



Scott Specialty Gases

M-22711/E-2

SCOTT\_SPECIALTY\_GASES

MATERIAL SAFETY DATA SHEETS

DATE: 3/09/04

SUPPLIER ADDRESS: 1290 COMBERMERE STREET  
TROY, MI 48083  
EMERGENCY PHONE: (248) 589-2950  
NUMBER

1. CHEMICAL PRODUCT

PRODUCT NAME: METHANE IN AIR

SYNONYMS: None

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient Name	Formula	CAS#	Concentration	Exposure Limits (PPM)			
				ACGIH TLV	OSHA PEL	MAC	Other STEL
METHANE	CH4	74-82-8	.0001-4 PCT	S/A	S/A	S/A	S/A
AIR	O2/N2	132259-10-0	BALANCE	NE	NE	NE	NE

Note: S/A = SIMPLE ASPHYXIANT

NE = NONE ESTABLISHED

3. HAZARD IDENTIFICATION

\*\*\* EMERGENCY OVERVIEW \*\*\*

High pressure gas.

May accelerate combustion.

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Inhalation

ACUTE EFFECTS: None

CHRONIC EFFECTS: None known

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None known

OTHER EFFECTS OF OVEREXPOSURE: None

CARCINOGENICITY (US Only):

NTP - No

IARC MONOGRAPHS - No

OSHA REGULATED - No

Continued ...

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4. FIRST AID MEASURES

INHALATION: None

EYE CONTACT: None

SKIN CONTACT: None

INGESTION: None

IN EVENT OF EXPOSURE, CONSULT A  
PHYSICIAN

NOTE TO PHYSICIAN: None

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING:

Secure cylinder when using to protect  
from falling. Use suitable hand truck to  
move cylinders.

PRECAUTIONS TO BE TAKEN IN STORAGE:

Store in well ventilated areas. Keep  
valve protection cap on cylinders when  
not in use.8. EXPOSURE CONTROLS/ PERSONAL  
PROTECTION

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5. FIRE FIGHTING MEASURES

FLASH POINT: Nonflammable  
AUTOIGNITION TEMPERATURE: N/Ap  
FLAMMABLE LIMITS: Nonflammable  
LOWER:  
UPPER:

EXTINGUISHING MEDIA: Use what is appropriate for surrounding fire.

SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT: Wear self-contained breathing apparatus and full protective clothing. Keep fire exposed cylinders cool with water spray. If possible, stop the product flow.

HAZARDOUS COMBUSTION PRODUCTS: Toxic carbon monoxide may be given off during combustion.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Cylinder rupture may occur under fire conditions. Compressed air at high pressure will accelerate the combustion of flammable materials.

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6. ACCIDENTAL RELEASE MEASURES

CLEAN UP PROCEDURES: Evacuate and ventilate area. Remove leaking cylinder to exhaust hood or safe outdoor area. Shut off source if possible and remove source of heat.

SPECIALIZED EQUIPMENT: None

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION: None

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11. TOXICOLOGICAL INFORMATION

LETHAL CONCENTRATION (LC50): NONE ESTABLISHED  
LETHAL DOSE 50 (LD50): N/Ap  
TERATOGENICITY: N/Ap  
REPRODUCTIVE EFFECTS: N/Ap  
MUTAGENICITY: N/Ap

ENGINEERING CONTROLS: None  
PERSONAL PROTECTION  
EYE/FACE PROTECTION: Safety glasses  
SKIN PROTECTION: None

RESPIRATORY PROTECTION: In case of leakage, use self-contained breathing apparatus.

OTHER PROTECTIVE EQUIPMENT: Safety shoes when handling cylinders.

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9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless  
ODOR: Odorless  
PHYSICAL STATE: Gas  
VAPOR PRESSURE: N/Ap  
VAPOR DENSITY (AIR=1): 0.982-1.0  
BOILING POINT (C): Gas  
SOLUBILITY IN WATER: @20 deg. C: 18.68 cm<sup>3</sup>/l  
SPECIFIC GRAVITY (H<sub>2</sub>O=1): Gas  
EVAPORATION RATE: Gas  
ODOR THRESHOLD: N/Ap

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10. STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions.

CONDITIONS TO AVOID: Storage in poorly ventilated areas. Storage near a heat source.

MATERIALS TO AVOID: Strong acids, oxidizers, and active metals. BrF<sub>5</sub>, Cl<sub>2</sub>, ClO<sub>2</sub>, NF<sub>3</sub>, liquid O<sub>2</sub>, and OF<sub>2</sub>.

Continued ...  
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inventory.

SARA: The threshold planning quantity for this mixture is 10,000 lbs.

EU NUMBER: N/Av

NUMBER IN ANNEX 1 OF DIR 67/548: Mixture is not listed in annex 1.

EU CLASSIFICATION: N/Av

R: 20

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12. ECOLOGICAL INFORMATION

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No adverse ecological effects are expected.

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13. DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: Dispose of non-refillable cylinders in accordance with federal, state and local regulations. Allow gas to vent slowly to atmosphere in an unconfined area or exhaust hood. If the cylinders are the refillable type, return cylinders to supplier with any valve outlet plugs or caps secured and valve protection caps in place.

