₂ | CH ₃ -CF ₂ Cl | R-142b | 4 |
| 51 | Vinyl Fluoride | C ₂ H ₃ F | H ₂ C=CHF | | 1 |
| 348 | Ethane, 1,1,1-Trifluoro | C ₂ H ₃ F ₃ | C ₂ H ₃ F ₃ | HFC-143a | 3 |
| 173 | Acetonitrile | C ₂ H ₃ N | CH ₃ CN | | 2 |
| 38 | Ethylene | C ₂ H ₄ | CH ₂ =CH ₂ | Ethene | 1 |
| 222 | Ethylene Dichloride | C ₂ H ₄ Cl ₂ | ClCH ₂ CH ₂ Cl | 1,2 Dichloroethane | 2 |
| 82 | Difluoroethane | C ₂ H ₄ F ₂ | CH ₃ CHF ₂ | Ethylidene Fluoride, R-152A | 1 |
| 45 | Ethylene Oxide | C ₂ H ₄ O | C ₂ H ₄ O | Acetaldehyde | 1 |
| 283 | Acetic acid | C ₂ H ₄ O ₂ | CH ₃ COOH | Ethanoic acid; UN 2789; | 2 |
| 75 | Ethyl Chloride | C ₂ H ₅ Cl | C ₂ H ₅ Cl | Chloroethane or Ethane, Chloro or Ethyl Chloride | 1 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|-----------------------------------|-----------------------------------|---|---|------------|
| 221 | Ethyl Fluoride | C2H5F | CH ₃ CH ₂ F | Fluoroethane, R-161, FREON-161 | 2 |
| 54 | Ethane | C2H6 | CH ₃ CH ₃ | | 1 |
| 218 | Dimethylcadmium | C2H6Cd | (CH ₃) ₂ Cd | | 2 |
| 73 | Dimethyl Ether | C2H6O | CH ₃ OCH ₃ | Methylether | 1 |
| 136 | Ethanol | C2H6O | CH ₃ CH ₂ OH | | 2 |
| 169 | Ethyleneglycol | C2H6O2 | HOCH ₂ CH ₂ OH | Ehtanediol, Glycol | 2 |
| 284 | Dimethyl selenide | C2H6Se | C ₂ H ₆ Se | (CH ₃) ₂ Se; Selenium dimethyl; Dimethylselenium | 2 |
| 212 | Dichlorodimethylsilane | C2H6SiCl ₂ | (CH ₃) ₂ SiCl ₂ | | 2 |
| 220 | Dimethyltellurium | C2H6Te | (CH ₃) ₂ Te | | 2 |
| 135 | Dimethylzinc | C2H6Zn | (CH ₃) ₂ Zn | | 3 |
| 164 | Dimethylaluminum-hydride | C2H7Al | (CH ₃) ₂ AlH | DMAH | 13 |
| 85 | Dimethylamine | C2H7N | (CH ₃) ₂ NH | | 1 |
| 233 | Monoethylamine | C2H7N | C ₂ H ₅ NH ₂ | | 2 |
| 285 | Ethoxy silane | C2H8OSi | C ₂ H ₈ OSi | | 2 |
| 219 | Dimethylsilane | C2H8Si | (CH ₃) ₂ SiH ₂ | | 2 |
| 137 | Halothane | C2HBrClF ₃ | BrClHCCF ₃ | | 6 |
| 186 | 2,2 Dichloro1,1,1 Trifluoroethane | C2HCl ₂ F ₃ | CHCl ₂ -CF ₃ | Freon 123, Suva 123 | 2 |
| 204 | Chlorodifluoroethylene | C2HClF ₂ | CF ₂ =CHCl | R-1122, FREON-1122 | 4 |
| 223 | Fluoroacetylene | C2HF | FC≡CH | | 2 |
| 155 | Pentafluoroethane | C2HF ₅ | CF ₃ CHF ₂ | F-125, R-125 | 9 |
| 59 | Cyanogen | C2N ₂ | NCCN | Oxalodinitrile | 1 |
| 138 | Hexafluoropropylene | C3F ₆ | CF ₃ CF=CF ₂ | Perfluoropropylene or Propylene, Perfluoro | 1 |
| 225 | Hexafluoroacetone | C3F ₆ O | (CF ₃) ₂ CO | | 2 |
| 286 | Hexafluoropropylene oxide | C3F ₆ O | C ₃ F ₆ O | Hexafluoroepoxypropane | 2 |
| 128 | Perfluoropropane | C3F ₈ | CF ₂ (CF ₃) ₂ | | 1 |
| 287 | Trimethoxy silane | C3H10O3Si | C ₃ H ₁₀ O ₃ Si | | 2 |
| 190 | Trimethyl Silane | C3H10Si | (CH ₃) ₃ SiH | | 2 |
| 165 | Trimethylaminealane | C3H12AlN | (CH ₃) ₃ NAlH ₃ | TMAA | 11 |
| 267 | Hexafluoro Propane | C3H2F ₆ | CH ₂ FCF ₂ CF ₃ | 1,1,1,2,2,3-Hexafluoropropane | 2 |
| 288 | Pentafluoropropanol | C3H3F5O | C ₂ F ₅ CH ₂ OH | Perfluorodihydropropanol, 1,1,1,2,2-Pentafluoropropane | 2 |
| 276 | Acrylonitrile | C3H3N | CH ₂ =CHCN | Acrylon; Propenenitrile | 3 |
| 66 | Allene | C3H4 | CH ₂ =C=CH ₂ | Propadiene | 1 |
| 68 | Methyl Acetylene | C3H4 | CH ₃ C≡CH | Propyne | 1 |
| 289 | Acrylic acid | C3H4O ₂ | C ₃ H ₄ O ₂ | 2-Propenoic acid; CH ₂ =CHCOOH | 2 |
| 290 | Trifluoropropane | C3H5F ₃ | C ₃ H ₅ F ₃ | 1,1,1-Trifluoropropane; CH ₃ CH ₂ CF ₃ | 2 |
| 61 | Cyclopropane | C3H6 | C ₃ H ₆ | | 1 |
| 69 | Propylene | C3H6 | CH ₃ CH=CH ₂ | Propene | 1 |
| 81 | Methyl Vinyl Ether | C3H6O | CH ₃ OCH=CH ₂ | | 1 |
| 184 | Acetone | C3H6O | CH ₃ COCH ₃ | | 2 |

| <i>Code</i> | <i>Gas Name</i> | <i>Symbol</i> | <i>Formula</i> | <i>Synonym</i> | <i>Ref</i> |
|-------------|---------------------------------|---------------|--|--|------------|
| 291 | Ethyl Formate | C3H6O2 | HCO ₂ C ₂ H ₅ | Ethyl ester formic acid; HC00C2H5 | 3 |
| 292 | Methyl acetate | C3H6O2 | CH ₃ CO ₂ CH ₃ | Methyl ester acetic acid; UN 1231 | 3 |
| 331 | Acetaldehyde methoxy | C3H6O2 | CH ₃ OCH ₂ CHO | | 3 |
| 332 | Acetone, hydroxy | C3H6O2 | CH ₃ COCH ₂ OH | Acetol | 3 |
| 333 | Glycol methylene ether | C3H6O2 | C ₃ H ₆ O ₂ | 1,3-Dioxolane | 3 |
| 334 | Propanoic acid | C3H6O2 | CH ₃ CH ₂ CO ₂ H | Propionic acid | 3 |
| 335 | Glycidol | C3H6O2 | CH ₂ CHCH ₂ OH | 1-Propanol, 2,3 epoxy | 3 |
| 293 | Propenamine | C3H7N | C ₃ H ₇ N | Allylamine; Monoallylamine; UN 2334 | 2 |
| 89 | Propane | C3H8 | CH ₃ CH ₂ CH ₃ | | 1 |
| 187 | Isopropal Alcohol | C3H8O | (CH ₃) ₂ CHOH | 2-Propanol | 2 |
| 149 | Trimethylaluminum | C3H9Al | Al(CH ₃) ₃ | TMA, TMAI | 4 |
| 151 | Trimethylarsenic | C3H9As | (CH ₃) ₃ As | Trimethylarsine, TMAs | 2 |
| 277 | Trimethylborane | C3H9B | (CH ₃) ₃ B | | 2 |
| 131 | Trimethoxyborine | C3H9BO3 | B(OCH ₃) ₃ | TMB, Trimethylborate | 2 |
| 152 | Trimethylgallium | C3H9Ga | Ga(CH ₃) ₃ | TMGa | 4 |
| 153 | Trimethylindium | C3H9In | (CH ₃) ₃ In | TMIn | 3 |
| 109 | Trimethylamine | C3H9N | (CH ₃) ₃ N | Methylamine | 1 |
| 294 | Trimethyl ester phosphoric acid | C3H9O4P | C ₃ H ₉ O ₄ P | Methyl phosphate; Trimethoxyphosphine oxide | 2 |
| 132 | Trimethylphosphorous | C3H9P | (CH ₃) ₃ P | Trimethylphosphine, TMP | 2 |
| 133 | Trimethylphosphite | C3H9PO3 | (CH ₃ O) ₃ P | TMPI, Trimethoxyphosphine | 2 |
| 150 | Trimethylantimony | C3H9Sb | (CH ₃) ₃ Sb | Trimethylstibene | 2 |
| 295 | Heptafluoropropane | C3HF7 | C ₃ HF ₇ | 1,1,1,2,3,3,3-Heptafluoropropane, Freon 227 | 2 |
| 241 | Perfluorobutane | C4F10 | C ₄ F ₁₀ | | 3 |
| 270 | Hexafluoro-2-Butyne | C4F6 | CF ₃ C≡CCF ₃ | Bis(trifluoromethyl)acetylene; Perfluoro-2-butyne | 3 |
| 296 | Hexafluorocyclobutene | C4F6 | C ₄ F ₆ | Perfluorocyclobutene; 1,2,3,3,4,4- Hexafluorocyclobutene | 3 |
| 297 | Hexafluoro butadiene-1,3 | C4F6 | CF ₂ =CF-CF=CF ₂ | Perfluorobutadiene-1,3; | 3 |
| 129 | Octafluorocyclobutane | C4F8 | (CF ₂) ₄ | Perfluorocyclobutane or Cyclobutane, Perfluoro | 1 |
| 236 | Octafluorobutane | C4F8 | C ₄ F ₈ | | 3 |
| 351 | Perfluoro (Oxacyclopentane) | C4F8O | C ₄ F ₈ O | | 3 |
| 111 | Isobutane | C4H10 | (CH ₃) ₂ CHCH ₃ | 2-Methylpropane or Propane, 2- Methyl | 1 |
| 117 | Butane | C4H10 | CH ₃ (CH ₂) ₂ CH ₃ | | 1 |
| 271 | Butanol-1 | C4H10O | CH ₃ CH ₂ CH ₂ CH ₂ OH | | 3 |
| 336 | Butanol-2 | C4H10O | CH ₃ CH ₂ CH(OH)CH ₃ | | 3 |
| 337 | Tertiary Butyl Alcohol | C4H10O | (CH ₃) ₃ COH | | 3 |
| 338 | Diethyl ether | C4H10O | C ₂ H ₅ OC ₂ H ₅ | | 3 |
| 339 | Methyl propyl ether | C4H10O | CH ₃ OC ₃ H ₇ | | 3 |
| 340 | Methyl isopropyl ether | C4H10O | (CH ₃) ₂ CHOCH ₃ | | 3 |

