

## Nitrous Oxide (N<sub>2</sub>O) A colorless, oxidizing liquified gas.

| Purity Specifications   | Minimum Purity | N <sub>2</sub> | O <sub>2</sub> + Ar | THC   | CO    | CO <sub>2</sub> | H <sub>2</sub> O | NH <sub>3</sub> | NO    | NO <sub>2</sub> |
|-------------------------|----------------|----------------|---------------------|-------|-------|-----------------|------------------|-----------------|-------|-----------------|
| VLSI                    | 99.9999%       | < 0.3          | < 0.3               | < 0.1 | < 0.2 | < 0.2           | < 0.1            | < 0.1           | < 0.1 | < 0.3           |
| Electronic              | 99.999%        | < 2            | < 2                 | < 0.2 | < 0.5 | < 2             | < 2              | < 0.5           | < 0.3 | < 0.2           |
| Ultra High Purity (UHP) | 99.99%         | < 25           | < 2                 | < 1   | < 10  | < 10            | < 3              | < 25            | < 2   | < 1             |
| Atomic Absorption (AA)  | 99.6%          |                |                     |       |       |                 |                  |                 |       |                 |

Concentrations given are ppm by volume unless otherwise specified.

| PRODUCT  | Ordering Information   |              |                             |                |                                  | Equipment Recommendations             |  |             |
|--|--|--------------|-----------------------------|----------------|----------------------------------|---------------------------------------|--|-------------|
|  | Cylinder Size  | Contents lbs | Standard Valve Outlet (CGA) | Product Number | Cylinder Pressure at 70°F (psig) | Description Product Number            | Delivery Pressure Range (psig)                 | Page Number |
| VLSI   | 150A   | 40           | 326                         | NS VL15A       | 745                              |                                       |  |             |
|  | 33A  | 6            | 326                         | NS VL33A       | 745                              |                                       |  |             |
| An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request. |  |              |                             |                |                                  |                                       |  |             |
| Electronic   | 200  | 60           | 326                         | NS EL200       | 745                              | Two-Stage Regulator<br>Y12-C445 * 326 | A = 0-25<br>B = 0-50<br>D = 0-100<br>E = 0-150 | E29         |
|  | 150A   | 40           | 326                         | NS EL15A       | 745                              |                                       |  |             |
|  | 80   | 20           | 326                         | NS EL80        | 745                              |                                       |  |             |
| An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request. |  |              |                             |                |                                  |                                       |  |             |
| Ultra High Purity (UHP)  | 200  | 60           | 326                         | NS UHP200      | 745                              |                                       |  |             |
|  | 80   | 20           | 326                         | NS UHP80       | 745                              |                                       |  |             |
|  | An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request. |              |                             |                |                                  |                                       |  |             |
| * Insert Delivery Pressure Range Code  |  |              |                             |                |                                  |                                       |  |             |
| Atomic Absorption (AA)   | 200  | 60           | 326                         | NS AA200       | 745                              | Two-Stage Regulator<br>Y12-215 * 326  | A = 0-25<br>B = 0-50<br>D = 0-100<br>E = 0-150 | E8          |
|  | 80   | 20           | 326                         | NS AA80        | 745                              |                                       |  |             |
|  | An individual or batch analysis is available upon request at a nominal charge. Certificate of Conformance provided upon request. |              |                             |                |                                  |                                       |  |             |
| * Insert Delivery Pressure Range Code  |  |              |                             |                |                                  |                                       |  |             |

| Technical Data & Shipping Information |                            |
|---------------------------------------|----------------------------|
| Molecular Weight                      | 44.01                      |
| Specific Volume                       | 8.8 cf/lb @70° F           |
| Flammability Limits in Air            | Oxidizer                   |
| U.S. DOT Name                         | Nitrous Oxide              |
| ID Number                             | UN 1070                    |
| U.S. DOT Hazard Class                 | 2.2, 5.1                   |
| U.S. DOT Label                        | Nonflammable Gas, Oxidizer |
| CAS Registry                          | 10024-97-2                 |

Nitrous Oxide is also available in medical and food grades. Ask your Airgas representative for details.