

Safety Data Sheet M-I WATE*

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

1.1 Product identifier

Product name M-I WATE*
Product code PID13503

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

Recommended Use Weighting agent. Drilling fluid additive.

Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier
Schlumberger Oilfield UK PLC
Schlumberger House, Buckingham Gate
Gatwick Airport
West Sussex RH6 0NZ

+47 51577424

SDS@slb.com

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

National Poison Center Numbers

| | |
|--------|--|
| Norway | Poison information centre: +47 22 59 13 00 |
|--------|--|

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Health hazards Not classified

Environmental hazards Not classified

Physical Hazards Not classified

2.2 Label elements

Signal word

None

Hazard Statements

This product is not classified as hazardous therefore no (H) hazard statements assigned.

Precautionary Statements

This product is not classified as hazardous therefore has no (P) precautionary statements assigned.

Contains

Barite

Crystalline silica (impurity)

2.3 Other hazards

Not classified as PBT/vPvB by current EU criteria

Thermal decomposition can lead to release of irritating gases and vapors

3. Composition/information on Ingredients

3.1 Substances

| Chemical Name | EC No | CAS No | Weight-% | Component information |
|-------------------------------|-----------|------------|----------|-----------------------|
| Barite | 236-664-5 | 13462-86-7 | 60 - 100 | Not classified |
| Crystalline silica (impurity) | 238-878-4 | 14808-60-7 | 5 - <10 | STOT RE. 2 (H373) |

3.2 Mixtures

Not applicable

Comments

This product contains a small quantity of quartz, crystalline silica. Prolonged and repeated exposure to concentrations of crystalline silica exceeding the workplace exposure limit (WEL) may lead to chronic lung disease such as silicosis. IARC Monographs, Vol. 68, 1997, concludes that there is sufficient evidence that inhaled crystalline silica in the form of quartz or cristobalite from occupational sources causes cancer in humans. IARC Classification Group I.

4. First Aid Measures

4.1 First aid measures

Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion

Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Skin contact

Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.

Eye Contact Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General advice The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop, the casualty should be transferred to hospital as soon as possible.

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.

Eye 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

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.

Hazardous combustion products

Thermal decomposition can lead to release of irritating gases and vapors

5.3 Advice for firefighters

Special protective equipment for fire-fighters

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

Special Fire-Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. See also section 8. Do not breathe dust. Material becomes slippery when wet. Use caution if wet.

6.2 Environmental precautions

The product should not be allowed to enter drains, water courses or the soil.

Environmental exposure controls

Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for containment

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

Methods for cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. After cleaning, flush away traces with water.

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 and eyes. Avoid dust formation. Do not breathe dust. Material becomes slippery when wet. Use caution if wet.

Hygiene Measures

Use good work and personal hygiene practices to avoid exposure. When using do not smoke, eat or drink. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions Ensure adequate ventilation. Keep airborne concentrations below exposure limits.

Storage precautions Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid wet and humid conditions.

Storage class Chemical storage.

Storage class, TRGS 510, Germany LGK13 - Non-combustible solids

Packaging materials Use specially constructed containers only.

7.3 Specific end uses

See Section 1.2.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Component Information

| Chemical Name | EU OEL | Austria | Denmark |
|-------------------------------|---|---|----------------------|
| Barite | Not determined | Not determined | Not determined |
| Crystalline silica (impurity) | 0.1 mg/m ³ TWA respirable fraction | 0.05 mg/m ³ TWA alveolar dust, respirable fraction | 0.1mg/m ³ |
| Chemical Name | France | Germany | Hungary |

| | | | |
|-------------------------------|-----------------------------------|---|---|
| Barite | Not determined | Not determined | Not determined |
| Crystalline silica (impurity) | 0.1 mg/m ³ TWA | Not determined | 0.1mg/m ³ TWA |
| Chemical Name | Italy | Netherlands | Norway |
| Barite | Not determined | Not determined | Not determined |
| Crystalline silica (impurity) | 0.1 mg/m ³ | 0.075 mg/m ³ | 0.05 mg/m ³ TWA respirable dust 0.1 mg/m ³ TWA respirable dust 0.3 mg/m ³ TWA total dust 0.9 mg/m ³ STEL total dust 0.15 mg/m ³ STEL respirable dust 0.3 mg/m ³ STEL respirable dust Carcinogen |
| Chemical Name | Poland | Portugal | Romania |
| Barite | Not determined | Not determined | Not determined |
| Crystalline silica (impurity) | 0.1 mg/m ³ TWA NDS | 0.025 mg/m ³ TWA respirable fraction | 0.1mg/m ³ TWAdust, respirable fraction |
| Chemical Name | Spain | Switzerland | UK |
| Barite | Not determined | Not determined | Not determined |
| Crystalline silica (impurity) | 0.05 mg/m ³ TWA VLA-ED | 0.15 mg/m ³ TWA MAK | Not determined |

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 Controls

Ensure adequate ventilation. Mechanical ventilation or local exhaust ventilation is required.