| Code | Gas Name | Symbol | Formula | Synonym | Ref |
|------|--------------------------------|------------|---|--|-----|
| 341 | Isobutyl Alcohol | C4H10O | (CH ₃) ₂ CHCH ₂ OH | | 3 |
| 298 | Diethyl sulfide | C4H10S | C ₄ H ₁₀ S | UN 2375; Ethyl sulfide; | 2 |
| 214 | Diethylzinc | C4H10Zn | Zn(C ₂ H ₅) ₂ | | 2 |
| 161 | Tertiarybutylarsine | C4H11As | C(CH ₃) ₃ AsH ₂ | TBA | 8 |
| 213 | Diethylamine | C4H11N | (C ₂ H ₅) ₂ NH | | 2 |
| 162 | Tertiarybutylphosphine | C4H11P | C(CH ₃) ₃ PH ₂ | TBP | 8 |
| 250 | Tetramethylgermanium | C4H12Ge | (CH ₃) ₄ Ge | | 2 |
| 299 | Tetramethoxygermanium | C4H12GeO4 | (CH ₃ O) ₄ Ge | Ge(OMe) ₄ | 2 |
| 300 | Dimethoxydimethyl silane | C4H12O2Si | (CH ₃ O) ₂ Si(CH ₃) ₂ | KBM 22 | 2 |
| 301 | Tetramethoxy silane | C4H12O4Si | (CH ₃ O) ₄ Si | Silicic Acid (H ₄ SiO ₄); Tetramethyl ester; Tetramethyl silicate | 2 |
| 302 | Tetramethyl lead | C4H12Pb | (CH ₃) ₄ Pb | (CH ₃) ₄ Pb; Plumbane, tetramethyl; | 2 |
| 154 | Diethylsilane | C4H12Si | (C ₂ H ₅) ₂ SiH ₂ | | 2 |
| 251 | Tetramethylsilane | C4H12Si | (CH ₃) ₄ Si | | 2 |
| 252 | Tetramethyl Tin | C4H12Sn | (CH ₃) ₄ Sn | | 2 |
| 166 | Dimethylethylaminealane | C4H14NAI | (CH ₃) ₂ C ₂ H ₅ NAIH ₃ | DMEAA | 14 |
| 158 | Tetramethylcyclotetra-siloxane | C4H16Si4O4 | (CH ₃) ₄ H ₄ (SiO) ₄ | TOMCATS | 7 |
| 93 | Ethyl Acetylene | C4H6 | CH ₃ CH ₂ C≡CH | | 1 |
| 100 | Butadiene | C4H6 | CH ₂ =C=CHCH ₃ | Methylallene | 1 |
| 98 | Transbutene | C4H8 | CH ₃ CH=CHCH ₃ | | 2 |
| 104 | Butene | C4H8 | CH ₃ CH ₂ CH=CH ₂ | 1-Butene | 1 |
| 106 | Isobutene | C4H8 | (CH ₃) ₂ C=CH ₂ | Isobutylene, Methylpropene | 2 |
| 107 | Cisbutene | C4H8 | CH ₃ CH=CHCH ₃ | Cis-2-Butene | 2 |
| 207 | Cyclobutane | C4H8 | C ₄ H ₈ | Tetramethylene | 2 |
| 182 | Tetrahydrofuran | C4H8O | C ₄ H ₈ O | | 2 |
| 140 | Nickel Carbonyl | C4O4Ni | Ni(CO) ₄ | | 1 |
| 266 | Octafluorocyclopentene | C5F8 | CF ₂ =C(CF ₃)-CF=CF ₂ | | 3 |
| 120 | Methylbutene | C5H10 | CH ₃ CH ₂ CCH ₃ =CH ₂ | 2-Methyl-1-Butene | 1 |
| 122 | Dimethylpropane | C5H12 | (CH ₃) ₄ C | Neopentane | 2 |
| 231 | Isopentane | C5H12 | CH ₃ CH ₂ CH(CH ₃) ₂ | 2-Methylbutane | 2 |
| 240 | Pentane | C5H12 | CH ₃ (CH ₂) ₃ CH ₃ | | 2 |
| 303 | Trimethylvinylsilane | C5H12Si | C ₅ H ₁₂ Si | Vinyltrimethylsilane; CH ₂ =CHSi(CH ₃) ₃ | 2 |
| 272 | Hexafluoro Acetylacetone | C5H2F6O2 | C ₅ H ₂ F ₆ O ₂ | | 1 |
| 304 | Pyridine | C5H5N | C ₅ H ₅ N | Azabenzene; Azine | 2 |
| 305 | Methyl methacrylate polymer | C5H8O2 | C ₅ H ₈ O ₂ | Poly(methyl methacrylate); 2- Methyl-2-propenoic acid | 2 |
| 230 | Iron Carbonyl | C5O5Fe | Fe(CO) ₅ | | 2 |
| 192 | Hexafluorobenzene | C6F6 | C ₆ F ₆ | | 2 |
| 178 | 4-Methyl, 1-Pentene | C6H12 | (CH ₃) ₂ CHCH ₂ CH=CH ₂ | | 2 |
| 127 | Hexane | C6H14 | CH ₃ (CH ₂) ₄ CH ₃ | | 2 |
| 170 | Hexanediol-1,6 | C6H14O2 | HO(CH ₂) ₆ OH | Hexyleneglycol, Hexamethyleneglycol | 2 |
| 257 | Triethylaluminum | C6H15Al | (C ₂ H ₅) ₃ Al | | 2 |

