Safety Data Sheet



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

1.1 Product identifier

Product Name Hydrogen Chloride (0.1-50.0%), Neon (Balance)

Product Code 60076

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s) Semiconductor Uses

1.3 Details of the supplier of the safety data sheet

Manufacturer Air Liquide

> 2700 Post Oak Blvd. Houston, TX 77056 United States

www.us.airliquide.com sds@airliquide.com

Telephone (Technical) | 713-896-2896 Telephone (Technical) | 800-819-1704

1.4 Emergency telephone number

800-424-9300 - CHEMTREC Manufacturer

Manufacturer +1 703-527-3887 - Outside United States

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010] According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP Compressed Gas - H280 Skin Corrosion 1A - H314

Acute Toxicity Inhalation 4 - H332

DSD/DPD Toxic (T) Corrosive (C)

R23, R35

2.2 Label Elements

CLP

DANGER







Hazard statements | H280 - Contains gas under pressure; may explode if heated

H314 - Causes severe skin burns and eye damage.

H332 - Harmful if inhaled

Precautionary statements

Prevention | P260 - Do not breathe fume/gas.

P264 - Wash thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection. **Response** P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P310 - Immediately call a POISON CENTER or doctor/physician. P321 - Specific treatment, see supplemental first aid information.

P363 - Wash contaminated clothing before reuse.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage/Disposal P403 - Store in a well-ventilated place.

P405 - Store locked up.

P501 - Dispose of content and/or container in accordance with local, regional,

national, and/or international regulations.

DSD/DPD





Risk phrases | R23 - Toxic by inhalation.

R35 - Causes severe burns.

Safety phrases | S36 - Wear suitable protective clothing.

S37 - Wear suitable gloves. S39 - Wear eye/face protection.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show

the label where possible).

2.3 Other Hazards

CLP According to Regulation (EC) No. 1272/2008 (CLP) this material is considered

hazardous.

DSD/DPD According to European Directive 1999/45/EC this preparation is considered

dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 | Compressed Gas - H280

Skin Corrosion 1A - H314 Serious Eye Damage 1 - H318 Acute Toxicity Inhalation 4 - H332

2.2 Label elements
OSHA HCS 2012

DANGER







Hazard statements | Contains gas under pressure; may explode if heated - H280

Causes severe skin burns and eye damage. - H314

Causes serious eye damage - H318

Harmful if inhaled - H332

Precautionary statements

Prevention | Do not breathe fume/gas. - P260

Wash thoroughly after handling. - P264

Use only outdoors or in a well-ventilated area. - P271

Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340

Call a POISON CENTER or doctor/physician if you feel unwell. - P312

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower. - P303+P361+P353

Immediately call a POISON CENTER or doctor/physician. - P310 Specific treatment, see supplemental first aid information. - P321

Wash contaminated clothing before reuse. - P363

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. - P305+P351+P338

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. - P301+P330+P331

Storage/Disposal | Store in a well-ventilated place. - P403

Store locked up. - P405

Dispose of content and/or container in accordance with local, regional, national, and/or

international regulations. - P501

2.3 Other hazards

OSHA HCS 2012 Under United States Regulations (29 CFR 1910.1200 - Hazard Communication

Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS

Compressed Gas - A Very Toxic - D1A Corrosive - E

2.2 Label elements

WHMIS







Compressed Gas - A Very Toxic - D1A Corrosive - E

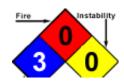
2.3 Other hazards

WHMIS

In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information

NFPA





Section 3 - Composition/Information on Ingredients

3.1 Substances

Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

			Composition	
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive
Hydrochloric acid	CAS:7647-01-0 EC Number:231- 595-7 EU Index:017-002- 00-2	0.1% TO 50%	Inhalation-Rat LC50 • 3124 ppm 1 Hour(s)	EU DSD/DPD: Annex I - T; R23 C; R35 EU CLP: Annex VI - Press. Gas- Comp., H280; Acute Tox. 3, H331; Skin Corr. 1A, H314 OSHA HCS 2012: Eye Dam. 1; Skin Corr. 1A; Press. Gas - Comp.; Acute Tox. 3 (Inhl)
Neon	CAS:7440-01-9 EINECS:231-110-9	Balance	NDA	EU DSD/DPD: Not Classified EU CLP: Self Classified - Press. Gas - Comp., H280 OSHA HCS 2012: Press. Gas - Comp.; Simp. Asphyx.

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately.

Skin

For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Get medical attention immediately.

Eye

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention immediately.

