

A Schlumberger Company

Safety Data Sheet M-I GEL^{*} SUPREME

1. Identification 1.1 Product identifier M-I GEL* SUPREME **Product name** Product code **PID982 1.2** Relevant identified uses of the substance or mixture and uses advised against **Recommended Use** Drilling fluid additive. Uses advised against Consumer use 1.3 Details of the supplier of the safety data sheet Supplier M-I L.L.C. P.O.Box 42842 Houston, TX 77242

www.miswaco.slb.com Telephone: 1 281-561-1511

Schlumberger Canada, Ltd.

200, 125 - 9th Avenue SE Calgary, Alberta T2G 0P6, Canada Telephone: 1-613-992-4624

E-mail address sdsmi@slb.com

Prepared by

Global Regulatory Compliance - Chemicals (GRC - Chemicals), Bethicia Prasek

1.4 Emergency Telephone Number

Emergency telephone (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600, Argentina: +54 11 5984 3690

Telephone Number - Emergency telephone number (24 Hour) Canada (English/French): +1 866 928 0789

2. Hazards identification

2.1 Classification of the substance or mixture

GHS - Classification

Health hazards

Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2



Environmental hazards	Not classified
Physical Hazards	Not classified

2.2 Label elements



DANGER

Hazard statements H350 - May cause cancer H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

Precautionary statements

- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P260 Do not breathe dust
- P264 Wash face, hands and any exposed skin thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P280 Wear protective gloves/protective clothing and eye/face protection
- P308 + P313 IF exposed or concerned: Get medical advice/ attention
- P501 Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified

None known

Unknown acute toxicity

Not applicable.

3. Composition/information on Ingredients

3.1 Substances

Chemical Name	CAS No	Weight-%
Quartz, Crystalline silica	14808-60-7	<10

3.2 Mixtures

Not applicable

Comments

Percentages (concentrations) represented as a range are due to batch-to-batch variability.

4. First aid measures

4.1 First-Aid Measures



Inhalation	Move to fresh air. If breathing is difficult, (trained personnel should) give oxygen. Get medical attention immediately if symptoms occur.
Ingestion	Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.
Eye contact	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
4.2 Most important symptoms a	and effects, both acute and delayed
Main symptoms	
Inhalation	Please see Section 11. Toxicological Information for further information.
Ingestion	Please see Section 11. Toxicological Information for further information.
Skin contact	Please see Section 11. Toxicological Information for further information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically

5. Fire-fighting measures

Please see Section 11. Toxicological Information for further information.

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing media appropriate for surrounding material.

Extinguishing media which must not be used for safety reasons None known.

5.2 Special hazards arising from the substance or mixture

Unusual fire and explosion hazards

None known.

Eye contact

Hazardous combustion products

Thermal decomposition can lead to release of irritating gases and vapors, React with hydrofluoric acid (HF) forming toxic gas (SiF4).

5.3 Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



Wear suitable protective equipment. Evacuate personnel to safe areas. Prevent further leakage or spillage if safe to do so. Avoid dust formation.

6.2 Environmental precautions

Do not allow material to contaminate ground water system.

Environmental exposure controls

No information available.

6.3 Methods and material for containment and cleaning up

Methods for containment

Cover powder spill with plastic sheet or tarp to minimize spreading. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid generating or breathing dust. Product is slippery if wet.

6.4 Reference to other sections

See section 13 for more information.

7. Handling and storage

7.1 Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe dust. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions	Ensure adequate ventilation. Keep airborne concentrations below exposure limits.
Storage precautions	Protect from moisture Keep containers tightly closed in a dry, cool and well-ventilated place. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

8. Exposure controls/personal protection

8.1 Control parameters

Component Information

Component	ACGIH TLV	OSHA PEL
Quartz, Crystalline silica	0.025 mg/m ³	See Table Z-3
14808-60-7 (<10)		

Quartz, Crystalline silica

OSHA - Final PELs - Table Z-3 Mineral Dusts

(30)/(%SiO2 + 2) mg/m³ TWA, total dust; (250)/(%SiO2 + 5) mppcf TWA, respirable fraction; (10)/(%SiO2 + 2) mg/m³ TWA, respirable fraction

8.2 Exposure controls

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.



Engineering measures to reduce exposure

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment Eye protection Hand protection Respiratory Protection	Tightly fitting safety goggles. Wear chemical resistant gloves such as nitrile or neoprene. All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent. If exposed to airborne particles of this product use at least a NIOSH-approved N95 half-mask disposable or re-useable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved P95 half-mask disposable or re-useable particulate respirator.
Skin and body protection	Wear suitable protective clothing and gloves, Eye wash and emergency shower must be available at the work place.
Hygiene measures	Wash hands before breaks and immediately after handling the product, Remove and wash contaminated clothing before re-use.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	
Appearance	
Color	
Odor	
Odor threshold	

Property pН pH @ dilution Melting / freezing point **Boiling point/range** Flash point Evaporation rate (BuAc =1) Flammability (solid, gas) Flammability Limit in Air Upper flammability limit Lower flammability limit Vapor pressure Vapor density Specific gravity **Bulk density** Water solubility Solubility in other solvents Autoignition temperature **Decomposition temperature** Kinematic viscosity Dynamic viscosity log Pow

Explosive properties Oxidizing properties

9.2 Other information Pour point Molecular weight Opaque Tan - Gray Odorless Not applicable Values Not applicable

Solid

No information available No information available Not applicable No information available Not applicable

No information available No information available No information available No information available 2.3 - 2.6 No information available slightly soluble Insoluble No information available No information available No information available No information available No information available

No information available

No information available No information available

Remarks

No information available



VOC content(%) Density No information available No information available

10. Stability and reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable. Hazardous polymerization does not occur.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization

Hazardous polymerization does not occur.