| Code | Gas Name | Symbol | Formula | Synonym | Ref |
|------|--------------------------------------|-----------|--|--|-----|
| 306 | Triethyl arsine | C6H15As | (C ₂ H ₅) ₃ As | Arsine; Triethylarsenic | 2 |
| 307 | Trietoxy arsine | C6H15AsO3 | (C ₂ H ₅ O) ₃ As | Triethyl ester arsenous acid; Triethyl arsenite | 2 |
| 308 | Triethoxyborane | C6H15BO3 | (C ₂ H ₅ O) ₃ B | Boron triethoxide; | 2 |
| 148 | Triethylgallium | C6H15Ga | (C ₂ H ₅) ₃ Ga | TEGa | 4 |
| 309 | Triethylindium | C6H15In | (C ₂ H ₅) ₃ In | Indium triethyl | 2 |
| 310 | Triethylamine | C6H15N | (C ₂ H ₅) ₃ N | UN 1296; Ethanamine; | 2 |
| 163 | Triethylborate | C6H15O3B | B(OC ₂ H ₅) ₃ | TEB, Triethoxyborane | 2 |
| 311 | Triethoxyphosphine | C6H15O3P | (C ₂ H ₅ O) ₃ P | Triethyl phosphite; UN 2323; Phosphorous acid, triethyl ester | 2 |
| 274 | TEAsat | C6H15O4As | (C ₂ H ₅ O) ₃ AsO | | 1 |
| 224 | Fluorotriethoxysilane | C6H15OSiF | (C ₂ H ₅ O) ₃ SiF | | 2 |
| 258 | Triethylantimony | C6H15Sb | (C ₂ H ₅) ₃ Sb | | 2 |
| 188 | Diethoxy Dimethyl Silane | C6H16O2Si | (C ₂ H ₅ O) ₂ Si(CH ₃) ₂ | | 2 |
| 312 | Triethoxy silane | C6H16O3Si | (C ₂ H ₅ O) ₃ SiH | | 2 |
| 313 | Triethyl silane | C6H16Si | (C ₂ H ₅) ₃ SiH | (C ₂ H ₅) ₃ SiH; | 2 |
| 139 | Hexamethyldisilane | C6H18Si2 | (CH ₃) ₃ Si ₂ (CH ₃) ₃ | HMDSi, HMDS | 3 |
| 228 | Hexamethyldisiloxane | C6H18Si2O | (CH ₃) ₆ Si ₂ O | | 2 |
| 227 | Hexamethyldisilazane | C6H19Si2N | (CH ₃) ₆ Si ₂ NH | | 2 |
| 172 | Chlorobenzene | C6H5Cl | C ₆ H ₅ Cl | Chlorobenzol, Phenylchloride | 2 |
| 197 | Benzene | C6H6 | C ₆ H ₆ | | 2 |
| 180 | Phenol | C6H6O | C ₆ H ₅ OH | | 2 |
| 314 | Trimethylisoxazole | C6H9NO | CH ₃ CH=CHCH=CHCON H ₂ | 3,4,5-Trimethylisoxazole, Sorbamide | 3 |
| 273 | Tungsten Hexacarbonyl | C6O6W | W(CO) ₆ | | 1 |
| 177 | Methylcyclohexane | C7H14 | CH ₃ C ₆ H ₁₁ | Hexahydrotoluene | 2 |
| 181 | Toluene | C7H8 | C ₆ H ₅ CH ₃ | Methylbenzene | 2 |
| 174 | Ethylbenzene | C8H10 | C ₆ H ₅ C ₂ H ₅ | | 2 |
| 179 | o-Xylene | C8H10 | 1,2-(CH ₃) ₂ C ₆ H ₄ | 1,2-Dimethylbenzene | 2 |
| 263 | Xylene m- | C8H10 | 1,3-(CH ₃) ₂ C ₆ H ₄ | 1,3 Dimethyl Benzene | 3 |
| 264 | Xylene p- | C8H10 | 1,4-(CH ₃) ₂ C ₆ H ₄ | 1,4 Dimethyl Benzene | 3 |
| 342 | 3-one-2,5-dimethyl hexadiene | C8H10 | CH ₂ =C(CH ₃)C=CC(CH ₃)C H ₂ | | 3 |
| 343 | 1,7-Octadiyne | C8H10 | HC≡C(CH ₂) ₄ C≡CH | | 3 |
| 344 | 2,6-Octadiyne | C8H10 | CH ₃ C≡CCH ₂ CH ₂ C≡CCH ₃ | | 3 |
| 345 | 1,3,5,7-Octatetraene | C8H10 | CH ₂ =CHCH=CHCH=CHC H=CH ₂ | | 3 |
| 237 | Octane | C8H18 | CH ₃ (CH ₂) ₆ CH ₃ | | 2 |
| 315 | Tetraethylgermane | C8H20Ge | (C ₂ H ₅) ₄ Ge | (C ₂ H ₅) ₄ Ge; Germanium tetraethyl | 2 |
| 144 | Tetraethoxysilane | C8H20O4Si | (C ₂ H ₅ O) ₄ Si | TEOS | 2 |
| 316 | Tetraethyl lead | C8H20Pb | (C ₂ H ₅) ₄ Pb | Plumbane, tetraethyl; UN 1649 | 2 |
| 317 | Tetraethyl silane | C8H20Si | C ₈ H ₂₀ Si | Tetraethylsilane; Tetraethylsilicon; (C ₂ H ₅) ₄ Si | 2 |
| 318 | Tetrakis(dimethylamino)- titanium | C8H24N4Ti | C ₈ H ₂₄ N ₄ Ti | | 2 |
| 319 | Styrene | C8H8 | C ₈ H ₈ | Ethenylbenzene; Un 2055 | 2 |

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|-------------|-----------------------------|------------------------------------|---|--|------------|
| 320 | Triallylamine | C ₉ H ₁₅ N | C ₉ H ₁₅ N | | 2 |
| 209 | Dibromodifluoromethane | CBr ₂ F ₂ | Br ₂ CF ₂ | R-12B2, FREON-12B2 | 2 |
| 200 | Carbon Tetrabromide | CBr ₄ | CBr ₄ | | 2 |
| 199 | Bromochlorodifluoromethane | CBrClF ₂ | BrClCF ₂ | | 2 |
| 80 | Bromotrifluoromethane | CBrF ₃ | BrCF ₃ | F-13B1, R-13B1 | 1 |
| 84 | Dichlorodifluoromethane | CCl ₂ F ₂ | CCl ₂ F ₂ | F-12, R-12 | 1 |
| 60 | Phosgene | CCl ₂ O | CCl ₂ O | Carbonyl Chloride | 1 |
| 91 | Trichlorofluoromethane | CCl ₃ F | CCl ₃ F | F-11, R-11 | 1 |
| 101 | Carbon Tetrachloride | CCl ₄ | CCl ₄ | Tetrachloromethane or Methane, Tetrachloro | 2 |
| 74 | Chlorotrifluoromethane | CClF ₃ | ClCF ₃ | F-13, R-13 | 1 |
| 46 | Carbonyl Fluoride | CF ₂ O | CF ₂ O | | 1 |
| 259 | Trifluoroacetic Acid | CF ₃ CO ₂ H | CF ₃ CO ₂ H | | 2 |
| 63 | Carbon Tetrafluoride | CF ₄ | CF ₄ | Tetrafluoromethane or Methane, Tetrafluoro | 1 |
| 321 | Trifluoromethylhypofluorite | CF ₄ O | CF ₄ O | CF ₃ OF; Hypofluorous acid; trifluoromethyl ester | 2 |
| 268 | Methylene Bromide | CH ₂ Br ₂ | CH ₂ Br ₂ | UN 2664; Methyl dibromide, Dibromomethane | 1 |
| 265 | Dichloromethane | CH ₂ Cl ₂ | CH ₂ Cl ₂ | | |
| 160 | Difluoromethane | CH ₂ F ₂ | CH ₂ F ₂ | Methylene Fluoride | 2 |
| 208 | Diazomethane | CH ₂ N ₂ | CH ₂ N ₂ | Acomethylene | 2 |
| 322 | Formaldehyde | CH ₂ O | CH ₂ O | H ₂ CO; UN 1198; BFV | 2 |
| 44 | Methyl Bromide | CH ₃ Br | CH ₃ Br | Bromomethane or Methane, Bromo | 1 |
| 36 | Methyl Chloride | CH ₃ Cl | CH ₃ Cl | Chloromethane or Methane, Chloro | 1 |
| 183 | Methyltrichlorosilane | CH ₃ Cl ₃ Si | CH ₃ SiCl ₃ | MTS | 2 |
| 33 | Methyl Fluoride | CH ₃ F | CH ₃ F | Fluoromethane or Methane, Fluoro | 1 |
| 323 | Iodomethane | CH ₃ I | CH ₃ I | Methyl iodide; Un 2644 | 2 |
| 235 | Nitromethane | CH ₃ NO ₂ | CH ₃ NO ₂ | | 2 |
| 28 | Methane | CH ₄ | CH ₄ | | 1 |
| 176 | Methanol | CH ₄ O | CH ₃ OH | Methyl Alcohol | 2 |
| 47 | Methyl Mercaptan | CH ₄ S | CH ₃ SH | | 1 |
| 52 | Methylamine | CH ₅ N | CH ₃ NH ₂ | Amino Methane, Monomethylamine | 2 |
| 234 | Monomethyl hydrazine | CH ₆ N ₂ | CH ₃ N ₂ H ₃ | | 2 |
| 185 | Methylsilane | CH ₆ Si | CH ₃ SiH ₃ | Monomethylsilane | 2 |
| 83 | Tribromomethane | CHBr ₃ | CHBr ₃ | | 2 |
| 65 | Dichlorofluoromethane | CHCl ₂ F | CHCl ₂ F | F-21, R-21 | 1 |
| 71 | Chloroform | CHCl ₃ | CHCl ₃ | Trichloromethane or Methane, Trichloro | 2 |
| 57 | Chlorodifluoromethane | CHClF ₂ | CClHF ₂ | F-22, R-22 | 1 |
| 49 | Fluoroform | CHF ₃ | CHF ₃ | Trifluoromethane or Methane, Trifluoro, F-23, R-23 | 1 |
| 19 | Chlorine | Cl ₂ | Cl ₂ | | 1 |

