Safety Data Sheet

Methane Rich Gas

Version 1.00 Revision Date 30.05.2022

SECTION 1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name	Methane Rich Gas
Synonyms	Synthisized Natural Gas

Relevant identified uses of the substance or mixture and uses advised against

Use	Industrial use.

Manufacturer or supplier's details

Company	Sasol Oil Pty (Ltd)
Address	Sasol Place, 50 Katherine Street Sandton 2090 South Africa
Telephone	+27860335444
E-mail address	sasolchem.info.sa@sasol.com
Emergency telephone number	South Africa: 0800 11 28 90; International: +27 17 610 4444

SECTION 2. Hazards identification

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Classification	Gases under pressure	
	Flammable gases	Category 1
	Reproductive toxicity	Category 1A
	Acute inhalation toxicity	Category 3
	Specific target organ toxicity - repeated exposure	Category 2

Label elements

Hazard pictograms :

Signal word : Danger

Hazard statements :

H280 Contains gas under pressure; may explode if heated.
H220 Extremely flammable gas.
H361d Suspected of damaging the unborn child.
H331 Toxic if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P203 Obtain, read and follow all safety instructions before use.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
P261 Avoid breathing gas.
P271 Use only outdoors or in a well-ventilated area.

Response

P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381 In case of leakage, eliminate all ignition sources.
P318 If exposed or concerned, get medical advice.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P319 Get medical help if you feel unwell.

Storage

P410 + P403 Protect from sunlight. Store in a well-ventilated place.
P405 Store locked up.

Disposal

P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

SECTION 3. Composition/information on ingredients

Mixture

Methane

Contents: >= 82.50 - <= 94.00 %W/W

CAS-No. 74-82-8 **Index-No.** 601-001-00-4 **EC-No.** 200-812-7

Hazard statements *H220 H280*

Nitrogen

Contents: < 6.00 %W/W

CAS-No. 7727-37-9 **Index-No.** **EC-No.** 231-783-9

Hazard statements *H280*

Argon

Contents: < 16.00 %W/W

CAS-No. 7440-37-1 **Index-No.** **EC-No.** 231-147-0

Hazard statements *H280*

Carbon Monoxide

Contents: < 4.00 %W/W

CAS-No. 630-08-0 **Index-No.** 006-001-00-2 **EC-No.** 211-128-3

Hazard statements *H360D H372 H331 H220 H280*

Hydrogen

Contents: < 3.00 %W/W

CAS-No. 1333-74-0 **Index-No.** 001-001-00-9 **EC-No.** 215-605-7

Hazard statements *H220 H280*

Ethylene

Contents: < 2.00 %W/W

CAS-No. 74-85-1 **Index-No.** 601-010-00-3 **EC-No.** 200-815-3

Hazard statements *H220 H336 H280*

Ethane

Contents: < 2.00 %W/W

CAS-No. 74-84-0 **Index-No.** 601-002-00-X **EC-No.** 200-814-8

Hazard statements *H220 H280*

SECTION 4. First aid measures

Description of necessary first-aid measures

Inhalation	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Obtain medical attention.
Skin contact	Wash frost-bitten areas with plenty of water. Do not remove clothing.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes.

Most important symptoms/effects, acute and delayed

Refer to SECTION 11

Treatment In case of shortness of breath, give oxygen.

SECTION 5. Firefighting measures

Suitable extinguishing media	Foam. Water spray. Dry powder.
Special hazards arising from the substance or mixture	Flash back possible over considerable distance. Extremely flammable gas.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

SECTION 6. Accidental release measures

Personal precautions	Keep people away from and upwind of spill/leak. Remove all sources of ignition. Wear self-contained breathing apparatus and protective suit.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Reference to other sections	Refer to section 8 and 13

SECTION 7. Handling and storage

Safe handling advice Observe special instructions applicable to compressed gases.
Wear self-contained breathing apparatus and protective suit.

Advice on protection against fire and explosion Keep away from heat and sources of ignition. Use only explosion-proof equipment.

Requirements for storage areas and containers Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage No data available.

SECTION 8. Exposure controls/personal protection

Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Components	Type	Control parameters	Update	Basis
CARBON MONOXIDE	TWA	55 mg/m3	1995	South Africa RELs
	TWA	50 ppm	1995	South Africa RELs
	STEL	330 mg/m3	1995	South Africa RELs
	STEL	300 ppm	1995	South Africa RELs

Exposure controls

Engineering measures

In use, may form flammable/explosive vapour-air mixture.

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Gloves suitable for permanent contact:
Material: Leather gloves

Eye protection	Safety glasses with side-shields.
Skin and body protection	Protective suit. Safety shoes.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Form	Gaseous
State of matter	Gaseous
Colour	Colourless
Odour	Odourless
Odour Threshold	No data available.
pH	No data available.
	Not applicable.
Boiling point/boiling range	-160 ° C
Flash point	-185.2 ° C
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Auto-ignition temperature	537 ° C
Lower explosion limit	5 %(V); Lower flammability limit
Upper explosion limit	17 %(V); Upper flammability limit
Vapour pressure	No data available.
Relative vapour density	0.56 - 0.66
Density	No data available.
Water solubility	Insoluble
Partition coefficient: n-octanol/water	Not applicable.
Viscosity, kinematic	No data available.

