Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

Product Identifier:

Identification as on the label/Trade name: Neon Gas, Enriched Neon.
Molecular weight: 20.1797
Chemical formula: Ne
Synonyms: None.

Details of the supplier of the Safety Data Sheet:

Neonest AB
Storgatan 70C, Solna
SE-17152
Sweden

Contact details:

+46-76-219-9731

24-hour Emergency Contact:

Swedish Poisons Centre
Phone: 112 - Ask for Poisons Information, 112 – begär Giftinformation.

Other International Contacts:

CHEMTREC 24-hour: +1-703-741-5500 (US + Worldwide)
NHS: 111 (UK)
Charite: +49 30 450 531 000 (Netherlands)
INTCF: +34 917689800 (Spain)
CapTv: +33 1 40 05 48 48 (France)

Section 2: Hazards Identification

Classification of the substances or mixture:

The mixture is classified according to: Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories:	**Hazard statement:**
Compressed Gas	H280

Label elements:

Hazard pictograms:

Signal Words: Warning.
Hazard Statements:
H280 Contains gas under pressure; may explode if heated.

Precautionary Statements:
P410 + P403 Protect from sunlight. Store in a well-ventilated place.

Section 3: Composition/Information on Ingredients

Substance/Mixture: Substance.
Ingredients:

Substance name (IUPAC/EC)	**CAS-No.** / **EC-No.**	**Concentration % by weight**	**Classification** EC1272/2008
Neon	7440-01-9 / 231-110-9	>99.9%	Press. Gas (Comp.) H280

For explanation of abbreviations see Section 16.

Section 4: First-Aid Measures

Description of first aid measures:

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Inhalation Exposure: Supply fresh air. If required, provide artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.
Skin Exposure: If frostbite or freezing occur, immediately flush with plenty of lukewarm water. DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Seek immediate medical attention.
Eye Exposure: Rinse opened eye for several minutes under running water. Then consult a doctor.
Oral Exposure: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

Most important symptoms and effects, both acute and delayed:

Inhalation: Short-term exposure: May be harmful if inhaled. May cause nausea, vomiting, difficulty breathing, irregular heartbeat, headache, dizziness, disorientation, mood swings, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma.
Skin Contact: Short-term exposure: May be harmful if absorbed through skin. May cause skin irritation or frostbite.
Indication of any immediate medical attention and special treatment needed: None known.

Section 5: Fire-Fighting Measures

Extinguisher media:

Fire and Explosion Hazards: Negligible fire hazard. Containers may rupture or explode if exposed to heat.
Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Further Information: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile).
Information for firefighters: Wear Self-Contained Breathing Apparatus for firefighting if necessary.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up:

Clean up promptly by vacuum. Stay upwind and keep out of low areas.

Section 7: Handling and Storage

Precautions for safe handling:

Handling: Contains gas under pressure; may explode if heated.

Conditions for safe storage, including any incompatibilities:

Keep container lightly closed in a dry and well-ventilated place. Store and handle in accordance with all current regulations and standards.

Section 8: Exposure Controls/Personal Protection

Control parameters:

Occupational exposure limits: No occupational exposure limits established.

Exposure controls:

Appropriate engineering controls: Based on available information, additional ventilation is not required. Ensure compliance with applicable exposure limits.

Individual protection measures, such as personal protective equipment:

Eye Protection: For gas: Eye protection not required, but recommended. For 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.

Body Protection: For gas: Protective clothing is not required. For liquid: Wear appropriate protective, cold-insulating clothing.

Hand Protection: Wear insulated gloves.

Respirator: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use. For Unknown Concentrations or Immediately Dangerous to Life or Health - Any supplied-air respirator with a full face-piece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Any self-contained breathing apparatus that has a full face-piece and is operated in a pressure-demand or other positive-pressure mode.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance (form): Gas.
Colour: Colourless.
Odour: Odourless.
Odour threshold: No data available.
pH (concentration): Not applicable.
Melting point/range (°C): -249 °C
Boiling point/range (°C): -246 °C
Flash point (°C): No data available.
Evaporation rate: Not applicable.
Flammability (solid, gas): Not applicable.
Ignition temperature (°C): No data available.
Upper/lower flammability/explosive limits: No data available.
Vapour pressure (20 °C): No data available.
Vapour density: 0.6964
Relative density (25 °C): 0.6964
Water solubility (g/L) at 20 °C: Slightly soluble.
n-Octanol/Water partition coefficient: No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity, dynamic (mPa s): No data available.
Explosive properties: The substance or mixture is not classified as explosive.
Oxidising properties: The substance or mixture is not classified as oxidizing.

Section 10: Stability and Reactivity

Stability: Stable under normal temperatures and pressure.
Conditions to avoid: Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.
Hazardous Polymerization: Will not polymerize.
Possibility of Hazardous Reactions: No data available.
Materials to avoid: Strong oxidizing agents.

Section 11: Toxicological Information

Information on toxicological effects:

Not classified based on available information.