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|-------------|-------------------------|---------------|-----------------------------------|--------------------------|------------|
| 37 | Cyanogen Chloride | CICN | CICN | | 1 |
| 77 | Chlorine Trifluoride | ClF3 | ClF ₃ | | 1 |
| 202 | Chlorine Pentafluoride | ClF5 | ClF ₅ | | 2 |
| 201 | Chlorine Dioxide | ClO2 | ClO ₂ | | 2 |
| 72 | Perchloryl Fluoride | ClO3F | ClO ₃ F | | 1 |
| 9 | Carbon Monoxide | CO | CO | | 1 |
| 25 | Carbon Dioxide | CO2 | CO ₂ | | 1 |
| 34 | Carbonyl Sulfide | COS | COS | | 1 |
| 40 | Carbon Disulfide | CS2 | CS ₂ | | 2 |
| 14 | Deuterium | D2 | H ₂ ² | D2 | 2 |
| 18 | Fluorine | F2 | F ₂ | | 1 |
| 217 | Digermane | Ge2H6 | Ge ₂ H ₆ | | 2 |
| 113 | Germanium Tetrachloride | GeCl4 | GeCl ₄ | Tetrachlorogermane | 2 |
| 99 | Germanium Tetrafluoride | GeF4 | GeF ₄ | Tetrafluorogermane | 2 |
| 43 | Germane | GeH4 | GeH ₄ | | 1 |
| 7 | Hydrogen | H2 | H ₂ | | 1 |
| 20 | Water Vapor | H2O | H ₂ O | | 2 |
| 22 | Hydrogen Sulfide | H2S | H ₂ S | | 1 |
| 23 | Hydrogen Selenide | H2Se | H ₂ Se | | 1 |
| 171 | Sulfuric Acid | H2SO4 | H ₂ SO ₄ | | 2 |
| 229 | Hydrogen telluride | H2Te | H ₂ Te | | 2 |
| 10 | Hydrogen Bromide | HBr | HBr | | 1 |
| 11 | Hydrogen Chloride | HCl | HCl | | 1 |
| 24 | Hydrogen Cyanide | HCN | HCN | | 1 |
| 1 | Helium | He | He | | 1 |
| 12 | Hydrogen Fluoride | HF | HF | | 1 |
| 275 | Hafnium Tetranitrate | HfN4O12 | Hf(NO ₃) ₄ | | 1 |
| 329 | Mercury | Hg | Hg | UN 2809 | 2 |
| 17 | Hydrogen Iodide | HI | HI | | 1 |
| 269 | Hydrazoic Acid | HN3 | HN ₃ | | 1 |
| 167 | Nitric Acid | HNO3 | HNO ₃ | | 2 |
| 115 | Iodine Pentafluoride | IF5 | IF ₅ | | 1 |
| 5 | Krypton | Kr | Kr | | 1 |
| 124 | Molybdenum Hexafluoride | MoF6 | MoF ₆ | | 2 |
| 13 | Nitrogen | N2 | N ₂ | | 1 |
| 157 | Tetrafluorohydrazine | N2F4 | F ₂ NNF ₂ | Dinitrogen Tetrafluoride | 1 |
| 50 | Hydrazine | N2H4 | H ₂ NNH ₂ | | 2 |
| 27 | Nitrous Oxide | N2O | N ₂ O | | 1 |
| 78 | Nitrogen Trioxide | N2O3 | N ₂ O ₃ | | 1 |
| 95 | Nitrogen Tetroxide | N2O4 | N ₂ O ₄ | Dinitrogenoxide | 2 |
| 346 | Niobium Pentachloride | NbCl5 | NbCl ₅ | | 3 |
| 350 | Deuterium Ammonia | ND3 | ND ₃ | | 3 |
| 2 | Neon | Ne | Ne | | 1 |
| 232 | Difluoroamidogen | NF2 | NF ₂ | | 2 |

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|-------------|--------------------------|---------------|--|---|------------|
| 53 | Nitrogen Trifluoride | NF3 | NF ₃ | | 1 |
| 29 | Ammonia | NH3 | NH ₃ | | 1 |
| 16 | Nitric Oxide | NO | NO | | 2 |
| 26 | Nitrogen Dioxide | NO2 | NO ₂ | | 1 |
| 141 | Nitrosyl Chloride | NOCl | NOCl | | 1 |
| 15 | Oxygen | O2 | O ₂ | | 1 |
| 30 | Ozone | O3 | O ₃ | | 1 |
| 238 | Oxygen Dichloride | OCl2 | OCl ₂ | | 2 |
| 41 | Oxygen Difluoride | OF2 | OF ₂ | | 1 |
| 193 | Phosphorus Trichloride | PCL3 | PCl ₃ | | 2 |
| 62 | Phosphorus Trifluoride | PF3 | PF ₃ | | 1 |
| 143 | Phosphorus Pentafluoride | PF5 | PF ₅ | | 1 |
| 31 | Phosphine | PH3 | PH ₃ | | 1 |
| 102 | Phosphorous Oxychloride | POCl3 | POCl ₃ | | 2 |
| 243 | Rhenium Hexafluoride | ReF6 | ReF ₆ | | 2 |
| 3 | Radon | Rn | Rn | | 2 |
| 189 | Sulfur Monochloride | S2Cl2 | S ₂ Cl ₂ | | 2 |
| 255 | Tribromostibine | SbBr3 | SbBr ₃ | | 2 |
| 256 | Trichlorostibine | SbCl3 | SbCl ₃ | | 2 |
| 245 | Stibine | SbH3 | SbH ₃ | | 2 |
| 349 | Diselenium Dichloride | Se2Cl2 | Se ₂ Cl ₂ | | 3 |
| 325 | Selenium hexafluoride | SeF6 | SeF ₆ | UN 2194; Selenium fluoride | 2 |
| 86 | Sulfur Tetrafluoride | SF4 | SF ₄ | | 1 |
| 110 | Sulfur Hexafluoride | SF6 | SF ₆ | | 1 |
| 347 | Disilabutane | Si2C2H10 | Si ₂ C ₂ H ₁₀ | | 3 |
| 97 | Disilane | Si2H6 | Si ₂ H ₆ | | 2 |
| 328 | Trisilane | Si3H8 | Si ₃ H ₈ | Silicopropane; Trisilicane; H ₈ Si3 | 2 |
| 253 | Tetrasilane | Si4H10 | Si ₄ H ₁₀ | | 2 |
| 108 | Silicon Tetrachloride | SiCl4 | SiCl ₄ | Tetrachlorosilane | 2 |
| 244 | Deuteriumsilane | SiD4 | SiH ₂ D ₂ | | 2 |
| 88 | Silicon Tetrafluoride | SiF4 | SiF ₄ | | 1 |
| 326 | Disilane hexafluoride | SiF6 | SiF ₆ | F ₆ Si ₂ ; Hexafluorodisilane | 2 |
| 67 | Dichlorosilane | SiH2Cl2 | SiH ₂ Cl ₂ | | 1 |
| 134 | Difluorosilane | SiH2F2 | SiH ₂ F ₂ | | 10 |
| 205 | Chlorosilane | SiH3Cl | SiH ₃ Cl | | 2 |
| 327 | Fluoro silane | SiH3F | SiH ₃ F | H ₃ FSi | 2 |
| 39 | Silane | SiH4 | SiH ₄ | | 1 |
| 147 | Trichlorosilane | SiHCl3 | SiHCl ₃ | | 5 |
| 261 | Trifluorosilane | SiHF3 | SiHF ₃ | | 2 |
| 145 | Tin Tetrachloride | SnCl4 | SnCl ₄ | Tetrachlorostannane | 2 |
| 32 | Sulfur Dioxide | SO2 | SO ₂ | | 1 |
| 87 | Sulfuryl Fluoride | SO2F2 | SO ₂ F ₂ | | 1 |
| 246 | Sulfur Trioxide | SO3 | SO ₃ | | 2 |
| 159 | Tritium | T2 | H ₃ ² | T2 | 2 |

| Code | Gas Name | Symbol | Formula | Synonym | Ref |
|------|--------------------------|-------------------|-------------------|-----------------------------------|-----|
| 247 | Tellurium Hexafluoride | TeF ₆ | TeF ₆ | | 2 |
| 114 | Titanium Tetrachloride | TiCl ₄ | TiCl ₄ | | 2 |
| 254 | Titanium Tetraiodide | TiI ₄ | TiI ₄ | | 2 |
| 123 | Uranium Hexafluoride | UF ₆ | UF ₆ | | 2 |
| 121 | Tungsten Hexafluoride | WF ₆ | WF ₆ | | 2 |
| 6 | Xenon | Xe | Xe | | 1 |
| 324 | Xenon difluoride | XeF ₂ | XeF ₂ | F ₂ Xe; Xenon fluoride | 2 |
| 330 | Zinc | Zn | Zn | UN 1383 | 2 |
| 90 | Intentionally Left Blank | | | | |
| 92 | Intentionally Left Blank | | | | |
| 175 | Intentionally Left Blank | | | | |

9 Mixed Gas Table Sorted by Code

Table 4 Mixed Gases Sorted by Code

| MIXED GAS NAME | SYMBOL | CODE |
|--|--|------|
| 15%PHOSPHINE/NITROGEN | 15%PH ₃ /N ₂ | 0500 |
| 5%PHOSPHINE/NITROGEN | 5%PH ₃ /N ₂ | 0501 |
| 20%SILANE/NITROGEN | 20%SiH ₄ /N ₂ | 0502 |
| 40%ARGON/TUNGSTEN HEXAFLUORIDE | 40%Ar/WF ₆ | 0503 |
| 10%ARSINE/HYDROGEN | 10%AsH ₃ /H ₂ | 0504 |
| 40%OXYGEN/HEXAFLUOROETHANE(FREON-116) | 40%O ₂ /C ₂ F ₆ | 0505 |
| 2%TRICHLOROETHANE/NITROGEN | 2%C ₂ H ₃ Cl ₃ /N ₂ | 0506 |
| 20%CARBON DIOXIDE/HYDROGEN | 20%CO ₂ /H ₂ | 0507 |
| 30%CARBON DIOXIDE/AIR | 30%CO ₂ /Air | 0508 |
| 10%GERMANE/HYDROGEN | 10%GeH ₄ /H ₂ | 0509 |
| 5%HYDROGEN SELENIDE/HYDROGEN | 5%H ₂ Se/H ₂ | 0510 |
| 10%HYDROGEN SELENIDE/HYDROGEN | 10%H ₂ Se/H ₂ | 0511 |
| 13%HYDROGEN CHLORIDE/1.32%XENON/NEON | 13%HCl/1.32%Xe/Ne | 0512 |
| 20%OXYGEN/CARBON TETRAFLUORIDE(FREON-14) | 20%O ₂ /CF ₄ | 0513 |
| 1%PHOSPHINE/NITROGEN | 1%PH ₃ /N ₂ | 0514 |
| 1.6%PHOSPHINE/21%SILANE/ARGON | 1.6%PH ₃ /21%SiH ₄ /Ar | 0515 |
| 10%PHOSPHINE/HYDROGEN | 10%PH ₃ /H ₂ | 0516 |
| 25%PHOSPHINE/SILANE | 25%PH ₃ /SiH ₄ | 0517 |
| 50%PHOSPHINE/NITROGEN | 50%PH ₃ /N ₂ | 0518 |
| 15%SILANE/NITROGEN | 15%SiH ₄ /N ₂ | 0519 |
| 21%SILANE/4%PHOSPHINE/ARGON | 21%SiH ₄ /4%PH ₃ /Ar | 0520 |
| 50%SILANE/HELIUM | 50%SiH ₄ /He | 0521 |
| 20%TRICHLOROSILANE/HYDROGEN | 20%SiHCl ₃ /H ₂ | 0522 |
| 5%TETRAETHYLORTHOSILICATE(TEOS)/NITROGEN | 5%Si(C ₂ H ₅ O) ₄ /N ₂ | 0523 |
| 5%TRIETHYLANTIMONY(TESb)/HYDROGEN | 5%(C ₂ H ₅) ₃ Sb/H ₂ | 0524 |
| 20%TRIMETHYLALUMINUM(TMAI)/HYDROGEN | 20%(CH ₃) ₃ Al/H ₂ | 0525 |
| 1%TRIMETHYLBORATE(TMB)/HYDROGEN | 1%(CH ₃ O) ₃ B/H ₂ | 0526 |
| 10%PHOSPHINE/NITROGEN | 10%PH ₃ /N ₂ | 0527 |

