



Material Safety Data Sheet

Hydrogen 50% LEL Cylinder

(REVISED 10/01/02)

EMERGENCY PHONE: (800) 424-9300

Section 1 - Identification

Product Code: 621-050P-85
Product Name: Cylinder, Hydrogen, 50% LEL, Balance Air (2% By Volume), 105L
Synonyms: H2 Cylinder, Compressed Gas Cylinder
Chemical Family: Gas Mixtures
CAS #: N/A
Molecular Formula: H₂ (2 %) in Air

NFPA Rating

Health	0
Flammability	0
Reactivity	0
Special	None

Section 2 - Ingredients

Chemical	CAS #	%	OSHA/PEL	ACGIH TLV
Hydrogen	1333-74-0	1.5 < x < 2.5	N/A	Simple Asphyxiant
Air	N/A	97.5 < x < 98.5	None	None

Section 3 - Physical Data

Boiling Point: -317°C (-194°F).
% Volatiles: N/A
Solubility in Water: Slightly Soluble
Specific Gravity (H₂O = 1): N/A
Freezing / Melting Point: N/A
Evaporation Rate
(butyl acetate = 1): N/A
Vapor Density (air = 1): 1.0
Vapor Pressure: Gas
Appearance and Odor: Colorless, odorless gas
Other:

Section 4 - Fire and Explosion Hazard Data

Flash Point (°F):	None
Flammable Limits in Air, % by volume:	Lower: None Upper: None
Autoignition Temperature:	None
Extinguishing Media:	None.
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Use water spray to cool surrounding containers until well after flames are extinguished. Cylinders may rupture violently when involved in a fire situation.
NFPA Ratings (Scale 0-4):	Health = 0, Fire = 0, Reactivity = 0

Section 5 - Health Data

OSHA (PEL):	H ₂	None
	Air	None
ACGIH (TLV):	H ₂	Simple Asphyxiant
	Air	None

ANIMAL TOXICITY

LDLO unr-man:	N/A
LD50: Oral - rat	N/A
Skin - rabbit	N/A
Carcinogenicity:	No

EFFECTS OF EXPOSURE

Acute Effects

Ingestion:	N/A
Skin Contact:	None.
Eye Contact:	None.
Inhalation:	None.
Medical Conditions, if any, aggravated by the chemical:	None identified.
Other health hazards:	N/A.
Most likely routes of entry:	Inhalation, skin contact.



Section 5 - Health Data (continued)

Chronic Effects

Ingestion: None expected.
Skin Contact: None.
Eye Contact: None.
Inhalation: None.
Other: N/A

EMERGENCY AND FIRST AID PROCEDURES

Ingestion: None Required.
Skin Contact: None Required.
Eye Contact: None Required.
Inhalation: None Required.

Section 6 - Reactivity

Incompatibility: None.
Hazardous
Decomposition Products: None.
Stability: Stable.
Hazardous Polymerization: Will not occur.
Other: None

Section 7 - Environmental Information

RCRA Code: N/A
TSCA Registered: No
Spill and Leak Procedures: N/A
Waste Disposal: Dispose in accordance with all applicable federal, state, and local environmental regulations.



Section 8 - Protection Information

Ventilation Requirement: None.
Respiratory Protection: None.
Protective Gloves: N/A.
Eye/Face Protection: N/A.

Section 9 - Special Precautions

Handling and Storage: Use only in well ventilated areas. Do not drag, slide or roll cylinders. Always use a suitable hand truck for moving cylinders. Use a pressure reducing regulator to connect high pressure cylinders with low pressure systems. Store in cool, dry, well ventilated areas.

Other Precautions: Do not heat cylinder by any means. Cylinder temperature should never exceed 125 F. Store cylinders upright and firmly secured to prevent falling or being knocked over. Protect cylinders from physical damage.

Section 10 - Transportation Information - U.S. Department of Transportation

Proper Shipping Name: Air, compressed, n.o.s..
Hazardous Class: 2.2.
UN#: 1956.
Shipping label: Non Flammable Gas

Section 11 - Comments

This data is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.