



# Safety Data Sheet

## Neon

### Section 1: Product and Company Identification

**Middlesex Gases & Technologies**

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Everett, MA 02149  
(617) 387-5050  
(800) 649-6704  
Fax (617) 387-3537  
<http://www.middlesexgases.com/>

Product Code: Neon

### Section 2: Hazards Identification



## Warning

**Hazard Classification:**

Gases Under Pressure

**Hazard Statements:**

Contains gas under pressure; may explode if heated

**Precautionary Statements****Storage:**

Protect from sunlight.  
Store in well-ventilated place.

### Section 3: Composition/Information on Ingredients

|       |
|-------|
| CAS # |
|-------|

|           |
|-----------|
| 7440-01-9 |
|-----------|

| Chemical Substance | Chemical Family | Trade Names                   |
|--------------------|-----------------|-------------------------------|
| NEON               | inorganic, gas  | NEON, COMPRESSED; UN 1065; Ne |

## Section 4: First Aid Measures

| Skin Contact   | Eye Contact                      | Ingestion  | Inhalation   | Note to Physicians               |
|--|----------------------------------|--|--|----------------------------------|
| If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115 F; 41-46 C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention. | Flush eyes with plenty of water. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |

## Section 5: Fire Fighting Measures

| Suitable Extinguishing Media  | Products of Combustion | Protection of Firefighters   |
|---|------------------------|--|
| Non-flammable. Use extinguishing media suitable for surrounding fire. | Non-flammable          | <ul style="list-style-type: none"> <li>Respiratory protection may be needed for frequent or heavy exposure.</li> </ul> |

## Section 6: Accidental Release Measures

| Personal Precautions   | Environmental Precautions            | Methods for Containment                      |
|--|--------------------------------------|--|
| Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. | Prevent contamination of environment | Stop leak if possible without personal risk. |

| Methods for Cleanup | Other Information |
|---------------------|-------------------|
| Not available       | Not available     |

## Section 7: Handling and Storage

| Handling  | Storage                        |
|---|--------------------------------|
| Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. | Protect cylinders from damage. |

## Section 8: Exposure Controls/Personal Protection

| Exposure Guidelines                                |
|--|
| NEON: No occupational exposure limits established. |

### Engineering Controls

Handle only in fully enclosed systems.

| Eye Protection   | Skin Protection  | Respiratory Protection   |
|--|--|--|
| For the gas: Eye protection not required, but recommended. For the liquid: Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. | For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing. | Respiratory protection may be needed for frequent or heavy exposure. |

## General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

## Section 9: Physical and Chemical Properties

| Physical State | Appearance | Color     | Change in Appearance | Physical Form | Odor     | Taste     |
|----------------|------------|-----------|----------------------|---------------|----------|-----------|
| Gas            | Clear      | Colorless | N/A                  | Gas           | Odorless | Tasteless |

| Flash Point   | Flammability  | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits | Lower Explosive Limits |
|---------------|---------------|-----------------------|--------------------------|------------------------|------------------------|
| Not flammable | Not available | Not available         | Nonflammable             | Nonflammable           | Nonflammable           |

| Boiling Point   | Freezing Point  | Vapor Pressure    | Vapor Density  | Specific Gravity | Water Solubility | pH             | Odor Threshold | Evaporation Rate | Viscosity           |
|-----------------|-----------------|-------------------|----------------|------------------|------------------|----------------|----------------|------------------|---------------------|
| -411 F (-246 C) | -416 F (-249 C) | 760 mmHg @ -246 C | 0.6964 (Air=1) | Not applicable   | Slightly soluble | Not applicable | Not available  | Not applicable   | 0.03181 cP @ 26.8 C |

| Molecular Weight | Molecular Formula | Density          | Weight per Gallon | Volatility by Volume | Volatility     | Solvent Solubility     |
|------------------|-------------------|------------------|-------------------|----------------------|----------------|------------------------|
| 20.179           | Ne                | 0.9002 g/L @ 0 C | Not available     | 100%                 | Not applicable | Soluble: Liquid oxygen |

## Section 10: Stability and Reactivity

| Stability                                   | Conditions to Avoid                         | Incompatible Materials     |
|---|---|----------------------------|
| Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | None known. Neon is inert. |

| Hazardous Decomposition Products | Possibility of Hazardous Reactions |
|----------------------------------|------------------------------------|
| None.                            | Will not polymerize.               |

## Section 11: Toxicology Information

### Acute Effects

| Oral LD50     | Dermal LD50   | Inhalation  |
|---------------|---------------|---|
| Not available | Not available | Nausea, vomiting, difficulty breathing, irregular heartbeat, head ache, dizziness, disorientation, mood swings, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma |

| Eye Irritation    | Skin Irritation   | Sensitization        |
|-------------------|-------------------|----------------------|
| Liquid: frostbite | Liquid: frostbite | Difficulty breathing |

### Chronic Effects

| Carcinogenicity | Mutagenicity  | Reproductive Effects | Developmental Effects |
|-----------------|---------------|----------------------|-----------------------|
| Not available   | Not available | Not available        | No data               |

## Section 12: Ecological Information

### Fate and Transport

| Eco toxicity   | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|--|-----------------------------|--------------------------------|-------------------------|
| Fish toxicity: Not available<br>Invertebrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available | Not available               | Not available                  | Not available           |

|                               |  |  |  |
|-------------------------------|--|--|--|
| Other toxicity: Not available |  |  |  |
|-------------------------------|--|--|--|

## Section 13: Disposal Considerations

Dispose in accordance with all applicable regulations.

## Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

| Proper Shipping Name | ID Number | Hazard Class or Division | Packing Group  | Labeling Requirements | Passenger Aircraft or Railcar Quantity Limitations | Cargo Aircraft Only Quantity Limitations | Additional Shipping Description |
|----------------------|-----------|--------------------------|----------------|-----------------------|--|--|---------------------------------|
| Neon, compressed     | UN1065    | 2.2                      | Not applicable | 2.2                   | 75 kg or L   | 150 kg                                   | N/A                             |

### Canadian Transportation of Dangerous Goods

| Shipping Name    | UN Number | Class | Packing Group / Risk Group |
|------------------|-----------|-------|----------------------------|
| Neon, compressed | UN1065    | 2.2   | Not applicable             |

## Section 15: Regulatory Information

### U.S. Regulations

| CERCLA Sections | SARA 355.30    | SARA 355.40    |
|-----------------|----------------|----------------|
| Not regulated.  | Not regulated. | Not regulated. |

### SARA 370.21

| Acute | Chronic | Fire | Reactive | Sudden Release |
|-------|---------|------|----------|----------------|
| Yes   | No      | No   | No       | Yes            |

### SARA 372.65

Not regulated.

### OSHA Process Safety

Not regulated.

### State Regulations

| CA Proposition 65 |
|-------------------|
| Not regulated.    |

### Canadian Regulations

| WHMIS Classification |
|----------------------|
| A                    |

### National Inventory Status

| US Inventory (TSCA)  | TSCA 12b Export Notification | Canada Inventory (DSL/NDSL) |
|----------------------|------------------------------|-----------------------------|
| Listed on inventory. | Not listed.                  | Not determined.             |

## Section 16: Other Information

| NFPA Rating                  |
|------------------------------|
| HEALTH=1 FIRE=0 REACTIVITY=0 |

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