Personal protective equipment

Eye protection

Use eye protection according to EN 166, designed to protect against dusts. Tightly fitting safety goggles. Safety glasses with side-shields.

Hand protection

Wear gloves according to EN 374 to protect against skin effects from powders
Use protective gloves made of: Neoprene Nitrile PVC
Frequent change is advisable

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment, Suitable mask with particle filter P3 (European Norm 143), At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.

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.



8.2.3 Environmental exposure controls

Environmental exposure

Use appropriate containment to avoid environmental contamination See section 6 for more information

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

| | |
|-----------------------|-------------------|
| Physical state | Solid |
| Appearance | Powder Dust |
| Odor | Odorless |
| Color | Gray - Tan - Pink |

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> |
|---|-------------------------------|----------------|
| pH | Not applicable | |
| pH @ dilution | No information available | |
| Melting point | 1580 °C / 2876 °F | |
| Boiling point/range | No information available | |
| Flash point | Not applicable | |
| Evaporation rate (BuAc =1) | No information available | |
| Flammability | Not applicable | |
| Explosion limits: | | |
| Upper explosion limit | No information available | |
| Lower explosion limit | No information available | |
| Vapor pressure | No information available | |
| Relative Vapor Density | No information available | |
| Specific gravity | 4.1 - 4.25 | 20 °C |
| Bulk density | 1920 - 2400 kg/m ³ | |
| Water solubility | Insoluble in water | |
| Solubility in other solvents | No information available | |
| Autoignition temperature | No information available | |
| Decomposition temperature | No information available | |
| Kinematic viscosity | No information available | |
| Dynamic viscosity | No information available | |
| Partition Coefficient (n-octanol/water) | No information available | |
| Density and/or Relative Density | No information available | |
| Explosive properties | Not applicable | |
| Oxidizing properties | None known. | |

9.2 Other information

| | |
|-------------------------|--------------------------|
| Pour point | No information available |
| Molecular weight | No information available |
| VOC content(%) | No information available |

Comments

The data listed above are typical physical and chemical properties and should not be construed as product specification.

10. Stability and Reactivity

10.1 Reactivity

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization

Hazardous polymerization does not occur.

Hazardous Reactions

None known.

10.4 Conditions to avoid

Avoid dust formation. Avoid wet and humid conditions.

10.5 Incompatible materials

No materials to be especially mentioned.

10.6 Hazardous decomposition products

See Section 5.

11. Toxicological Information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

| | |
|-------------------------------|--|
| Product information | This product contains a small quantity of quartz, crystalline silica. Prolonged and repeated exposure to concentrations of crystalline silica exceeding the workplace exposure limit (WEL) may lead to chronic lung disease such as silicosis. |
| Inhalation | Inhalation of dust in high concentration may cause irritation of respiratory system. |
| Eye contact | Dust may cause mechanical irritation. |
| Skin contact | Prolonged contact may cause redness and irritation. |
| Ingestion | Ingestion may cause stomach discomfort. |
| Unknown acute toxicity | Not applicable. |

Toxicology data for the components

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------------------|-----------------------|--------------------|------------------------|
| Barite | > 15000 mg/kg (Rat) | No data available | No data available |
| Crystalline silica (impurity) | No data available | No data available | No data available |

| | |
|---|---|
| Sensitization | This product does not contain any components suspected to be sensitizing. |
| Mutagenic effects | This product does not contain any known or suspected mutagens. |
| Carcinogenicity | Crystalline silica dust is listed by IARC in Group 1 as known to cause lung cancer in humans, if inhaled. |
| Reproductive toxicity | This product does not contain any known or suspected reproductive hazards. |
| Routes of Exposure | Inhalation. |
| Routes of entry | Inhalation. |
| Specific target organ toxicity - Single exposure | Not classified |
| Specific target organ toxicity - Repeated exposure | Not classified. |

Aspiration hazard Not applicable.

11.2 Information on other hazards

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

Other information Key literature references and sources for data. See Section 16 for more information.

12. Ecological Information

12.1 Toxicity

The product component(s) are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Listed on PLONOR list of OSPAR

Toxicity to algae

This product is not considered toxic to algae.

Toxicity to fish

This product is not considered toxic to fish.

Toxicity to daphnia and other aquatic invertebrates

This product is not considered toxic to invertebrates.