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14. TRANSPORT INFORMATION

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CONCENTRATION: 0.0001-4%  
DOT DESCRIPTION (US ONLY):  
    PROPER SHIPPING NAME: Compressed gases, n.o.s.  
    HAZARD CLASS: 2.2 (nonflammable)  
    IDENTIFICATION NUMBER: UN1956  
    REPORTABLE QUANTITIES: None  
    LABELING: NONFLAMMABLE GAS  
ADR/RID (EU Only): Class 2, 1A  
SPECIAL PRECAUTIONS: Cylinders should be transported in a secure upright position in a well ventilated truck.

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15. REGULATORY INFORMATION

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OSHA: Process Safety Management:  
Materials are not listed in appendix A of 29 CFR 1910.119 as highly hazardous chemicals.  
TSCA: Mixture is not listed in TSCA

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16. OTHER INFORMATION

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OTHER PRECAUTIONS: Protect containers from physical damage. Do not deface cylinders or labels. Cylinders should be refilled by qualified producers of compressed gas. Shipment of a compressed gas cylinder which has not been filled by the owner or with his written consent is a violation of federal law (49 CFR).

ABBREVIATIONS:

N/Ap - Not Applicable  
N/Av - Not Available  
SA - Simple Asphyxiant  
NE - None Established

DISCLAIMER: Information included in this document is given to the best of our knowledge, however, no warranty is made that the information is accurate or complete. We do not accept any responsibility for damages by the use of the document.



5. FIRE FIGHTING MEASURES

FLASH POINT: Nonflammable  
AUTOIGNITION TEMPERATURE: N/Ap  
FLAMMABLE LIMITS: Nonflammable  
LOWER:  
UPPER:

EXTINGUISHING MEDIA: Use what is appropriate for surrounding fire.

SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT: Wear self-contained breathing apparatus and full protective clothing. Keep fire exposed cylinders cool with water spray. If possible, stop the product flow.

HAZARDOUS COMBUSTION PRODUCTS: None

UNUSUAL FIRE AND EXPLOSION HAZARDS: Cylinder rupture may occur under fire conditions. Compressed air at high pressure will accelerate the combustion of flammable materials.

6. ACCIDENTAL RELEASE MEASURES

CLEAN UP PROCEDURES: Evacuate and ventilate area. Remove leaking cylinder to exhaust hood or safe outdoor area. Shut off source if possible and remove source of heat.

SPECIALIZED EQUIPMENT: None

occur.

HAZARDOUS DECOMPOSITION: None

11. TOXICOLOGICAL INFORMATION

LETHAL CONCENTRATION (LC50): None established

LETHAL DOSE 50 (LD50): N/Ap

TERATOGENICITY: N/Ap

REPRODUCTIVE EFFECTS: N/Ap

MUTAGENICITY: N/Ap

12. ECOLOGICAL INFORMATION

No adverse ecological effects are

ENGINEERING CONTROLS: None

PERSONAL PROTECTION

EYE/FACE PROTECTION: Safety glasses

SKIN PROTECTION: None

RESPIRATORY PROTECTION: In case of leakage, use self-contained breathing apparatus.

OTHER PROTECTIVE EQUIPMENT: Safety shoes when handling cylinders.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless

ODOR: Pungent odor due to propane.

PHYSICAL STATE: Gas

VAPOR PRESSURE: N/Ap

VAPOR DENSITY (AIR=1): 1.11

BOILING POINT (C): N/Ap

SOLUBILITY IN WATER: @20 deg. celsius: 18.68 cm3/l

SPECIFIC GRAVITY (H2O=1): Gas

EVAPORATION RATE: Gas

ODOR THRESHOLD: N/Av

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions.

CONDITIONS TO AVOID: Storage in poorly ventilated areas. Storage near a heat source.

MATERIALS TO AVOID: None

HAZARDOUS POLYMERIZATION: Will not

Continued ...

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SARA: The threshold planning quantity for this mixture is 10,000 lbs.

EU NUMBER: N/Ap

NUMBER IN ANNEX 1 OF DIR 67/548: Mixture is not listed in annex 1.

EU CLASSIFICATION: N/Av

R: 20

S: 9

16. OTHER INFORMATION

expected.

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13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of non-refillable cylinders in accordance with federal, state and local regulations. Allow gas to vent slowly to atmosphere in an unconfined area or exhaust hood. If the cylinders are the refillable type, return cylinders to supplier with any valve outlet plugs or caps secured and valve protection caps in place.

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14. TRANSPORT INFORMATION

CONCENTRATION: 1-1000ppm  
DOT DESCRIPTION (US ONLY):  
    PROPER SHIPPING NAME: Compressed gases,  
    n.o.s.  
    HAZARD CLASS: 2.2 (nonflammable)  
    IDENTIFICATION NUMBER: UN1956  
    REPORTABLE QUANTITIES: None  
    LABELING: NONFLAMMABLE GAS  
ADR/RID (EU Only): Class 2, 1A  
SPECIAL PRECAUTIONS: Cylinders should be transported in a secure upright position in a well ventilated truck.

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15. REGULATORY INFORMATION

OSHA: Process Safety Management: Minor component is not listed in appendix A of 29 CFR 1910.119 as a highly hazardous chemical.  
TSCA: Mixture is not listed in TSCA inventory.

OTHER PRECAUTIONS: Protect containers from physical damage. Do not deface cylinders or labels. Cylinders should be refilled by qualified producers of compressed gas. Shipment of a compressed gas cylinder which has not been filled by the owner or with his written consent is a violation of federal law (49 CFR).

ABBREVIATIONS:

N/Ap - Not Applicable  
N/Av - Not Available  
SA - Simple Asphyxiant  
NE - None Established

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