



# Safety Data Sheet

## SPECIALTY - METHANE 5PPM BAL HELIUM

Central McGowan  
 123 Roosevelt Road, St. Cloud, MN, 56301  
 800-569-1322

### Section 1: Product and Company Identification

**Central McGowan**  
 123 Roosevelt Road, St. Cloud, MN, 56301

Product Code: **SPECIALTY - METHANE 5PPM BAL HELIUM**

**Synonyms:** SPG HEL 5PPM CH4 T

**Recommended Use:**

**Usage Restrictions:**

### Section 2: Hazards Identification



**Warning**

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
<b>Methane</b>	74-82-8	0.0005ppm
<b>Helium</b>	7440-59-7	Balance

	Chemical Substance	Chemical Family	Trade Names
<b>Methane</b>	METHANE, COMPRESSED GAS	Hydrocarbons, Aliphatic, Saturated	FIRE DAMP; MARSH GAS; METHYL HYDRIDE; NATURAL GAS; METHANE; UN 1971; R50; CH4
<b>Helium</b>	HELIUM	Inorganic gases	HELIUM GAS; HELIUM COMPRESSED; HELIUM-4; ATOMIC HELIUM; UN 1046; He

## Section 4: First Aid Measures

	Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
<b>Methane</b>	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.
<b>Helium</b>	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
<b>Methane</b>	Carbon dioxide, regular dry chemical Large fires: Use regular foam or flood with fine water spray.	Carbon monoxide, carbon dioxide, water	<ul style="list-style-type: none"> <li>▪ Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece.</li> <li>▪ Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece.</li> </ul>
<b>Helium</b>	Non-flammable. use suitable extinguishing media for surrounding fire.	Non-flammable	<ul style="list-style-type: none"> <li>▪ Non-flammable</li> <li>▪ non-flammable</li> </ul>

## Section 6: Accidental Release Measures

	Personal Precautions	Environmental Precautions	Methods for Containment
<b>Methane</b>	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.
<b>Helium</b>	Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.	Avoid soil, waterways, drains and sewers	Stop leak if possible without personal risk.

	Methods for Cleanup	Other Information
<b>Methane</b>	Not available	NOT AVAILABLE
<b>Helium</b>	Stop leak, evacuate area. Contact emergency personnel.	None

## Section 7: Handling and Storage

	Handling	Storage
<b>Methane</b>	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.
<b>Helium</b>	Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101.	Keep separated from incompatible substances.

## Section 8: Exposure Controls/Personal Protection

	Exposure Guidelines
<b>Methane</b>	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
<b>Helium</b>	HELIUM: ACGIH (simple asphyxiant)

## Engineering Controls

Handle only in fully enclosed systems.

	Eye Protection	Skin Protection	Respiratory Protection
<b>Methane</b>	Eye protection not required, but recommended.	Protective clothing is not required. Wear appropriate chemical resistant gloves.	Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece.
<b>Helium</b>	Eye protection not required, but recommended.	Protective clothing is not required. Protective gloves are not required.	Non-flammable

## 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
<b>Methane</b>	Gas	Colorless	Colorless	N/A	Gas	Odorless
<b>Helium</b>	Gas	Colorless	Colorless	N/A	Gas	Odorless

	Taste	Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits
<b>Methane</b>	Tasteless	-369 F (-223 C)	Not available	724.44 (log = 2.87) (estimated from water solubility)	999 F (537 C)	15%
<b>Helium</b>	Tasteless	Not flammable	Not available	Not available	Nonflammable	Nonflammable

	Lower Explosive Limits	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity
<b>Methane</b>	5%	-260 F (-162 C)	-297 F (-183 C)	760 mmHg @ -161 C	0.555 (Air=1)	Not applicable
<b>Helium</b>	Nonflammable	-452 F (-269 C)	-458 F (-272 C) @ 26 atm	1719 mmHg @ -268 C	0.138 (Air=1)	Not applicable

	Water Solubility	pH	Odor Threshold	Evaporation Rate	Viscosity	Molecular Weight
<b>Methane</b>	3.5% @ 17 C	Not applicable	Not available	Not applicable	0.01118 cP @ 27 C	16.04
<b>Helium</b>	0.94% @ 0 C	Not applicable	Not available	Not applicable	0.02012 cP @ 26.8 C	4.0026