| MIXED GAS NAME | SYMBOL | CODE |
|--------------------------------|--------------|------|
| 4.5%PHOSPHINE/NITROGEN | 4.5%PH3/N2 | 0528 |
| 20%SILANE/HELIUM | 20%SiH4/He | 0529 |
| 20%PHOSPHINE/SILANE | 20%PH3/SiH4 | 0530 |
| 1%PHOSPHINE/SILANE | 1%PH3/SiH4 | 0531 |
| 10%HYDROGEN/NITROGEN | 10%H2/N2 | 0532 |
| 1.5%PHOSPHINE/SILANE | 1.5%PH3/SiH4 | 0533 |
| 3%PHOSPHINE/ARGON | 3%PH3/Ar | 0534 |
| 4%PHOSPHINE/NITROGEN | 4%PH3/N2 | 0535 |
| 20%OXYGEN/HELIUM | 20%O2/He | 0536 |
| 1%PHOSPHINE/ARGON | 1%PH3/Ar | 0537 |
| 10%PHOSPHINE/ARGON | 10%PH3/Ar | 0538 |
| 2%PHOSPHINE/ARGON | 2%PH3/Ar | 0539 |
| 20%ARGON/SILANE | 20%Ar/SiH4 | 0540 |
| 20%SILANE/ARGON | 20%SiH4/Ar | 0541 |
| 5%HYDROGEN/NITROGEN | 5%H2/N2 | 0542 |
| 16%CARBON DIOXIDE/NITROGEN | 16%CO2/N2 | 0543 |
| 2%SILANE/HYDROGEN | 2%SiH4/H2 | 0544 |
| 15%HYDROGEN/NITROGEN | 15%H2/N2 | 0545 |
| 1%PHOSPHINE/HELIUM | 1%PH3/He | 0546 |
| .01%DIBORANE/HYDROGEN | .01%B2H6/H2 | 0547 |
| .01%SILANE/HYDROGEN | .01%SiH4/H2 | 0548 |
| .5%DIBORANE/ARGON | .5%B2H6/Ar | 0549 |
| .5%PHOSPHINE/NITROGEN | .5%PH3/N2 | 0550 |
| .5%SILANE/HYDROGEN | .5%SiH4/H2 | 0551 |
| .8%PHOSPHINE/NITROGEN | .8%PH3/N2 | 0552 |
| .8%PHOSPHINE/SILANE | .8%PH3/SiH4 | 0553 |
| .9%ARSINE/HYDROGEN | .9%AsH3/H2 | 0554 |
| 1%ARSINE/NITROGEN | 1%AsH3/N2 | 0555 |
| 1%ARSINE/SILANE | 1%AsH3/SiH4 | 0556 |
| 1%DIBORANE/HYDROGEN | 1%B2H6/H2 | 0557 |
| 1%DIBORANE/NITROGEN | 1%B2H6/N2 | 0558 |
| 1%BORON TRICHLORIDE/HYDROGEN | 1%BCl3/H2 | 0559 |
| 1%BORON TRICHLORIDE/NITROGEN | 1%BCl3/N2 | 0560 |
| 1%HYDROGEN/NITROGEN | 1%H2/N2 | 0561 |
| 1%OXYGEN/NITROGEN | 1%O2/N2 | 0562 |
| 1%PHOSPHINE/HYDROGEN | 1%PH3/H2 | 0563 |
| 1.5%ARSINE/HYDROGEN | 1.5%AsH3/H2 | 0564 |
| 10%SILANE/ARGON | 10%SiH4/Ar | 0565 |
| 10%FLUORINE/HELIUM | 10%F2/He | 0566 |
| 5%WATER VAPOR/AIR | 5%H2O/Air | 0567 |
| 10%WATER VAPOR/NITROGEN | 10%H2O/N2 | 0568 |
| 2%OZONE/OXYGEN | 2%O3/O2 | 0569 |
| 10%NITROGEN TRIFLUORIDE/OXYGEN | 10%NF3/O2 | 0570 |
| 10%OZONE/OXYGEN | 10%O3/O2 | 0571 |
| 10%PHOSPHINE/SILANE | 10%PH3/SiH4 | 0572 |

| MIXED GAS NAME | SYMBOL | CODE |
|---|---|------|
| 10% SILANE/HELIUM | 10% SiH ₄ /He | 0573 |
| 8% CARBON TETRAFLUORIDE(FREON-14)/OXYGEN | 8% CF ₄ /O ₂ | 0574 |
| 10% SILANE/HYDROGEN | 10% SiH ₄ /H ₂ | 0575 |
| 10% NITROGEN/ARGON | 10% N ₂ /Ar | 0576 |
| 20% SILANE/HYDROGEN | 20% SiH ₄ /H ₂ | 0577 |
| 15% ARGON/PHOSPHINE | 15% Ar/PH ₃ | 0578 |
| 15% ARSINE/HYDROGEN | 15% AsH ₃ /H ₂ | 0579 |
| 15% DIBORANE/NITROGEN | 15% B ₂ H ₆ /N ₂ | 0580 |
| 15% PHOSPHINE/15% SILANE/NITROGEN | 15% PH ₃ /15% SiH ₄ /N ₂ | 0581 |
| 15% PHOSPHINE/ARGON | 15% PH ₃ /Ar | 0582 |
| 15% PHOSPHINE/HYDROGEN | 15% PH ₃ /H ₂ | 0583 |
| 15% PHOSPHINE/SILANE | 15% PH ₃ /SiH ₄ | 0584 |
| 17% OXYGEN/CARBON TETRAFLUORIDE(FREON-14) | 17% O ₂ /CF ₄ | 0585 |
| 2% ARSINE/NITROGEN | 2% AsH ₃ /N ₂ | 0586 |
| 2% DIBORANE/ARGON | 2% B ₂ H ₆ /Ar | 0587 |
| 2% HYDROGEN/NITROGEN | 2% H ₂ /N ₂ | 0588 |
| 2% SILANE/HELIUM | 2% SiH ₄ /He | 0589 |
| 20% ARSINE/HYDROGEN | 20% AsH ₃ /H ₂ | 0590 |
| 20% DIBORANE/SILANE | 20% B ₂ H ₆ /SiH ₄ | 0591 |
| 20% HYDROGEN/CARBON MONOXIDE | 20% H ₂ /CO | 0592 |
| 20% PHOSPHINE/HYDROGEN | 20% PH ₃ /H ₂ | 0593 |
| 21% OXYGEN/NITROGEN | 21% O ₂ /N ₂ | 0594 |
| 3% DIBORANE/NITROGEN | 3% B ₂ H ₆ /N ₂ | 0595 |
| 3% HYDROGEN/HELIUM | 3% H ₂ /He | 0596 |
| 3% HYDROGEN/NITROGEN | 3% H ₂ /N ₂ | 0597 |
| 3% OXYGEN/HELIUM | 3% O ₂ /He | 0598 |
| 3% OZONE/AIR | 3% O ₃ /Air | 0599 |
| 3% PHOSPHINE/NITROGEN | 3% PH ₃ /N ₂ | 0600 |
| 3% PHOSPHINE/SILANE | 3% PH ₃ /SiH ₄ | 0601 |
| 3% SILANE/HELIUM | 3% SiH ₄ /He | 0602 |
| 30% HELIUM/OXYGEN | 30% He/O ₂ | 0603 |
| 30% OXYGEN/HELIUM | 30% O ₂ /He | 0604 |
| 4% DIBORANE/NITROGEN | 4% B ₂ H ₆ /N ₂ | 0605 |
| 4% HYDROGEN/HELIUM | 4% H ₂ /He | 0606 |
| 4% HYDROGEN/NITROGEN | 4% H ₂ /N ₂ | 0607 |
| 4% NITROGEN/HYDROGEN | 4% N ₂ /H ₂ | 0608 |
| 4% OXYGEN/CARBON TETRAFLUORIDE(FREON-14) | 4% O ₂ /CF ₄ | 0609 |
| 4% PHOSPHINE/HELIUM | 4% PH ₃ /He | 0610 |
| 4% PHOSPHINE/SILANE | 4% PH ₃ /SiH ₄ | 0611 |
| 40% HELIUM/SILANE | 40% He/SiH ₄ | 0612 |
| 8% OXYGEN/CARBON TETRAFLUORIDE(FREON-14) | 8% O ₂ /CF ₄ | 0613 |
| 5% ARSINE/HYDROGEN | 5% AsH ₃ /H ₂ | 0614 |
| 5% DIBORANE/ARGON | 5% B ₂ H ₆ /Ar | 0615 |
| 5% BORON TRICHLORIDE/HYDROGEN | 5% BCl ₃ /H ₂ | 0616 |
| 5% PROPANE/HYDROGEN | 5% C ₃ H ₈ /H ₂ | 0617 |

