

# Safety Data Sheet

## Methane, compressed

### United States Cylinder Gas

11618 S Mayfield Ave, Alsip, Illinois, 60803

Emergency Phone: CHEMTREC 1-800-424-9300

www.uscylgas.com

## Section 1: Product and Company Identification

### United States Cylinder Gas

11618 S Mayfield Ave, Alsip, Illinois, 60803

Phone (708) 389-1402

Emergency Phone: CHEMTREC 1-800-424-9300

www.uscylgas.com

Product Code: **Methane**

Part Number: METH CP

**Synonyms:** CH<sub>4</sub>

**Recommended Use:** Industrial use. Use as directed.

**Usage Restrictions:**

## Section 2: Hazards Identification



Hazard Classification:

Flammable (Category 1), H220

Gases Under Pressure, H280

Simple Asphyxiant, OSHA-H01

Hazard Statements:

H220: Extremely flammable gas

H280: Contains gas under pressure; may explode if heated

CGA-HG04: MAY FORM EXPLOSIVE MIXTURES WITH AIR.

OSHA-H01: MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

Precautionary Statements

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P271+P403: Use and store only outdoors or in a well-ventilated place.

P377: Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381: In case of leakage, eliminate all ignition sources.

CGA-PG02: Protect from sunlight when ambient temperature exceeds 52C (125F).

CGA-PG05: Use a back flow preventive device in the piping.

CGA-PG06: Close valve after each use and when empty.

CGA-PG10+CGA-PG20: Use only with equipment of compatible materials of construction and rated for cylinder pressure.

CGA-PG12: Do not open valve until connected to equipment prepared for use.

CGA-PG27: Read and follow the Safety Data Sheet (SDS) before use.

### Section 3: Composition/Information on Ingredients

	CAS #	Concentration
Methane	74-82-8	100%

	Trade Names
Methane	02329_FLUKA 0CB689EE-132E-4559-A597-C79A40192203 14493-06-2 150036-83-2 295477_ALDRICH 3B4-2254

### Section 4: First Aid Measures

IF ON SKIN: wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

### Section 5: Fire Fighting Measures

**Suitable Extinguishing Media:**

Dry powder, carbon dioxide, cool surrounding area with fine water mist.

**Protection of Firefighters:**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

	Products of Combustion
Methane	Oxides of carbon

### Section 6: Accidental Release Measures

**Personal Precautions:**

Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.

**Environmental Precautions:**

Keep away from drains, surface and ground water. Avoid heat, flames, sparks and other sources of ignition.

**Methods for Containment and Cleanup:**

Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. If necessary, cover drains. Absorb large spills, dispose in appropriate containers.

### Section 7: Handling and Storage

**Handling:**

See precautions in Section 2. Only trained personnel should handle this product. Always use approved personal protective equipment.

**Storage:**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep separated from incompatible substances.

	Incompatibilities	Conditions to avoid
Methane	Halogens, oxidizing materials, combustible materials	Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat.

## Section 8: Exposure Controls/Personal Protection

Exposure Guidelines	Threshold Limit Value -TLV (ppm)
Methane	Not Available

### Engineering Controls

No specific controls are needed.

### Eye Protection

Wear splash resistant safety goggles.

### Skin Protection

Wear chemical protective clothing, including gloves.

### Respiratory Protection

Use self-contained breathing apparatus.

### 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 / Physical Form	Appearance / Color	Odor	Flash Point	Flammability	Partition Coefficient
Methane	Gas	Colorless	Odorless	-369 F (-223 C)	True	1

	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits	Boiling Point	Freezing Point	Vapor Pressure
Methane	999 F (537 C)	15	4.4	-260 F (-162 C)	-297 F (-183 C)	Not Available

	Vapor Density	Specific Gravity	Water Solubility	pH	Evaporation Rate	Viscosity
Methane	0.555	Not applicable	3.5% @ 17 C	0	Not applicable	0.01118 cP @ 27 C

	Molecular Weight	Molecular Formula	Density	Volatility	Solvent Solubility
Methane	16.043	CH <sub>4</sub>	Not Available	Not applicable	Soluble : Alcohol, ether, benzene, organic solvents

## Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
Methane	Stable at normal temperatures and pressure.	Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat.	Halogens, oxidizing materials, combustible materials

	Hazardous Decomposition Products	Possibility of Hazardous Reactions
Methane	Oxides of carbon	Will not polymerize.

## Section 11: Toxicology Information

The toxicology information is calculated for the mixture.

**Acute Toxicity Estimates (ATE) of the mixture.**

<b>Oral ATE (mg/kg)</b>	Not Available
<b>Inhalation ATE (ppm)</b>	Not Available
<b>Dermal ATE (mg/kg)</b>	Not Available

**Additional health hazards:**

OSHA-H01: MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

Skin Corrosion/Irritation	Not Available
Eye Damage/Irritation	Not Available
Respiratory or Skin Sensitization	Not Available
Germ Cell Mutagenicity	Not Available
Carcinogenicity	Not Available
Reproductive Toxicity	Not Available
STOT – single exposure	Not Available
STOT – repeated exposure	Not Available
Aspiration Hazard	Not Available

**Section 12: Ecological Information****Fate and Transport**

	<b>Eco toxicity</b>	<b>Persistence / Degradability</b>	<b>Bioaccumulation / Accumulation</b>	<b>Mobility in Environment</b>
<b>Methane</b>	Fish toxicity: 0 Invertebrate toxicity: Algal toxicity: Phyto toxicity: Other toxicity:	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.

**Section 13: Disposal Considerations**

Dispose in accordance with all applicable regulations. Do not dispose in sewers or waterways. Recycle if possible to do so. Return to manufacturer for disposal if needed.

**Section 14: Transportation Information****U.S. DOT 49 CFR 172.101**

	<b>Proper Shipping Name</b>	<b>ID Number</b>	<b>Hazard Class or Division</b>	<b>Packing Group</b>	<b>Passenger Aircraft or Railcar Quantity Limitations</b>	<b>Cargo Aircraft Only Quantity Limitations</b>	<b>Additional Shipping Description</b>
<b>Methane</b>	Methane, compressed	UN1971	2.1	Not available	Not available	Not available	Not available

**Canadian Transportation of Dangerous Goods**

	<b>Shipping Name</b>	<b>UN Number</b>	<b>Class</b>	<b>Packing Group / Risk Group</b>
<b>Methane</b>	Methane, compressed	UN1971	2.1	Not Available

## Section 15: Regulatory Information

### U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
Methane	Not Regulated.	Not Regulated.	Not Regulated.

### SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
Methane	Yes	No	Yes	No	Yes

### SARA 372.65

Methane	Not Regulated.
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### OSHA Process Safety

Methane	Not regulated.
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### State Regulations

	CA Proposition 65
Methane	Not regulated.

### Canadian Regulations

	WHMIS Classification
Methane	A, B1

### National Inventory Status

	US Inventory (TSCA)	TSCA 12b Export Notification	Canada Inventory (DSL/NDSL)
Methane	Methane	Not listed.	Listed on DSL.

## Section 16: Other Information

	NFPA Rating
Methane	Health = 2, Flammability = 4, Instability = 0

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