Hazardous Reactions None known.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Hydrofluoric acid (HF).

10.6 Hazardous decomposition products

See Section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity Inhalation	Inhalation of dust in high concentration may cause irritation of respiratory system. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Repeated or prolonged inhalation of crystalline silica dust can cause delayed lung injury, and other diseases, including silicosis and lung cancer.
Eye contact	Dust may cause mechanical irritation.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Ingestion	Irritant; may cause pain or discomfort to mouth, throat and stomach.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quartz, Crystalline silica	= 500 mg/kg (Rat)	No data available	No data available

Chemical Name	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Quartz, Crystalline silica	Group 1; Monograph 100C	A2 - Suspected Human	Listed	Known Human Carcinogen
	[2012] Monograph 100C	Carcinogen		



Crys t oc M	2012] (listed under stalline silica inhaled in he form of quartz or cristobalite from scupational sources); lonograph 68 [1997] oup 1; Monograph 68 [1997]	
Sensitization	Not classified.	
Mutagenic effects	No evidence of mutagenic properties.	
Carcinogenicity	Contains a known or suspected carcinogen. Crystalline silica dust is listed by IARC in Group 1 as known to cause lung cancer in humans, if inhaled.	
Reproductive toxicity	No evidence of toxicity to reproduction.	
Developmental toxicity	Not known to cause birth defects or have a deleterious effect on a developing fetus.	
Routes of exposure	Skin contact. Inhalation. Eye contact.	
Routes of entry	Inhalation.	
Specific target organ toxicity (sing	/ (single Not classified	
exposure) Specific target organ toxicity (repeated exposure)	Category 2.	
Target organ effects	Respiratory system. Lungs.	
Aspiration hazard	Not applicable.	

12. Ecological information

12.1 Toxicity

Toxicity to algae

See component information below.

Toxicity to fish

See component information below.

Toxicity to daphnia and other aquatic invertebrates

See component information below.

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Quartz, Crystalline silica	No information available	No information available	No information available

12.2 Persistence and degradability

No product level data available.

12.3 Bioaccumulative potential



No product level data available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT) This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

12.6 Other adverse effects.

None known.

13. Disposal considerations

13.1 Waste treatment methods

Disposal Method	Disposal should be made in accordance with federal, state and local regulations.
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

14.1. UN number

UN No. (DOT)	Not regulated
UN No. (TDG)	Not regulated
UN/ID No. (ADR/RID/ADN/ADG)	Not regulated
UN No. (IMDG)	Not regulated
UN No. (ICAO)	Not regulated

14.2. UN proper shipping name

The product is not covered by international regulation on the transport of dangerous goods

<u>14.3 Hazard class(es)</u> DOT Hazard class TDG Hazard class ADR/RID/ADN/ADG Hazard class IMDG Hazard class ICAO Hazard class/division	Not regulated Not regulated Not regulated Not regulated Not regulated
14.4 Packing group DOT Packing group TDG Packing group ADR/RID/ADN/ADG Packing group IMDG Packing group ICAO Packing group	Not regulated Not regulated Not regulated Not regulated Not regulated
14.5 Environmental hazard Marine pollutant	No



14.6 Special precautions Not applicable

15. Regulatory information

International inventories

USA (TSCA)
Canada (DSL)
European Union (EINECS and ELINCS)
Philippines (PICCS)
Japan (ENCS)
China (IECSC)
Australia (AICS)
Korean (KECL)
New Zealand (NZIoC)

Complies Complies Complies Complies Complies Complies Complies Complies

U.S. Federal and State Regulations

SARA 311/312 Hazard Categories

Delayed (chronic) health hazard.

Chemical Name	SARA 302 / TPQs	SARA 313	CERCLA RQ
Quartz, Crystalline silica	N/A	N/A	N/A

State Comments

Proposition 65: This product contains chemical(s) considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 to cause cancer and/or reproductive toxicity.

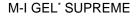
Quartz, Crystalline silica

Cancer

Canadian Classification

This Safety Data Sheet has been prepared in compliance with the Hazardous Products Regulations.

16. Other information		
Supersedes date	30/Jun/2016	
Revision date	09/Feb/2017	
Version	6	
This SDS has been revised in the following section(s)	1, 2, 3, 8, 11, 16. Updated according to WHMIS 2015.	
HMIS classification		





1'
0
0
E

N/A - Not Applicable, N/D - Not Determined.

*A mark of M-I L.L.C., a Schlumberger Company

Disclaimer

The information contained herein is considered in good faith as reliable of the date issued and is based upon on measurements, tests or data derived from supplier's own study or furnished by others. In providing this SDS information, Supplier makes no express or implied warranties as to the information or product; merchantability or fitness of purpose; any express or implied warranty; or non-infringement of intellectual property rights; and supplier assumes no responsibility for any direct, special or consequential damages, results obtained, or the activities of others. To the maximum extent permitted by law, supplier's warranty obligations and buyer's sole remedies are as stated in separate agreement between the parties.