| MIXED GAS NAME | SYMBOL | CODE |
|---------------------------------------|--|------|
| 5%CARBON DIOXIDE/NITROGEN | 5%CO ₂ /N ₂ | 0618 |
| 5%HYDROGEN/ARGON | 5%H ₂ /Ar | 0619 |
| 8%PHOSPHINE/NITROGEN | 8%PH ₃ /N ₂ | 0620 |
| 5%NITROGEN/HYDROGEN | 5%N ₂ /H ₂ | 0621 |
| 5%NITROGEN/PHOSPHINE | 5%N ₂ /PH ₃ | 0622 |
| 5%OXYGEN/ARGON | 5%O ₂ /Ar | 0623 |
| 5%OZONE/OXYGEN | 5%O ₃ /O ₂ | 0624 |
| 5%PHOSPHINE/5%SILANE/NITROGEN | 5%PH ₃ /5%SiH ₄ /N ₂ | 0625 |
| 5%PHOSPHINE/ARGON | 5%PH ₃ /Ar | 0626 |
| 5%PHOSPHINE/SILANE | 5%PH ₃ /SiH ₄ | 0627 |
| 5%DICHLOROSILANE/ARGON | 5%SiH ₂ Cl ₂ /Ar | 0628 |
| 5%SILANE/ARGON | 5%SiH ₄ /Ar | 0629 |
| 50%HELIUM/OXYGEN | 50%He/O ₂ | 0630 |
| 50%NITROGEN/OXYGEN | 50%N ₂ /O ₂ | 0631 |
| 50%PHOSPHINE/SILANE | 50%PH ₃ /SiH ₄ | 0632 |
| 50%SILANE/HYDROGEN | 50%SiH ₄ /H ₂ | 0633 |
| 6.5%DIBORANE/15%SILANE/NITROGEN | 6.5%B ₂ H ₆ /15%SiH ₄ /N ₂ | 0634 |
| 6.5%DIBORANE/HYDROGEN | 6.5%B ₂ H ₆ /H ₂ | 0635 |
| 8%PHOSPHINE/SILANE | 8%PH ₃ /SiH ₄ | 0636 |
| 30%OXYGEN/HYDROGEN | 30%O ₂ /H ₂ | 0637 |
| 25%AMMONIA/HYDROGEN | 25%NH ₃ /H ₂ | 0638 |
| 8%OZONE/OXYGEN | 8%O ₃ /O ₂ | 0639 |
| 2%PHOSPHINE/NITROGEN | 2%PH ₃ /N ₂ | 0640 |
| 15%OZONE/OXYGEN | 15%O ₃ /O ₂ | 0641 |
| 40%OXYGEN/SULFUR HEXAFLUORIDE | 40%O ₂ /SF ₆ | 0642 |
| 13%HYDROGEN/NITROGEN | 13%H ₂ /N ₂ | 0643 |
| 1%HYDROGEN SULFIDE/HYDROGEN | 1%H ₂ S/H ₂ | 0644 |
| 1%HYDROGEN SELENIDE/HYDROGEN | 1%H ₂ Se/H ₂ | 0645 |
| 10%SILANE/NITROGEN | 10%SiH ₄ /N ₂ | 0646 |
| 10%DISILANE/HELIUM | 10%Si ₂ H ₆ /He | 0647 |
| 20%DISILANE/HELIUM | 20%Si ₂ H ₆ /He | 0648 |
| 10%OXYGEN/HELIUM | 10%O ₂ /He | 0649 |
| 50%HYDROGEN BROMIDE/HYDROGEN CHLORIDE | 50%HBr/HCl | 0650 |
| 12%OZONE/OXYGEN | 12%O ₃ /O ₂ | 0651 |
| 15%NITRIC OXIDE/NITROGEN | 15%NO/N ₂ | 0652 |
| 2%SILANE/NITROGEN | 2%SiH ₄ /N ₂ | 0653 |
| 5%DIBORANE/NITROGEN | 5%B ₂ H ₆ /N ₂ | 0654 |
| .5%BORON TRICHLORIDE/HYDROGEN | .5%BCl ₃ /H ₂ | 0655 |
| .5%PHOSPHINE/HYDROGEN | .5%PH ₃ /H ₂ | 0656 |
| 3%DIBORANE/HYDROGEN | 3%B ₂ H ₆ /H ₂ | 0657 |
| 1%GERMANE/NITROGEN | 1%GeH ₄ /N ₂ | 0658 |
| 3%DIBORANE/5%SILANE/NITROGEN | 3%B ₂ H ₆ /5%SiH ₄ /N ₂ | 0659 |
| .3%PHOSPHINE/SILANE | .3%PH ₃ /SiH ₄ | 0660 |
| 30%NITROGEN TRIFLUORIDE/NITROGEN | 30%NF ₃ /N ₂ | 0661 |
| .8%DIBORANE/NITROGEN | .8%B ₂ H ₆ /N ₂ | 0662 |

| MIXED GAS NAME | SYMBOL | CODE |
|----------------------------------|--|------|
| 2%ARSINE/SILANE | 2%AsH ₃ /SiH ₄ | 0663 |
| 8%GERMANE/HYDROGEN | 8%GeH ₄ /H ₂ | 0664 |
| 3%ARSINE/HYDROGEN | 3%AsH ₃ /H ₂ | 0665 |
| 10%DIBORANE/NITROGEN | 10%B ₂ H ₆ /N ₂ | 0666 |
| 8%PHOSPHINE/HELIUM | 8%PH ₃ /He | 0667 |
| 10%AMMONIA/NITROGEN | 10%NH ₃ /N ₂ | 0668 |
| 5%FLUORINE/NITROGEN TRIFLUORIDE | 5%F ₂ /NF ₃ | 0669 |
| 10%DISILANE/ARGON | 10%Si ₂ H ₆ /Ar | 0670 |
| 3%PHOSPHINE/5%SILANE/NITROGEN | 3%PH ₃ /5%SiH ₄ /N ₂ | 0671 |
| 3%NITROGEN/HYDROGEN | 3%N ₂ /H ₂ | 0672 |
| .7%ARSINE/HYDROGEN | .7%AsH ₃ /H ₂ | 0673 |
| 10%PHOSPHINE/HELIUM | 10%PH ₃ /He | 0674 |
| .8%PHOSPHINE/HELIUM | .8%PH ₃ /He | 0675 |
| 7.5%PHOSPHINE/SILANE | 7.5%PH ₃ /SiH ₄ | 0676 |
| 20%FLUORINE/HELIUM | 20%F ₂ /He | 0677 |
| 22%PHOSPHINE/SILANE | 22%PH ₃ /SiH ₄ | 0678 |
| 5%TRICHLOROSILANE/HYDROGEN | 5%SiHCl ₃ /H ₂ | 0679 |
| 25%TRICHLOROSILANE/HYDROGEN | 25%SiHCl ₃ /H ₂ | 0680 |
| .8%PHOSPHINE/DISILANE | .8%PH ₃ /Si ₂ H ₆ | 0681 |
| 13%TRICHLOROSILANE/HYDROGEN | 13%SiHCl ₃ /H ₂ | 0682 |
| 5%DIBORANE/SILANE | 5%B ₂ H ₆ /SiH ₄ | 0683 |
| 1%SILANE/DIBORANE | 1%SiH ₄ /B ₂ H ₆ | 0684 |
| 7%METHYLENE CHLORIDE/3%OZONE/AIR | 7%CH ₂ Cl ₂ /3%O ₃ /Air | 0685 |
| 50%FLUOROFORM/ARGON | 50%CHF ₃ /Ar | 0686 |
| 20%HELIUM/OXYGEN | 20%He/O ₂ | 0687 |
| 3%ARSINE/ARGON | 3%AsH ₃ /Ar | 0688 |
| 10%METHYLSILANE/HYDROGEN | 10%CH ₆ Si/H ₂ | 0689 |
| .05%DIBORANE/HYDROGEN | .05%B ₂ H ₆ /H ₂ | 0690 |
| 4%PHOSPHINE/ARGON | 4%PH ₃ /Ar | 0691 |
| 8%HYDROGEN/ARGON | 8%H ₂ /Ar | 0692 |
| 5%PHOSPHINE/HELIUM | 5%PH ₃ /He | 0693 |
| 15%HYDROGEN/ARGON | 15%H ₂ /Ar | 0694 |
| 2%DIBORANE/NITROGEN | 2%B ₂ H ₆ /N ₂ | 0695 |
| 2%PHOSPHINE/SILANE | 2%PH ₃ /SiH ₄ | 0696 |
| 15%DIBORANE/ARGON | 15%B ₂ H ₆ /Ar | 0697 |
| 10%GERMANE/ARGON | 10%GeH ₄ /Ar | 0698 |
| 5%METHANE/HELIUM | 5%CH ₄ /He | 0699 |
| 4%HYDROGEN/ARGON | 4%H ₂ /Ar | 0700 |
| 10%DIBORANE/HYDROGEN | 10%B ₂ H ₆ /H ₂ | 0701 |
| 40%SILANE/HELIUM | 40%SiH ₄ /He | 0702 |
| 2%ARSINE/HYDROGEN | 2%AsH ₃ /H ₂ | 0703 |
| 10%GERMANE/HELIUM | 10%GeH ₄ /He | 0704 |
| 9.4%ARGON/NITROGEN TRIFLUORIDE | 9.4%Ar/NF ₃ | 0705 |
| 8.6%ARGON/NITROGEN TRIFLUORIDE | 8.6%Ar/NF ₃ | 0706 |
| .8%PHOSPHINE/HYDROGEN | .8%PH ₃ /H ₂ | 0707 |