Classification according to GHS (1272/2008/EG, CLP)

Skin corrosion/irritation:
Not classified based on available information.
Serious eye damage/eye irritation:
Not classified based on available information.
Respiratory or skin sensitisation:
Not classified based on available information.
Germ cell mutagenicity:

Not classified based on available information.

Carcinogenicity:

Not classified based on available information.

Reproductive toxicity:

Not classified based on available information.

Specific target organ toxicity – single exposure (STOT):

Not classified based on available information.

Specific target organ toxicity (STOT) – repeated exposure:

Not classified based on available information.

Aspiration toxicity:

Not classified based on available information.

Section 12: Ecological Information

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT& vPvB assessment: No data available.

Other adverse effects: No data available.

Section 13: Disposal Considerations

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dispose of as unused product.

Section 14: Transport Information

UN number: 1065

UN proper shipping name: NEON, COMPRESSED.

Transport hazard class: Class 2.2

Transport hazard label:

Marine pollutant: No.

Section 15: Regulatory Information

EU regulations:

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.
Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry
Not listed.
Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations:
Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended
Not listed.

Restrictions on use:
Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use
Not regulated.
Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.
Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work
Not regulated.
Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding.
Not regulated.

Other EU regulations:
Directive 2012/18/EU on major accident hazards involving dangerous substances
Not listed.
Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
Always applicable.
Directive 94/33/EC on the protection of young people at work
Not listed.

Additional Information:
OSHA Hazards: Compressed Gas.
SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards: Acute Health Hazard.
California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.
Canadian Regulations: WHMIS Classification: A
Chemical safety assessment: No Chemical Safety Assessment has been carried out.

Section 16: Other Information

List of abbreviations:
ACGIH American Conference of Governmental Industrial Hygienists
ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road
ALARA As Low As Is Reasonably Achievable
AMU Atomic Mass Unit
ANSI American National Standards Institute
BLS Basic Life Support
CAM Continuous Air Monitor
CAS Chemical Abstracts Service (division of the American Chemical Society)
CEN European Committee for Standardization
CERCLA Comprehensive Environmental Response Compensation and Liability Act
CLP Classification, Labelling and Packaging (European Union)
CPR Controlled Products Regulations (Canada)
CWA Clean Water Act (USA)
DAC Derived Air Concentration (USA)
DOE United States Department of Energy (USA)
DOT United States Department of Transportation (USA)
DSL Domestic Substances List (Canada)
EC50 Half Maximal Effective Concentration
EINECS European Inventory of Existing Commercial Chemical Substances
EHS Environmentally Hazardous Substance
ELINCS European List of Notified Chemical Substances
EMS Emergency Response Procedures for Ships Carrying Dangerous Goods
EPA Environmental Protection Agency (USA)
EPCRA Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986
GHS Globally Harmonized System
HMIS Hazardous Materials Identification System (USA)
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC Intermediate Bulk Containers
ICAO International Civil Aviation Organization
IDLH Immediately Dangerous to Life or Health
IMDG International Maritime Code for Dangerous Goods
LC50 Lethal concentration, 50 percent
LD50 Lethal dose, 50 percent
LDLO Lethal Dose Low
LOEC Lowest-Observed-Effective Concentration

MARPOL International Convention for the Prevention of Pollution from Ships
MSHA Mine Safety and Health Administration (USA)
NCRP National Council on Radiation Protection & Measurements (USA)
NDSL Non-Domestic Substances List (Canada)
NFPA National Fire Protection Association (USA)
NIOSH National Institute for Occupational Safety and Health (USA)
NOEC No Observed Effect Concentration
N.O.S. Not Otherwise Specified
NRC Nuclear Regulatory Commission (USA)
NTP National Toxicology Program (USA)
OSHA Occupational Safety and Health Administration (USA)
PBT Persistent Bioaccumulative and Toxic Chemical
PEL Permissible Exposure Limit
PIH Poisonous by Inhalation Hazard
RCRA Resource Conservation and Recovery Act (USA)
RCT Radiation Control Technician
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (Europe)
RID Regulations Concerning the International Transport of Dangerous Goods by Rail
RTECS Registry of Toxic Effects of Chemical Substances
SARA Superfund Amendments and Reauthorization Act (USA)
TDG Transportation of Dangerous Goods (Canada)
TIH Toxic by Inhalation Hazard
TLV Threshold Limit Value
TPQ Threshold Planning Quantity
TSCA Toxic Substances Control Act
TWA Time Weighted Average
UN United Nations (Number)
VOC Volatile Organic Compound
vPvB Very Persistent Very Bioaccumulative Chemical
WGK Wassergefährdungsklassen (Germany: Water Hazard Classes)
WHMIS Workplace Hazardous Materials Information System

References:

Not available.

Full text of any H-statements not written out in full under Sections 2 to 15:

H280 Contains gas under pressure; may explode if heated.

Revision information:

None.

Training information:

Follow training instructions when handling this material.

Further Information:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.