Ingestion

If swallowed, rinse mouth with water (only if the person is conscious) Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Give plenty of water to drink. Do not use mouth-to-mouth method if victim ingested the substance. Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media | Use extinguishing agent suitable for type of surrounding fire.

SMALL FIRES: Dry chemical or CO2. LARGE FIRES: Water spray or fog.

Unsuitable Extinguishing Media

No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

TOXIC; may be fatal if inhaled, ingested or absorbed through skin.

Vapors are extremely irritating and corrosive.

Cylinders exposed to fire may vent and release toxic and/or corrosive gas through

pressure relief devices.

Containers may explode when heated.

Ruptured cylinders may rocket.

Will be easily ignited by heat, sparks or flames.

Will form explosive mixtures with air.

May emit hydrogen gas upon contact with metal. Contact with water causes formation

of dense hydrochloric acid fumes.

Hazardous Combustion Products

No data available

5.3 Advice for firefighters

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Always wear thermal protective clothing when handling refrigerated/cryogenic liquids.

Wear positive pressure self-contained breathing apparatus (SCBA).

Move containers from fire area if you can do it without risk.

FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

FIRE INVOLVING TANKS: Fight fire from maximum distance or use unmanned hose

holders or monitor nozzles.

FIRE INVOLVING TANKS: Cool containers with flooding quantities of water until well after fire is out.

FIRE INVOLVING TANKS: Do not direct water at source of leak or safety devices;

icing may occur.

FIRE INVOLVING TANKS: Withdraw immediately in case of rising sound from venting

safety devices or discoloration of tank.
FIRE INVOLVING TANKS: ALWAYS stay away from tanks engulfed in fire.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Self contained breathing apparatus and fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch or walk through spilled material. Ventilate the area before entry.

Emergency Procedures

LARGE SPILL: Consider initial downwind evacuation for at least 500 meters (1/3 mile) Keep unauthorized personnel away. Keep out of low areas. Stay upwind. Do not direct water at spill or source of leak.

6.2 Environmental precautions

Prevent spreading of vapors through sewers, ventilation systems and confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

Stop leak if you can do it without risk.

Do not direct water at spill or source of leak.

Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container.

If possible, turn leaking containers so that gas escapes rather than liquid.

Preparation Date: 09/December/2014 Revision Date: 09/December/2014 Isolate area until gas has dispersed. Ventilate the area. Allow substance to evaporate.

6.4 Reference to other sections

Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

Use only with adequate ventilation. Ventilate closed spaces before entering. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe gas. Do not get in eyes, on skin, or on clothing. Cylinders should be firmly secured to prevent falling or being knocked-over. Do not attempt to repair, adjust, or in any other way modify cylinders. If there is a malfunction or another type of operational problem, contact nearest distributor immediately. Empty containers retain product residue and can be hazardous. Do not cut, weld, puncture or incinerate container.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Store in a cool, dry, well-ventilated place. Protect cylinders against physical damage. Cylinders should be firmly secured to prevent falling or being knocked-over. Do not allow area where cylinders are stored to exceed 52C (125F).

7.3 Specific end use(s)

Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

			Exposure Limits	/Guidelines		
	Result	ACGIH	Canada Ontario	Canada Quebec	China	France
	Ceilings	2 ppm Ceiling	2 ppm Ceiling	5 ppm Ceiling; 7.5 mg/m3 Ceiling	7.5 mg/m3 Ceiling [MAC]	Not established
Hydrochloric acid (7647-01-0)	STELs	Not established	Not established	Not established	Not established	5 ppm STEL [VLCT]; 7.6 mg/m3 STEL [VLCT]
		Ex	posure Limits/Gu	idelines (Con't.)		
	Result	Germany DFG	Germany TRGS	Ireland	Israel	Italy
	STELs	Not established	Not established	10 ppm STEL; 15 mg/m3 STEL	Not established	10 ppm STEL; 15 mg/m3 STEL
Hydrochloric acid (7647-01-0)	TWAs	Not established	2 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 3 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)	5 ppm TWA; 8 mg/m3 TWA	Not established	5 ppm TWA; 8 mg/m3 TWA