SECTION 10. Stability and reactivity

Reactivity	No data available.
Chemical stability	No data available.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	Heat, flames and sparks.

Materials to avoid	Oxidizing agents.
Hazardous decomposition products	Carbon oxides

SECTION 11. Toxicological information

Acute oral toxicity	Methane: No data available.
Acute oral toxicity	Nitrogen: No data available.
Acute oral toxicity	Argon: No data available.
Acute inhalation toxicity	Methane: LC50 Rat: 15 min; vapour; 1,442.738 - 1,443 mg/l;
Acute inhalation toxicity	Methane: LC50 Mouse: male; 2 h; vapour; 1,237 mg/l;
Acute inhalation toxicity	Nitrogen: No data available.
Acute inhalation toxicity	Argon: No data available.
Acute dermal toxicity	Methane: No data available.
Acute dermal toxicity	Nitrogen: No data available.
Acute dermal toxicity	Argon: No data available.
Skin irritation	Methane: No data available.
Skin irritation	Nitrogen: No data available.
Eye irritation	Methane: No data available.
Eye irritation	Nitrogen: No data available.
Repeated dose toxicity	Methane: No data available.

Repeated dose toxicity	Nitrogen: No data available.
Repeated dose toxicity	Argon: No data available.
Mutagenicity	Methane: Bacterial reverse mutation assay: TA1535; with and without; negative; (literature value);
Further Information	No data available.

SECTION 12. Ecological information

Toxicity to fish	Methane: 4 d; LC50; 24.11 - 147.54 mg/l;
Toxicity to fish	Nitrogen: No data available.
Toxicity to fish	Argon: No data available.
Toxicity to daphnia and other aquatic invertebrates	Methane: 48 h; LC50; 14.22 - 69.43 mg/l
Toxicity to daphnia and other aquatic invertebrates	Nitrogen: No data available.
Toxicity to daphnia and other aquatic invertebrates	Argon: No data available.
Toxicity to algae	Nitrogen: No data available.
Toxicity to algae	Argon: No data available.
Toxicity to bacteria	Methane: 4 d; EC50; 7.71 - 19.37 mg/l
Other adverse effects	No data available.

SECTION 13. Disposal considerations

Product	Dispose of as special waste in compliance with local and national regulations.

Packaging	Contaminated absorbent must be removed and disposed via an authorised waste contractor.

SECTION 14. Transport information

DG Pictogram

ADR

UN number:	1954
Class:	2
	1F;
Proper shipping name:	COMPRESSED GAS, FLAMMABLE, N.O.S. (Methane, Carbon Monoxide)

RID

UN number:	1954
Class:	2
	1F
Proper shipping name:	COMPRESSED GAS, FLAMMABLE, N.O.S. (Methane, Carbon Monoxide)

ADNR

UN number:	1954
Class:	2
	1F
Proper shipping name:	COMPRESSED GAS, FLAMMABLE, N.O.S. (Methane, Carbon Monoxide)

IMDG

UN number:	1954
Class:	2.1
EmS:	F-D, S-U
Proper shipping name:	COMPRESSED GAS, FLAMMABLE, N.O.S.

(Methane, Carbon Monoxide)

ICAO/IATA

UN number : 1954

Class: 2.1

Proper shipping name: Compressed gas, flammable, n.o.s.
(Methane, Carbon Monoxide)

SECTION 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Canada. DSL - Domestic Substances List, part of CEPA	All chemical constituents are listed in: Canada. DSL - Domestic Substances List, part of CEPA (See chapter 3)
Australia. AICS - Australian Inventory of Chemical Substances	All chemical constituents are listed in: Australia. AICS - Australian Inventory of Chemical Substances (See chapter 3)
New Zealand Inventory of Chemical Substances	All chemical constituents are listed in: New Zealand Inventory of Chemical Substances (See chapter 3)
Japan. ENCS - Existing and New Chemical Substances Inventory	**Components Not listed** Argon Nitrogen Hydrogen
Japan. Industrial Safety and Health Law - Inventory	**Components Not listed** Argon Nitrogen Hydrogen
Korea. KECI - Korean Existing Chemicals Inventory	All chemical constituents are listed in: Korea. KECI - Korean Existing Chemicals Inventory (See chapter 3)
Philippines. PICCS - Philippines Inventory of Chemicals and Chemical Substances	All chemical constituents are listed in: Philippines. PICCS - Philippines Inventory of Chemicals and Chemical Substances (See chapter 3)
China. IECSC - Inventory of Existing	All chemical constituents are listed in: China. IECSC - Inventory

Chemical Substances in China	of Existing Chemical Substances in China (See chapter 3)
Taiwan. Chemical Substances Inventory (TCSI)	All chemical constituents are listed in: Taiwan. Chemical Substances Inventory (TCSI) (See chapter 3)
USA TSCA Inventory	All chemical constituents are listed in: USA TSCA Inventory (See chapter 3)

SECTION 16. Other information

Full text of H-Statements

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H360D May damage the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.

All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The SDS only provides information regarding the health, safety and environmental hazards at the date of issue, to facilitate the safe receipt, use and handling of this product in the workplace and does not replace any product information or product specifications. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which this product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which this product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place with respect to health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of this product.
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