

Safety Data Sheet

Section 1: Product and Company Identification

Absolute Accuracy

4591 S Wayside Dr Houston, TX 77087 (832) 571-2387

Product Code: 800

Synonyms: N/A

Recommended Use: CALIBRATION GAS

Usage Restrictions: INDUSTRIAL CALIBRATION GAS ONLY

Section 2: Hazards Identification



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 #	Concentration
Methane	74-82-8	1000PPM
Air	Not applicable	balance

	Chemical Substance	Chemical Family	Trade Names
Methane	METHANE, COMPRESSED GAS	Hydrocarbons, Aliphatic, Saturated	FIRE DAMP; MARSH GAS; METHYL HYDRIDE; NATURAL GAS; METHANE; UN 1971; R50; CH4
Air	AIR, COMPRESSED	Inorganic gases	AIR; UN 1002 Nitrogen CAS: 7727-37-9 Oxygen CAS: 7782-44-7

Section 4: First Aid Measures

	Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
Methan e	Wash exposed skin with soap and water.	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.
Air	Wash exposed skin with soap and water.	Flush eyes with plenty of water.	If a large amount is swallowed, get medical attention.	If adverse effects occur, remove to uncontaminated area. Get medical attention.	

Section 5: Fire Fighting Measures

	Suitable Extinguishing Media	Products of Combustion	Protection of Firefighters
Methan e	Carbon dioxide, regular dry chemical Large fires: Use regular foam or flood with fine water spray.	Carbon monoxide, carbon dioxide, water	 Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece. Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece.
Air	Use extinguishing agents appropriate for surrounding fire.		 No respirator is required under normal conditions of use.

Section 6: Accidental Release Measures

	Personal Precautions Environmental Precautions		Methods for Containment	
Methan	Keep unnecessary people away, isolate	Avoid heat, flames, sparks and other	Stop leak if possible without personal risk.	
e	hazard area and deny entry. Ventilate	sources of ignition.	Reduce vapors with water spray. Remove	
	closed spaces before entering.	before entering. sources of ignition.		
Air			Stop leak if possible without personal risk.	

	Methods for Cleanup	Other Information	
Methane	Not available	Not available	
Air			

Section 7: Handling and Storage

	Handling	Storage
Methane	Store and handle in accordance with all current regulations and standards. Grounding and bonding required. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101.	Keep separated from incompatible substances.

	Handling	Storage
Air	Store and handle in accordance	with
	all current regulations and stand	dards.
	Subject to storage regulations: U	J.S.
	OSHA 29 CFR 1910.101.	

Section 8: Exposure Controls/Personal Protection

	Exposure Guidelines
Methane	METHANE, COMPRESSED GAS: ALIPHATIC HYDROCARBON GASES ALKANE (C1-C4): 1000 ppm ACGIH TWA METHANE: No occupational exposure limits established. ALIPHATIC HYDROCARBON GASES ALKANE (C1-C4): 1000 ppm ACGIH TWA
Air	AIR, COMPRESSED: No occupational exposure limits established.

Engineering Controls

Handle only in fully enclosed systems.

-	Eye Protection	Skin Protection	Respiratory Protection
Methane	Eye protection not required, but recommended.	Protective clothing is not required.	Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece.
Air	Eye protection not required under normal conditions.	Protective clothing is not required under normal conditions.	No respirator is required under normal conditions of use.

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
Meth ane	Gas	Colorless	Colorless	N/A	Gas	Odorless	Tasteless
Air	Gas	Clear	Colorless		Gas	Not available	

	Flash Point	Flammability	Partition Coefficient	Autoignitio n Temperatur e	Upper Explosive Limits	Lower Explosive Limits
Meth ane	-369 F (-223 C)	Not available	724.44 (log = 2.87) (estimated from water solubility)	999 F (537 C)	15%	5%
Air						