Preparation Date: 09/December/2014 Revision Date: 09/December/2014

	Ceilings	4 ppm Peak; 6 mg/m3 Peak	Not	established	Not	established	2 ppm Ceiling	Not established
	MAKs	2 ppm TWA MAK; 3.0 mg/m3 TWA MAK	Not	established	Not	established	Not established	Not established
		Ex	pos	ure Limits/Gui	deli	nes (Con't.)		
	Result	NIOSH		OSHA	С	SHA Vacated	Portugal	Spain
	Ceilings	5 ppm Ceiling; 7 mg/m3 Ceiling		om Ceiling; 7 m3 Ceiling		m Ceiling; 7 n3 Ceiling	2 ppm Ceiling [VLE- CM]	Not established
Hydrochloric acid	STELs	Not established	Not	established	Not	established	Not established	10 ppm STEL [VLA- EC]; 15 mg/m3 STEL [VLA-EC]
(7647-01-0)	TWAs	Not established	Not	established	Not	established	Not established	5 ppm TWA [VLA-ED] (indicative limit value); 7.6 mg/m3 TWA [VLA-ED] (indicative limit value)
		Ex	pos	ure Limits/Gui	deli	nes (Con't.)		
				Result		Sweden		
Hydrochloric acid (7647-01-0)				Ceilings		5 ppm CLV; 8 mg/ CLV	m3	

Exposure Control Notations

Portugal

•Hydrochloric acid (7647-01-0): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen)

•Neon (7440-01-9): Simple Asphyxiants: (Simple Asphyxiant)

Ireland

•Neon (7440-01-9): **Simple Asphyxiants:** (Asphyxiant)

Spain

•Neon (7440-01-9): Simple Asphyxiants: (simple asphyxiant)

Germany DFG

•Hydrochloric acid (7647-01-0): Pregnancy: (no risk to embryo/fetus if exposure limits adhered to)

8.2 Exposure controls

Engineering Measures/Controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If possible, handle the material in an efficient fume hood.

Personal Protective Equipment

Respiratory

In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face | Wear safety glasses.

Skin/Body Wear leather gloves when handling cylinders.

Environmental Exposure Controls

Follow best practice for site management and disposal of waste. Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

Maximale Arbeitsplatz Konzentration is the maximum permissible

concentration

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

Short Term Exposure Limits are based on 15-minute

exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Preparation Date: 09/December/2014 Revision Date: 09/December/2014

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Gas	Appearance/Description	Colorless gas with a pungent odor.
Color	Colorless	Odor	Pungent
Odor Threshold	Data lacking		
General Properties			-
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	рН	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	Data lacking
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			•
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			•
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

1 No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

1 Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Excess heat.

10.5 Incompatible materials

Due to the Hydrogen Chloride present in this mixture it is not compatible with most metals, alcohols, potassium permanganate, sodium metal, fluorine, metal acetylides, carbides, acetic anhydride, ammonia and ammonium hydroxide, caustics, sulfuric acid, perchloric acid, and with many organic compounds with reactive functional groups.

10.6 Hazardous decomposition products

The Hydrogen Chloride component of this gas mixture will decompose at 1800°C (3272°F) to form hydrogen gas and chlorine. Hydrogen Chloride will react with water to form acidic solutions.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

	Components
,	Acute Toxicity: Ingestion/Oral-Rabbit LD50 • 900 mg/kg; Inhalation-Rat LC50 • 3124 ppm 1 Hour(s); Sense Organs and Special Senses:Olfaction:Other changes; Sense Organs and Special Senses:Eye:Iritis; Irritation: Eye-Rabbit • 5 mg 30 Second(s)-Rinse • Mild irritation; Skin-Human • 4 % 24 Hour(s) • Mild irritation; Reproductive: Inhalation-Rat TCLo • 450 mg/m³ 1 Hour(s)(1D pre); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Homeostasis

GHS Properties	Classification
Acute toxicity	EU/CLP • Acute Toxicity - Inhalation 4 OSHA HCS 2012 • Acute Toxicity - Inhalation 4
Aspiration Hazard	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Carcinogenicity	EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Classification criteria not met
Germ Cell Mutagenicity	EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Skin Corrosion 1A OSHA HCS 2012 • Skin Corrosion 1A
Skin sensitization	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
STOT-RE	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
STOT-SE	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Toxicity for Reproduction	EU/CLP ◆ Classification criteria not met OSHA HCS 2012 ◆ Classification criteria not met
Respiratory sensitization	EU/CLP Classification criteria not met OSHA HCS 2012 Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Serious Eye Damage 1

Potential Health Effects

Inhalation

Acute (Immediate)Harmful if inhaled. May cause corrosive burns - irreversible damage.

Chronic (Delayed) I No data available

Skin

Acute (Immediate) Lauses severe skin burns and eye damage.

Chronic (Delayed) I No data available

Eye

Acute (Immediate) | Causes serious eye damage.

Chronic (Delayed) | No data available

Ingestion

Acute (Immediate)

May cause corrosive burns - irreversible damage.