| MIXED GAS NAME | SYMBOL | CODE |
|--|---|------|
| .06%ARSINE/HYDROGEN | .06%AsH ₃ /H ₂ | 0708 |
| 5%PHOSPHINE/HYDROGEN | 5%PH ₃ /H ₂ | 0709 |
| 10%METHANE/ARGON | 10%CH ₄ /Ar | 0710 |
| 5%ACETONE/NITROGEN | 5%C ₃ H ₆ O-m)/N ₂ | 0711 |
| 5%BENZENE/NITROGEN | 5%C ₆ H ₆ /N ₂ | 0712 |
| 20%DISILANE/HYDROGEN | 20%Si ₂ H ₆ /H ₂ | 0713 |
| 8%PROPANE/10%AMMONIA/AIR | 8%C ₃ H ₈ /10%NH ₃ /Air | 0714 |
| 8.2%PROPANE/9.8%AMMONIA/AIR | 8.2%C ₃ H ₈ /9.8%NH ₃ /Air | 0715 |
| 10%CYCLOPROPANE/HELIUM | 10%C ₃ H ₆ -a)/He | 0716 |
| 2%METHYSILANE/HYDROGEN | 2%CH ₃ SiH ₃ /H ₂ | 0717 |
| 10%ETHYLENE/HELIUM | 10%C ₂ H ₄ /He | 0718 |
| 5%CHLORINE/HELIUM | 5%Cl ₂ /He | 0719 |
| 5%FLUORINE/HELIUM | 5%F ₂ /He | 0720 |
| .7%ARSINE/HELIUM | .7%AsH ₃ /He | 0721 |
| 5%DIBORANE/HYDROGEN | 5%B ₂ H ₆ /H ₂ | 0722 |
| 20%OZONE/NITROGEN | 20%O ₃ /N ₂ | 0723 |
| 1%ARSINE/HYDROGEN | 1%AsH ₃ /H ₂ | 0724 |
| 40%HYDROGEN/HELIUM | 40%H ₂ /He | 0725 |
| 5%HYDROGEN CHLORIDE/NITROGEN | 5%HCl/N ₂ | 0726 |
| 8%HYDROGEN/NITROGEN | 8%H ₂ /N ₂ | 0727 |
| 20%CARBON TETRAFLUORIDE/NITROGEN | 20%CF ₄ /N ₂ | 0728 |
| 10%CARBON MONOXIDE/CARBON DIOXIDE | 10%CO/CO ₂ | 0729 |
| 10%CARBON MONOXIDE/AIR | 10%CO/Air | 0730 |
| 10%DISILANE/HYDROGEN | 10%Si ₂ H ₆ /H ₂ | 0731 |
| 5%FLUORINE/NITROGEN | 5%F ₂ /N ₂ | 0732 |
| 1%FLUORINE/NEON | 1%F ₂ /Ne | 0733 |
| 5%CARBON DIOXIDE/15%OXYGEN/NITROGEN | 5%CO ₂ /15%O ₂ /N ₂ | 0734 |
| 10%CARBON DIOXIDE/10%OXYGEN/NITROGEN | 10%CO ₂ /10%O ₂ /N ₂ | 0735 |
| 20%OXYGEN/NITROGEN | 20%O ₂ /N ₂ | 0736 |
| 25%HELIUM/ARGON | 25%He/Ar | 0737 |
| 4%HELIUM/NITROGEN | 4%He/N ₂ | 0738 |
| 10%TRIMETHYSILANE/HYDROGEN | 10%(CH ₃) ₃ SiH/H ₂ | 0739 |
| 2%GERMANE/ARGON | 2%GeH ₄ /Ar | 0740 |
| .8%ARSINE/HYDROGEN | .8%AsH ₃ /H ₂ | 0741 |
| .8%GERMANIUM TETRAFLUORIDE/HYDROGEN | .8%GeF ₄ /H ₂ | 0742 |
| .8%DIBORANE/HYDROGEN | .8%B ₂ H ₆ /H ₂ | 0743 |
| 10%METHANE/HELIUM | 10%CH ₄ /He | 0744 |
| 1%SILANE/HELIUM | 1%SiH ₄ /He | 0745 |
| 25%FLUORINE/NITROGEN | 25%F ₂ /N ₂ | 0746 |
| 50%GERMANE/ARGON | 50%GeH ₄ /Ar | 0747 |
| 7%CARBON DIOXIDE/10%HYDROGEN/20%CARBON MONOXIDE/NITROGEN | 7%CO ₂ /10%H ₂ /20%CO/N ₂ | 0748 |
| 10%HELIUM/HYDROGEN | 10%He/H ₂ | 0749 |
| 1%BUTADIENE/BUTENE | 1%C ₄ H ₆ -e)/C ₄ H ₈ -i) | 0750 |
| 40%GERMANE/ARGON | 40%GeH ₄ /Ar | 0751 |

| MIXED GAS NAME | SYMBOL | CODE |
|---|----------------------|------|
| 5%HELIUM/NITROGEN | 5%He/N2 | 0752 |
| 5%OXYGEN/CARBON TETRAFLUORIDE | 5%O2/CF4 | 0753 |
| 10%FLUORINE/ARGON | 10%F2/Ar | 0754 |
| 25%FLUORINE/ARGON | 25%F2/Ar | 0755 |
| 50%FLUORINE/ARGON | 50%F2/Ar | 0756 |
| 50%FLUORINE/HELIUM | 50%F2/He | 0757 |
| 25%FLUORINE/HELIUM | 25%F2/He | 0758 |
| 10%FLUORINE/NITROGEN | 10%F2/N2 | 0759 |
| 50%FLUORINE/NITROGEN | 50%F2/N2 | 0760 |
| 5%FLUORINE/ARGON | 5%F2/Ar | 0761 |
| 5%HYDROGEN/HELIUM | 5%H2/He | 0762 |
| 5%SULFUR DIOXIDE/HELIUM | 5%SO2/He | 0763 |
| 2%DISILANE/HELIUM | 2%SiH6/He | 0764 |
| 5%GERMANE/HELIUM | 5%GeH4/He | 0765 |
| 5%DIBORANE/HELIUM | 5%B2H6/He | 0766 |
| 20%PHOSPHINE/NITROGEN | 20%PH3/N2 | 0767 |
| 3.5%HYDROGEN/NITROGEN | 3.5%H2/N2 | 0768 |
| 50%HEXAFLUROETHANE/OXYGEN | 50%C2F6/O2 | 0769 |
| 25%HEXAFLUROETHANE/OXYGEN | 25%C2F6/O2 | 0770 |
| .7%GERMANIUM/HYDROGEN | .7%GeH4/H2 | 0771 |
| 1%ACETYLENE/ETHYLENE | 1%C2H2/C2H4 | 0772 |
| 5%SILANE/NITROGEN | 5%SiH4/N2 | 0773 |
| .8%CO/.8%O2/20%CO2/32%N2/H2 | SELOX GAS MIX | 0774 |
| 1.5%GERMANE/HYDROGEN | 1.5%GeH4/H2 | 0775 |
| 5%BORON TRIFLUORIDE/HELIUM | 5%BF3/He | 0776 |
| 5%PHOSPHORUS PENTAFLUORIDE/HELIUM | 5%PF5/He | 0777 |
| 15%CARBON DIOXIDE/NITROGEN | 15%CO2/N2 | 0778 |
| 5%OXYGEN/HELIUM | 5%O2/He | 0779 |
| 5%SILANE/HELIUM | 5%SiH4/He | 0780 |
| 1%NITROGEN DIOXIDE/NITROGEN | 1%NO2/N2 | 0781 |
| 1%SULFUR DIOXIDE/NITROGEN | 1%SO2/N2 | 0782 |
| 10%CARBON DIOXIDE/NITROGEN | 10%CO2/N2 | 0783 |
| .02%CARBON MONOXIDE/NITROGEN | .02%CO/N2 | 0784 |
| 5%HEXAFLUROETHANE/OXYGEN | 5%C2F6/O2 | 0785 |
| .1%CARBON MONOXIDE/NITROGEN | .1%CO/N2 | 0786 |
| 15%GERMANIUM TETRACHLORIDE/OXYGEN | 15%GeCl4/O2 | 0787 |
| 2%NITROGEN/3%CARBON MONOXIDE/17%CARBON DIOXIDE/HYDROGEN | 2%N2/3%CO/17%CO2/H2 | 0788 |
| .1%PHOSPHINE/NITROGEN | .1%PH3/N2 | 0789 |
| .1%HYDROGEN CHLORIDE/NITROGEN | .1%HCl/N2 | 0790 |
| .1%NITROGEN DIOXIDE/AIR | .1%NO2/Air | 0791 |
| .1%NITROGEN DIOXIDE/NITROGEN | .1%NO2/N2 | 0792 |
| .1%PHOSPHINE/HYDROGEN | .1%PH3/H2 | 0793 |
| .2%SULFUR DIOXIDE/AIR | .2%SO2/Air | 0794 |
| .25%CARBON MONOXIDE/.1% HYDROGEN/1%OXYGEN/NITROGEN | .25%CO/.1%H2/1%O2/N2 | 0795 |