	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	рН	Odor Threshol d	Evaporati on Rate	Viscosi ty
Me tha ne	-260 F (- 162 C)	-297 F (- 183 C)	760 mmHg @ -161 C	0.555 (Air=1)	Not applicable	3.5% @ 17 C	Not applic able	Not available	Not applicable	0.01118 cP @ 27 C
Air	-317 F (- 194 C)	Not available	760 mmHg @ -194 C	1	Not applicable	Slightly soluble	Not applic able	Not available	Not applicable	0.01853 cP @ 26.85 C

	Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
Meth ane	16.04	C-H4	0.717 g/L @ 0 C	Not available	Not applicable	Not applicable	Soluble: Alcohol, ether, benzene, organic solvents
Air			1.29 g/L @ 0 C			Not applicable	Slightly Soluble

Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
Methane Stable at normal temperatures and		Stable at normal temperatures and	Halogens, oxidizing materials, combustible
	pressure.	pressure.	materials
Air Stable at normal temperatures and		Stable at normal temperatures and	None known
	pressure.	pressure.	

	Hazardous Decomposition Products	Possibility of Hazardous Reactions	
Methane	Oxides of carbon	Will not polymerize.	
Air	No hazard expected.	Will not polymerize.	

Section 11: Toxicology Information

Acute Effects

	Oral LD50	Dermal LD50	Inhalation
Methan e	Not available	Not available	Nausea, vomiting, difficulty breathing, irregular heartbeat, headache, drowsiness, fatigue, dizziness, disorientation, mood swings, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma
Air	Not available	Not available	

	Eye Irritation	Skin Irritation	Sensitization	
Metha	No information on significant adverse effects	No information on significant adverse effects	Difficulty breathing	
ne				
Air	No information is available	No information is available	No significant target effects reported.	

Chronic Effects

	Carcinogenicity	Mutagenicity	Reproductive Effects	Develo pmenta l Effects
Methan	Not available	Not available	Not available	No data
е				
Air	Not available	Not available	No data	No data

Section 12: Ecological Information

Fate and Transport

	Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
Meth ane	Fish toxicity: Not available Invertibrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Relatively non-persistent in the environment. Moderately volatile from water.	Accumulates very little in the bodies of living organisms.	Not expected to leach through the soil or the sediment.
Air	Fish toxicity: Not available	Not available	Not available	Not available

Section 13: Disposal Considerations

Methane	Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262.
	Hazardous Waste Number(s): D001.
Air Dispose in accordance with all applicable requi	

Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

DOT Information For This Mixture

BOT Information For This winterc						
Shipping Name Compressed gas, n.o.s. (Air, Methane)						
UN Number	UN1956					
Hazard Class	2.2					
Hazard Information	Non-Flammable Gas					

Individual Component Information

	Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Labeling Requiremen ts	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Descriptio n
M et h a n e	Methane, compressed	UN1971	2.1	Not applicable	2.1	Forbidden	150 kg	N/A
Ai r	Air, compressed	UN1002	2.2	Not available	2.2	Not available	Not available	Not available

Canadian Transportation of Dangerous Goods

	Shipping Name	UN Number	Class	Packing Group / Risk
				Group
Met han e	Methane, compressed	UN1971	2.1	Not applicable
Air	Air, compressed	UN1002	2.2	Not available

Section 15: Regulatory Information

U.S. Regulations

	CERCLA Sections SARA 355.30 SARA 355.40		SARA 355.40
Metha	Not regulated.	Not regulated.	Not regulated.
ne			
Air	Not regulated.	Not regulated.	Not regulated.

SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
Met	Yes	No	Yes	No	Yes
hane					
Air	No	No	No	No	Yes

SARA 372.65

Methane	Not regulated.
Air	Not regulated.

OSHA Process Safety

Methane	Not regulated.
Air	Not regulated.

State Regulations

	CA Proposition 65
Methane	Not regulated.
Air	Not regulated.

Canadian Regulations

	WHMIS Classification
Methane	A, B1
Air	A

National Inventory Status

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

Section 16: Other Information

	NFPA Rating
Methane	HEALTH=0 FIRE=4 REACTIVITY=0
Air	HEALTH=0 FIRE=0 REACTIVITY=0

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