Chronic (Delayed)

No data available

Key to abbreviations

TC = Toxic Concentration

LC = Lethal Concentration

LD = Lethal Dose

Section 12 - Ecological Information

12.1 Toxicity

Material data lacking.

12.2 Persistence and degradability

Material data lacking.

12.3 Bioaccumulative potential

Material data lacking.

12.4 Mobility in Soil

Material data lacking.

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment has not been conducted for this material.

12.6 Other adverse effects

No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1956	Compressed gas, n.o.s. (Neon, Hydrogen Chloride)	2.2	NDA	NDA
TDG	UN1956	COMPRESSED GAS, N.O.S. (Neon, Hydrogen Chloride)	2.2	NDA	NDA
IMO/IMDG	UN1956	COMPRESSED GASES, N.O.S. (Neon, Hydrogen Chloride)	2.2	NDA	NDA
IATA/ICAO	UN1956	Compressed gases, n.o.s. (Neon, Hydrogen Chloride)	2.2	NDA	NDA

14.6 Special precautions for user

Cylinders should be transported in a secure position, in a well-ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards. If transporting these cylinders in vehicles, ensure these cylinders are not exposed to extremely high temperatures (as may occur in an enclosed vehicle on a hot day). Additionally, the vehicle should be well-ventilated during transportation.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications Acute, Pressure(Sudden Release of)

		State Righ	t To Know	
Component	CAS	MA	NJ	PA
Hydrochloric acid	7647-01-0	Yes	Yes	Yes
Neon	7440-01-9	Yes	Yes	Yes

			Inventory				
Component	CAS	Canada DSL	Canada NDSL	Ch	nina	EU EINECS	EU ELNICS
Hydrochloric acid	7647-01-0	Yes	No	Υ	es	Yes	No
Neon	7440-01-9	Yes	No	Y	es	Yes	No
			Inventory (Cor	n't.)			
Component			CAS		TS	CA	
Hydrochloric acid		76	647-01-0		Υ	es	
Neon		74	140-01-9		Υ	es	

Canada

• Neon	7440-01-9	Α
• Neon	7440-01-9	A, D1A, E (listed under Hydrogen chloride); D1A, E; (0.036% in aqueous solution, 0.36% in aqueous solution,
• Hydrochloric acid	7647-01-0	3.6% in aqueous solution); D1B, E (28% in aqueous solution); D1A, E (31.45% in aqueous solution, 35.2% in aqueous solution)
Canada - WHMIS - Ingredient Disclosure List		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	1 %

Environment

Canada - CEPA - Priority Substances List

• Neon 7440-01-9 Not Listed

Hydrochloric acid	7647-01-0	Not Listed
nina		
Environment		
China - Ozone Depleting Substances - First Schedule		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
China - Ozone Depleting Substances - Second Schedule		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
China - Ozone Depleting Substances - Third Schedule		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
Other		
China - Annex I & II - Controlled Chemicals Lists		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
China - Dangerous Goods List		
• Neon	7440-01-9	(compressed or refrigerated liquid)
Hydrochloric acid	7647-01-0	(anhydrous, refrigerated liquid or Hydrochloric acid)
China - Export Control List - Part I Chemicals		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
ırope		
Other EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	T; R23 C; R35
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
• Neon	7440-01-9	Not Listed
NeonHydrochloric acid	7440-01-9 7647-01-0	Not Listed T C R:23-35 S:(1/2)-9-26- 36/37/39-45
Hydrochloric acid	7647-01-0	T C R:23-35 S:(1/2)-9-26-
	7647-01-0	T C R:23-35 S:(1/2)-9-26-
Hydrochloric acid EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations	7647-01-0 s	T C R:23-35 S:(1/2)-9-26- 36/37/39-45
Hydrochloric acid EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations Neon	7647-01-0 s 7440-01-9	T C R:23-35 S:(1/2)-9-26-36/37/39-45 Not Listed
 Hydrochloric acid EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations Neon Hydrochloric acid 	7647-01-0 s 7440-01-9	T C R:23-35 S:(1/2)-9-26-36/37/39-45 Not Listed

