

Safety Data Sheet Methane

Sidney Lee Welding Supply 2247 Highway US 19-41 Hampton, GA 30228

http://www.sidneylee.com

CHEMTREC - 24HR Emergency Contact 1-800-424-9300 ACCT: 20182

Section 1: Product and Company Identification

Sidney Lee Welding Supply

2247 Highway US 19-41 Hampton, GA 30228 http://www.sidneylee.com

CHEMTREC - 24HR Emergency Contact 1-800-424-9300 ACCT: 20182

Product Code: Methane

Section 2: Hazards Identification



Hazard Classification: Flammable (Category 1) Gases Under Pressure

Hazard Statements:

Contains gas under pressure; may explode if heated Extremely flammable gas

Precautionary Statements

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Response:

Eliminate all ignition sources if safe to do so. Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Storage:

Protect from sunlight. Store in well-ventilated place.

Section 3: Composition/Information on Ingredients

CAS # 74-82-8

| Chemical Substance | Chemical Family | Trade Names |
|---------------------|--------------------------|--|
| METHANE, COMPRESSED | Hydrocarbons, Aliphatic, | FIRE DAMP; MARSH GAS; METHYL HYDRIDE; NATURAL GAS; METHANE; UN |
| GAS | Saturated | 1971; R50; CH4 |

Section 4: First Aid Measures

| Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|--|--|--|--|--|
| 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. |

Section 5: Fire Fighting Measures

| Suitable Extinguishing Media | Products of Combustion | Protection of Firefighters |
|--|---|--|
| 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 facepieceRespiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece. |

Section 6: Accidental Release Measures

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

| Methods for Cleanup | Other Information |
|---------------------|-------------------|
| Not available | Not available |

Section 7: Handling and Storage

| Handling | Storage |
|---|--|
| 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. |

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

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

Engineering Controls

Handle only in fully enclosed systems.

| Eye Protection | Skin Protection | Respiratory Protection |
|----------------|-----------------|--|
| | | Respiratory protection may be needed for frequent or heavy exposure. Any self- |
| recommended. | required. | contained breathing apparatus with a full facepiece. |

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 |
|----------------|------------|-----------|----------------------|---------------|----------|-----------|
| Gas | Colorless | Colorless | N/A | Gas | Odorless | Tasteless |

| Flash Point | Flammability | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits | Lower Explosive Limits |
|--------------------|---------------|---|-----------------------------|---------------------------|---------------------------|
| -369 F (-223 C) | Not available | 724.44 (log = 2.87) (estimated from water solubility) | 999 F (537 C) | 15% | 5% |

| Boi Poi | iling int | Freezing Point | Vapor Pressure | Vapor Density | Specific Gravity | Water Solubility | рН | Odor Threshold | Evaporation Rate | Viscosity |
|------------|--------------|------------------------|-------------------------|------------------|---------------------|---------------------|-------------------|-------------------|---------------------|-------------------------|
| | 60 F .62 | -297 F (- 183 C) | 760 mmHg @ -161 C | 0.555 (Air=1) | Not applicable | 3.5% @ 17 C | Not applicable | Not available | Not applicable | 0.01118 cP @ 27 C |

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

Section 10: Stability and Reactivity

| Stability | Conditions to Avoid | Incompatible Materials | |
|-----------------------------------|-----------------------------------|--|--|
| Stable at normal temperatures and | Stable at normal temperatures and | Halogens, oxidizing materials, combustible | |
| pressure. | pressure. | materials | |

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

Section 11: Toxicology Information

Acute Effects

| Oral LD50 | Dermal LD50 | Inhalation |
|------------------|------------------|---|
| 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 |

| Eye Irritation | Skin Irritation | Sensitization |
|---|---|----------------------|
| No information on significant adverse effects | No information on significant adverse effects | Difficulty breathing |

Chronic Effects

| Carcinogenicity | Mutagenicity | Reproductive Effects | Developmental Effects |
|-----------------|---------------|----------------------|-----------------------|
| Not available | Not available | Not available | No data |

Section 12: Ecological Information

Fate and Transport

| Eco toxicity | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|---|---|--|---|
| 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. |

Section 13: Disposal Considerations

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

Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

| Proper Shipping Name | ID Number | Hazard Class or Division | Packing Group | Labeling Requirements | Passenger Aircraft or Railcar Quantity Limitations | Cargo Aircraft Only Quantity Limitations | Additional Shipping Description |
|----------------------------|--------------|--------------------------------|-------------------|--------------------------|--|--|---------------------------------------|
| Methane, compressed | UN1971 | 2.1 | Not applicable | 2.1 | Forbidden | 150 kg | N/A |

Canadian Transportation of Dangerous Goods

| | | 0 | |
|---------------------|-----------|-------|----------------------------|
| Shipping Name | UN Number | Class | Packing Group / Risk Group |
| Methane, compressed | UN1971 | 2.1 | Not applicable |

Section 15: Regulatory Information

U.S. Regulations

| CERCLA Sections | SARA 355.30 | SARA 355.40 |
|-----------------|----------------|----------------|
| Not regulated. | Not regulated. | Not regulated. |

SARA 370.21

| Acute | Chronic | Fire | Reactive | Sudden Release |
|-------|---------|------|----------|----------------|
| Yes | No | Yes | No | Yes |

SARA 372.65 Not regulated.

OSHA Process Safety

Not regulated.

State Regulations

CA Proposition 65

Not regulated.

Canadian Regulations

WHMIS Classification

A. B1

National Inventory Status

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

Section 16: Other Information

HEALTH=0 FIRE=4 REACTIVITY=0

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