| MIXED GAS NAME | SYMBOL | CODE |
|---|---|------|
| .25%DIBORANE/HYDROGEN | .25%B ₂ H ₆ /H ₂ | 0796 |
| .25%OXYGEN/.5%HYDROGEN/1.5%CARBON MONOXIDE/NITROGEN | .25%O ₂ /.5%H ₂ /1.5%CO/N ₂ | 0797 |
| .4%HYDROGEN CHLORIDE/AIR | .4%HCl/Air | 0798 |
| .5%ARSINE/SILANE | .5%AsH ₃ /SiH ₄ | 0799 |
| 1%CARBON DIOXIDE/NITROGEN | 1%CO ₂ /N ₂ | 0800 |
| 1%CARBON MONOXIDE/19% NITROGEN/30%OXYGEN/CARBON DIOXIDE | 1%CO/19%N ₂ /30%O ₂ /CO ₂ | 0801 |
| 1%CARBON MONOXIDE/AIR | 1%CO/Air | 0802 |
| 1%CARBON MONOXIDE/CARBON DIOXIDE | 1%CO/CO ₂ | 0803 |
| 1%CHLORINE/NITROGEN | 1%Cl ₂ /N ₂ | 0804 |
| 1%DIBORANE/ARGON | 1%B ₂ H ₆ /Ar | 0805 |
| 1%HYDROGEN SULFIDE/NITROGEN | 1%H ₂ S/N ₂ | 0806 |
| 1%METHANE/49.5%CARBON DIOXIDE/ARGON | 1%CH ₄ /49.5%CO ₂ /Ar | 0807 |
| 1%NITROGEN DIOXIDE/AIR | 1%NO ₂ /Air | 0808 |
| 1%SULFUR DIOXIDE/ARGON | 1%SO ₂ /Ar | 0809 |
| 1.5%SILANE/ARGON | 1.5%SiH ₄ /Ar | 0810 |
| 1.8%SILANE/NITROGEN | 1.8%SiH ₄ /N ₂ | 0811 |
| 1.9%SILANE/NITROGEN | 1.9%SiH ₄ /N ₂ | 0812 |
| 10%CARBON DIOXIDE/ARGON | 10%CO ₂ /Ar | 0813 |
| 10%FLUORINE/OXYGEN | 10%F ₂ /O ₂ | 0814 |
| 10%METHANE/HYDROGEN | 10%CH ₄ /H ₂ | 0815 |
| 10%OXYGEN/30%CARBON DIOXIDE/ARGON | 10%O ₂ /30%CO ₂ /Ar | 0816 |
| 10%OZONE/NITROGEN | 10%O ₃ /N ₂ | 0817 |
| 10%SULFUR DIOXIDE/NITROGEN | 10%SO ₂ /N ₂ | 0818 |
| 12%HYDROGEN/NITROGEN | 12%H ₂ /N ₂ | 0819 |
| 15%DIBORANE/HYDROGEN | 15%B ₂ H ₆ /H ₂ | 0820 |
| 15%SILANE/ARGON | 15%SiH ₄ /Ar | 0821 |
| 2%NITRIC OXIDE/NITROGEN | 2%NO/N ₂ | 0822 |
| 2%SILANE/ARGON | 2%SiH ₄ /Ar | 0823 |
| 2%SULFUR DIOXIDE/NITROGEN | 2%SO ₂ /N ₂ | 0824 |
| 2.5%DIBORANE/HYDROGEN | 2.5%B ₂ H ₆ /H ₂ | 0825 |
| 2.5%METHANE/AIR | 2.5%CH ₄ /Air | 0826 |
| 20%FLUOROFORM/OXYGEN | 20%CF ₄ /O ₂ | 0827 |
| 22%OXYGEN/HELIUM | 22%O ₂ /He | 0828 |
| 25%CARBON MONOXIDE/HYDROGEN | 25%CO/H ₂ | 0829 |
| 25%PROPANE/PROPYLENE | 25%C ₃ H ₈ /C ₃ H ₆ | 0830 |
| 3%AMMONIA/NITROGEN | 3%NH ₃ /N ₂ | 0831 |
| 3%BORON TRICHLORIDE/HYDROGEN | 3%BCl ₃ /H ₂ | 0832 |
| 3%HYDROGEN/ARGON | 3%H ₂ /Ar | 0833 |
| 3%PHOSPHINE/HELIUM | 3%PH ₃ /He | 0834 |
| 3.5%CARBON DIOXIDE/HELIUM | 3.5%CO ₂ /He | 0835 |
| 30% ISOBUTANE/HELIUM | 30%CH(CH ₃) ₃ /He | 0836 |
| 30%GERMANE/ARGON | 30%GeH ₄ /Ar | 0837 |
| 30%SILANE/ARGON | 30%SiH ₄ /Ar | 0838 |
| 30%SILANE/NITROGEN | 30%SiH ₄ /N ₂ | 0839 |

| MIXED GAS NAME | SYMBOL | CODE |
|---|---|------|
| 33.3%HYDROGEN/CARBON MONOXIDE | 33.3%H ₂ /CO | 0840 |
| 35%PHOSPHINE/SILANE | 35%PH ₃ /SiH ₄ | 0841 |
| 4%SILANE/NITROGEN | 4%SiH ₄ /N ₂ | 0842 |
| 5%AMMONIA/NITROGEN | 5%NH ₃ /N ₂ | 0843 |
| 5%CARBON MONOXIDE/ARGON | 5%CO/Ar | 0844 |
| 5%ETHENE/NITROGEN | 5%C ₂ H ₄ /N ₂ | 0845 |
| 5%HELIUM/ARGON | 5%He/Ar | 0846 |
| 5%SILANE/HYDROGEN | 5%SiH ₄ /H ₂ | 0847 |
| 50%CARBON DIOXIDE/NITROGEN | 50%CO ₂ /N ₂ | 0848 |
| 50%HELIUM/ARGON | 50%He/Ar | 0849 |
| 50%HYDROGEN/NITROGEN | 50%H ₂ /N ₂ | 0850 |
| 50%NITROGEN DIOXIDE/AMMONIA | 50%NO ₂ /NH ₃ | 0851 |
| 50%NITROGEN/HELIUM | 50%N ₂ /He | 0852 |
| 50%SULFUR DIOXIDE/NITRIC OXIDE | 50%SO ₂ /NO | 0853 |
| 6%CARBON DIOXIDE/NITROGEN | 6%CO ₂ /N ₂ | 0854 |
| 6%HYDROGEN CHLORIDE/OXYGEN | 6%HCl/O ₂ | 0855 |
| 6%HYDROGEN/NITROGEN | 6%H ₂ /N ₂ | 0856 |
| 6%OZONE/OXYGEN | 6%O ₃ /O ₂ | 0857 |
| 6.5%DIBORANE/NITROGEN | 6.5%B ₂ H ₆ /N ₂ | 0858 |
| 7%HYDROGEN/ARGON | 7%H ₂ /Ar | 0859 |
| 8%DIBORANE/ARGON | 8%B ₂ H ₆ /Ar | 0860 |
| 8%DIBORANE/NITROGEN | 8%B ₂ H ₆ /N ₂ | 0861 |
| 5%CARBON MONOXIDE/NITROGEN | 5%CO/N ₂ | 0862 |
| 2%OXYGEN/ARGON | 2%O ₂ /Ar | 0863 |
| 15%SILANE/HELIUM | 15%SiH ₄ /He | 0864 |
| 5%CARBON DIOXIDE/5%OXYGEN/NITROGEN | 5%CO ₂ /5%O ₂ /N ₂ | 0865 |
| 2.5%OXYGEN/5%CARBON DIOXIDE/NITROGEN | 2.5%O ₂ /5%CO ₂ /N ₂ | 0866 |
| 5%CARBON DIOXIDE/10%OXYGEN/NITROGEN | 5%CO ₂ /10%O ₂ /N ₂ | 0867 |
| 11%OZONE/OXYGEN | 11%O ₃ /O ₂ | 0868 |
| 20%OZONE/OXYGEN | 20%O ₃ /O ₂ | 0869 |
| 3%SILANE/HYDROGEN | 3%SiH ₄ /H ₂ | 0870 |
| 1%NITROGEN/HYDROGEN | 1%N ₂ /H ₂ | 0871 |
| 3%PROPANE/HYDROGEN | 3%C ₃ H ₈ /H ₂ | 0872 |
| 1.65%ACETYLENE/70%ETHYLENE/NITROGEN | 1.65%C ₂ H ₂ /70%C ₂ H ₄ /N ₂ | 0873 |
| 30%TRIMETHYLSILANE/HYDROGEN | 30%(CH ₃) ₃ SiH/H ₂ | 0874 |
| 20%OXYGEN/ARGON | 20%O ₂ /Ar | 0875 |
| 5%DIBORANE/5%SILANE/NITROGEN | 5%B ₂ H ₆ /5%SiH ₄ /N ₂ | 0876 |
| 30%TRICHLOROSILANE/HYDROGEN | 30%SiHCl ₃ /H ₂ | 0877 |
| 3%ETHYLENE/HELIUM | 3%C ₂ H ₄ /He | 0878 |
| .1%HYDROGEN/.25%CARBON MONOXIDE/1%OXYGEN/NITROGEN | .1%H ₂ /.25%CO/1%O ₂ /N ₂ | 0879 |
| 20%NITROGEN/HYDROGEN | 20%N ₂ /H ₂ | 0880 |
| 10%DIBORANE/ARGON | 10%B ₂ H ₆ /Ar | 0881 |
| 21.6%CARBON DIOXIDE/32.4%NITROGEN/HYDROGEN | 21.6%CO ₂ /32.4%N ₂ /H ₂ | 0882 |
| 7%HYDROGEN/HELIUM | 7%H ₂ /He | 0883 |
| 4%TETRAFLUOROETHANE (FREON- | 4%C ₂ H ₂ F ₄ /44%C ₂ HF ₅ /C ₂ H ₃ F ₃ | 0884 |