Germany

Environment		
Germany - TA Luft - Types and Classes		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		
Neon	7440-01-9	Not Listed
	7647-01-0	Not Listed
Hydrochloric acid	7647-01-0	NOI LISTED
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
• Neon	7440-01-9	Not Listed
		ID Number 238, hazard class ?
Hydrochloric acid	7647-01-0	 low hazard to waters (footnote 8)
Germany - Water Classification (VwVwS) - Annex 3		
Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
• Hydrochionic acid	7647-01-0	NOI LISTED
Other		
Germany - Specifically Regulated Chemicals in TRGS		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
Portugal		
Other Portugal - Prohibited Substances		
Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
- Trydrochione acid	7047-01-0	Not Listed
United Kingdom		
Environment		
United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases		
Mana		
• Neon	7440-01-9	Not Listed
Neon Hydrochloric acid	7440-01-9 7647-01-0	Not Listed 10000 kg
Hydrochloric acid		
Hydrochloric acid Other	7647-01-0	
Hydrochloric acid	7647-01-0	
Hydrochloric acid Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review	7647-01-0 w	10000 kg
Hydrochloric acid Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review Neon Hydrochloric acid	7647-01-0 w 7440-01-9	10000 kg Not Listed
Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review Neon Hydrochloric acid United Kingdom - List of Dangerous Substances in Water	7647-01-0 w 7440-01-9 7647-01-0	Not Listed Not Listed
Hydrochloric acid Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review Neon Hydrochloric acid United Kingdom - List of Dangerous Substances in Water Neon	7647-01-0 w 7440-01-9 7647-01-0	Not Listed Not Listed Not Listed
Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review Neon Hydrochloric acid United Kingdom - List of Dangerous Substances in Water	7647-01-0 w 7440-01-9 7647-01-0	Not Listed Not Listed
Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review Neon Hydrochloric acid United Kingdom - List of Dangerous Substances in Water Neon Hydrochloric acid	7647-01-0 w 7440-01-9 7647-01-0	Not Listed Not Listed Not Listed
Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review Neon Hydrochloric acid United Kingdom - List of Dangerous Substances in Water Neon Hydrochloric acid United States Labor	7647-01-0 w 7440-01-9 7647-01-0	Not Listed Not Listed Not Listed
Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review Neon Hydrochloric acid United Kingdom - List of Dangerous Substances in Water Neon Hydrochloric acid United States Labor U.S OSHA - Process Safety Management - Highly Hazardous Chemicals	7647-01-0 w 7440-01-9 7647-01-0 7440-01-9 7647-01-0	Not Listed Not Listed Not Listed Not Listed
Other United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review Neon Hydrochloric acid United Kingdom - List of Dangerous Substances in Water Neon Hydrochloric acid United States Labor	7647-01-0 w 7440-01-9 7647-01-0	Not Listed Not Listed Not Listed

U.S OSHA - Specifically Regulated Chemicals		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
Environment		
U.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants	7440 04 0	Not Listed
Neon Hydrochloria acid	7440-01-9 7647-01-0	Not Listed
Hydrochloric acid	7647-01-0	
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	5000 lb final RQ; 2270 kg final RQ
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	5000 lb EPCRA RQ (gas only)
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	500 lb TPQ (gas only)
U.S CERCLA/SARA - Section 313 - Emission Reporting		
• Neon	7440-01-9	Not Listed
		1.0 % de minimis
		concentration (acid aerosols
Hydrochloric acid	7647-01-0	including mists, vapors, gas, fog, and other airborne forms
		of any particle size)
		V 1 /
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed

United States - California

Environment			
U.S California - Proposition 65 - Carcinogens List			
• Neon	7440-01-9	Not Listed	
Hydrochloric acid	7647-01-0	Not Listed	
U.S California - Proposition 65 - Developmental Toxicity			
• Neon	7440-01-9	Not Listed	
Hydrochloric acid	7647-01-0	Not Listed	
U.S California - Proposition 65 - Maximum Allowable Dose Levels (M	IADL)		
• Neon	7440-01-9	Not Listed	
Hydrochloric acid	7647-01-0	Not Listed	
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)			
• Neon	7440-01-9	Not Listed	

Hydrochloric acid	7647-01-0 Not Listed	
U.S California - Proposition 65 - Reproductive Toxicity - Female		
• Neon	7440-01-9 Not Listed	
Hydrochloric acid	7647-01-0 Not Listed	
U.S California - Proposition 65 - Reproductive Toxicity - Male		
• Neon	7440-01-9 Not Listed	
Hydrochloric acid	7647-01-0 Not Listed	

United States - Pennsylvania

l bor U.S Pennsylvania - RTK (Right to Know) - Envir	onmental Hazard List	
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	
.S Pennsylvania - RTK (Right to Know) - Speci	al Hazardous Substances	
• Neon	7440-01-9	Not Listed
Hydrochloric acid	7647-01-0	Not Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

H331 - Toxic if inhaled

Last Revision Date

₁ 09/December/2014

Preparation Date

09/December/2014

Disclaimer/Statement of

Liability

To the best of Air Liquide's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this gas mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

Key to abbreviations NDA = No Data Available