	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
<b>Methane</b>	C-H4	0.717 g/L @ 0 C	Not available	Not applicable	Not applicable	Soluble : Alcohol, ether, benzene, organic solvents
<b>Helium</b>	He	0.1785 g/L @ 0 C	Not available	100%	Not applicable	Insoluble : Not available

## Section 10: Stability and Reactivity

	Stability	Conditions to Avoid	Incompatible Materials
<b>Methane</b>	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

	Stability	Conditions to Avoid	Incompatible Materials
Helium	Stable at normal temperatures and pressure.	Protect from physical damage and heat. Containers may rupture or explode if exposed to heat. Keep liquid helium from contact with air.	No data available.

	Hazardous Decomposition Products	Possibility of Hazardous Reactions
Methane	Oxides of carbon	Will not polymerize.
Helium	Miscellaneous decomposition products	Will not polymerize.

## Section 11: Toxicology Information

### Acute Effects

	Oral LD50	Dermal LD50	Inhalation
Methane	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
Helium	Not available	Not available	Nausea, vomiting, difficulty breathing, irregular heartbeat, headache, fatigue, dizziness, disorientation, emotional disturbances, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma

	Eye Irritation	Skin Irritation	Sensitization
Methane	No information on significant adverse effects	No information on significant adverse effects	Difficulty breathing
Helium	Liquid: frostbite, blurred vision	Liquid: frostbite	Difficulty breathing

### Chronic Effects

	Carcinogenicity	Mutagenicity	Reproductive Effects	Developmental Effects
Methane	Not available	Not available	Not available	No data
Helium	Not available	Not available	Not available	No data

## Section 12: Ecological Information

### Fate and Transport

	Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
Methane	Fish toxicity: Not available Invertebrate 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.
Helium	Fish toxicity: Not available Invertebrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Not available	Not available	Not available

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### Section 13: Disposal Considerations

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

### Section 14: Transportation Information

#### U.S. DOT 49 CFR 172.101

#### DOT Information For This Mixture

<b>Shipping Name</b>	Compressed gas, n.o.s. (Methane, Helium)
<b>UN Number</b>	UN1956
<b>Hazard Class</b>	2.2
<b>Hazard Information</b>	NonFlammable Gas

#### Individual Component Information

	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
<b>Methane</b>	Methane, compressed	UN1971	2.1	Not applicable	2.1	Forbidden	150 kg	N/A
<b>Helium</b>	Helium, compressed	UN1046	2.2	Not applicable	2.2	75 kg or L	150 kg	N/A

#### Canadian Transportation of Dangerous Goods

	Shipping Name	UN Number	Class	Packing Group / Risk Group
<b>Methane</b>	Methane, compressed	UN1971	2.1	Not applicable
<b>Helium</b>	Helium, compressed	UN1046	2.2	Not applicable

### Section 15: Regulatory Information

#### U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
<b>Methane</b>	Not regulated.	Not regulated.	Not regulated.
<b>Helium</b>	Not regulated.	Not regulated.	Not regulated.

#### SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
<b>Methane</b>	Yes	No	Yes	No	Yes
<b>Helium</b>	Yes	No	No	No	Yes

#### SARA 372.65

<b>Methane</b>	Not regulated.
<b>Helium</b>	Not regulated.

#### OSHA Process Safety

<b>Methane</b>	Not regulated.
<b>Helium</b>	Not regulated.

#### State Regulations

	<b>CA Proposition 65</b>
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<b>Methane</b>	Not regulated.
<b>Helium</b>	Not regulated.

### Canadian Regulations

	<b>WHMIS Classification</b>
<b>Methane</b>	A, B1
<b>Helium</b>	A

### National Inventory Status

	<b>US Inventory (TSCA)</b>	<b>TSCA 12b Export Notification</b>	<b>Canada Inventory (DSL/NDSL)</b>
<b>Methane</b>	Listed on inventory.	Not listed.	Listed on inventory.
<b>Helium</b>	Listed on inventory.	Not listed.	Not determined.

## Section 16: Other Information

	<b>NFPA Rating</b>
<b>Methane</b>	HEALTH=0 FIRE=4 REACTIVITY=0
<b>Helium</b>	HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA

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