Toxicology data for the components

| Chemical Name | Toxicity to fish | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates |
|-------------------------------|--|--------------------------|---|
| Barite | No information available | No information available | No information available |
| Crystalline silica (impurity) | LC50 Danio rerio (zebra fish) : > 10000 mg/l 96h | EC50: > 1000 mg/l 72h | LC50 Daphnia magna (Water flea): > 10000 mg/l 24h |

12.2 Persistence and degradability

Product is not biodegradable. See component information below.

| Chemical Name | Persistence and degradability |
|-------------------------------|-------------------------------|
| Barite | Inorganic compound |
| Crystalline silica (impurity) | Inorganic compound |

12.3 Bioaccumulative potential

Does not bioaccumulate. See component information below.

| Chemical Name | Bioaccumulation |
|-------------------------------|--------------------------------|
| Barite | Product/Substance is inorganic |
| Crystalline silica (impurity) | Product/Substance is inorganic |

12.4 Mobility

Mobility

See component information below.

| Chemical Name | Mobility |
|-------------------------------|--------------------|
| Barite | Insoluble in water |
| Crystalline silica (impurity) | Insoluble in water |

Mobility in soil

See component information below.

| Chemical Name | Mobility in soil |
|-------------------------------|--------------------------------|
| Barite | Not expected to adsorb on soil |
| Crystalline silica (impurity) | Not expected to adsorb on soil |

12.5 Results of PBT and vPvB assessment

Not classified as PBT/vPvB by current EU criteria.

12.6 Endocrine disrupting properties.

This product does not contain any known or suspected endocrine disruptors

12.7 Other adverse effects

None known.

12.8 Additional information

Key literature references and sources for data. See Section 16 for more information.

13. Disposal Considerations

13.1 Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

EWC Waste Disposal No

According to the European Waste Catalog, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used The following Waste Codes are only suggestions: 01 05 07

14. Transport information

14.1. UN number

Not regulated

14.2. UN proper shipping name

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

14.3 Hazard class(es)

ADR/RID/ADN/ADG Hazard class Not regulated

IMDG/ANTAQ Hazard class Not regulated

ICAO/ANAC Hazard class/division Not regulated

14.4 Packing group

ADR/RID/ADN/ADG Packing group Not regulated

IMDG/ANTAQ Packing group Not regulated

ICAO/ANAC Packing group Not regulated

14.5 Environmental hazard

No

14.6 Special precautions

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Please contact SDS@slb.com for info regarding transport in Bulk.

15. Regulatory Information

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

This safety data sheet complies with the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008
Commission Regulation (EU) No 2015/830 of 28 May 2015
Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Dangerous substance category per Seveso Directive (2012/18/EU)

This product does not contain substances listed under Dangerous substance category per Seveso Directive (2012/18/EU)

Netherlands

Dutch Mining Regulations: In accordance with Mining Regulations 9.2 and Chapter 4 of the Working Conditions Decree.

SZW list; Crystalline Silica (respirable) is listed in the SZW list of carcinogenic substances and processes

Germany

Regulations governing systems for handling substances hazardous to waters
Hazardous substances ordinance

Germany, Water Endangering Water endangering class = nwg
Classes (VwVwS)

Technical Rules for Hazardous TRGS 220 National aspects when compiling safety data sheets
Substances (TRGS) TRGS 510 Storage of hazardous substances in non stationary containers
TRGS 900 Occupational exposure limits
TRGS 905 List of substances that are carcinogenic, mutagenic or toxic for reproduction

International inventories

| | |
|----------------------------|----------|
| USA (TSCA) | Complies |
| Canada (DSL) | Complies |
| Philippines (PICCS) | Complies |
| Japan (ENCS) | Complies |
| China (IECSC) | Complies |
| Australia (AICS) | Complies |
| Korean (KECL) | Complies |
| New Zealand (NZIoC) | Complies |

Europe - REACH

All products supplied from the European Economic Area (EEA) are compliant with the REACH Regulation EC 1907/2006. For products supplied from the EEA, Schlumberger and/or its suppliers have pre-registered and is registering all of the substances that it and/or its suppliers manufactures in or imports into the EEA that are subject to Title II of the REACH Regulation. All products supplied from outside the EEA are subject to REACH only if imported into the EEA. The importer of the products must comply with REACH for each imported substance. Contact REACH@slb.com for REACH information.

15.2 Chemical Safety Report

No information available

16. Other Information

Prepared by Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Anne Karin (Anka) Fosse

Supersedes Date: 20/Jan/2020

Revision date 08/Mar/2022

Version 6

This SDS has been revised in the following section(s) All sections. No changes with regard to classification have been made.

Key literature references and sources for data

www.ChemADVISOR.com

Supplier

National Chemical Inventories

National regulatory information

National occupational exposure limits

Training Advice

Do not handle until all safety precautions have been read and understood

Follow general hygiene considerations recognized as common good workplace practices

HMIS classification

| | |
|-----------------|----|
| Health | 1* |
| Flammability | 0 |
| Physical hazard | 0 |
| PPE | E |

Full text of H-Statements referred to under sections 2 and 3

This product is not classified as hazardous therefore no (H) hazard statements assigned.

H373 - May cause damage to organs through prolonged or repeated exposure

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

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