



SAFETY DATA SHEET MAX BORE* HDD

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name MAX BORE* HDD

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

Identified uses Drilling fluid additive

1.3. Details of the supplier of the safety data sheet

Supplier M-I Australia Pty Ltd
ABN: 67 009 214 162
Level 5
256 St. George Tce
Perth
WA 6000
T = +61 08 9440 2900
F = +61 08 9322 3080
Contact Person MISDS@slb.com

1.4. Emergency telephone number

(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.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Not classified.

Human health

This product contains a small quantity of quartz, crystalline silica. 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 1.

2.2. Label elements

Risk Phrases

NC Not classified.

Safety Phrases

NC Not classified.

Australian statement of hazardous/dangerous nature

Classified as Non-Hazardous according to the criteria of NOHSC.
NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

MAX BORE* HDD

BENTONITE		60-100%
CAS-No.: 1302-78-9	EC No.: 215-108-5	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.	
QUARTZ, CRYSTALLINE SILICA		5-10%
CAS-No.: 14808-60-7	EC No.: 238-878-4	
Classification (EC 1272/2008) STOT RE 2 - H373	Classification (67/548/EEC) Xn;R48/20.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

The data shown is in accordance with the latest EC Directives. 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.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

Ingestion

Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible. For further information, please refer to section 11.

4.3. Indication of any immediate medical attention and special treatment needed

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

When heated, vapours/gases hazardous to health may be formed.

Unusual Fire & Explosion Hazards

High concentrations of dust may form explosive mixture with air.

5.3. Advice for firefighters

Special Fire Fighting Procedures

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

MAX BORE* HDD**Protective equipment for fire-fighters**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Avoid generation and spreading of dust. Shovel into dry containers. Cover and move the containers. Flush the area with water. In case of spills, beware of slippery floors and surfaces.

6.4. Reference to other sections

For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Avoid inhalation of dust and contact with skin and eyes. Avoid handling which leads to dust formation. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Remove contaminated clothing. Do not eat, drink or smoke when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
QUARTZ, CRYSTALLINE SILICA	WEL		0,1 mg/m ³			

WEL = Workplace Exposure Limit.

No biological limit allocated.

QUARTZ, CRYSTALLINE SILICA (CAS: 14808-60-7)**DNEL**

Inhalation.

Short Term

Local Effects

4 mg/m³

Inhalation.

Long Term

Local Effects

1 mg/m³

8.2. Exposure controls**Protective equipment****Process conditions**

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

Provide adequate general and local exhaust ventilation.

MAX BORE* HDD**Respiratory equipment**

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Dust filter P2 (for fine dust).

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Nitrile. or Neoprene gloves are recommended.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash hands after handling. Promptly remove any clothing that becomes wet or contaminated.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<u>Appearance</u>	Solid
<u>Colour</u>	Tan to Grey.
<u>Odour</u>	Odourless.
<u>Solubility</u>	Insoluble in water
<u>Relative density</u>	2.3 - 2.6 g/cm ³
<u>Bulk Density</u>	769-833 kg/m ³

9.2. Other information

Not relevant

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not known.

10.4. Conditions to avoid

Keep away from heat, sparks and open flame.

10.5. Incompatible materials**Materials To Avoid**

Not known.

10.6. Hazardous decomposition products

When heated, vapours/gases hazardous to health may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects**Aspiration hazard:**

Not anticipated to present an aspiration hazard based on chemical structure.

Inhalation

Dust may irritate respiratory system or lungs.

Ingestion

May cause discomfort if swallowed.

MAX BORE* HDD**Skin contact**

Prolonged and frequent contact may cause redness and irritation.

Eye contact

Particles in the eyes may cause irritation and smarting.

Route of entry

Inhalation. Skin and/or eye contact.

Target Organs

Eyes Skin Respiratory system, lungs

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity**

Contact M-I SWACO's QHSE Department for ecological information at M-ISWACOenv@slb.com.

12.1. Toxicity**Acute Fish Toxicity**

Not considered toxic to fish.

12.2. Persistence and degradability**Degradability**

There are no data on the degradability of this product.

12.3. Bioaccumulative potential**Bioaccumulative potential**

No data available on bioaccumulation.

12.4. Mobility in soil**Mobility:**

The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Recover and reclaim or recycle, if practical. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION**General**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID). and (ADG).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

MAX BORE* HDD**14.5. Environmental hazards****Environmentally Hazardous Substance/Marine Pollutant**

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable. Please contact MISDS@slb.com for info regarding transport in Bulk.

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Uk Regulatory References**

Chemicals (Hazard Information & Packaging) Regulations. Control of Substances Hazardous to Health Regulations 2002 (as amended) Workplace Exposure Limits EH40.

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Australian Standard for the Uniform Scheduling of Drugs and Poisons

No Poisons Schedule number allocated.

Australian Regulations

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011 (2003)]. National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004) 3rd Edition]. National Occupational Health and Safety Commission's Exposure Standards for Atmospheric Contaminants in the occupational Environment [NOHSC:1003 (1995)]. Safe Work Australia. Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP). ADG Code – Australian Dangerous Goods Code.

15.2. Chemical Safety Assessment**International Chemical Inventories**

Contact REACH@miswaco.slb.com for REACH information. Complies with the following national/regional chemical inventory requirements: Australia (AICS), Canada (DSL / NDSL), China (IECSC), Europe (EINECS / ELINCS), Japan (METI / ENCS), Korea (TCCL / ECL), New Zealand (NZIoC), Phillipines (PICCS), United States (TSCA).

SECTION 16: OTHER INFORMATION**Abbreviations and acronyms used in the safety data sheet**

*a mark of M-I L.L.C.

General information

HMIS Health -1 HMIS Flammability - 0 HMIS Physical Hazard - 0 E - Safety glasses, Gloves, Dust Respirator

Information Sources

Product information provided by the commercial vendor(s). Material Safety Data Sheet, Misc. manufacturers. LOLI. European Chemicals Bureau - ESIS (European Chemical Substances Information).

Revision Comments

General revision. Compiled or revised by Sarah Malone

Issued By Bill Cameron**Revision Date** 18-Jan-2013**Revision** 2**Supersedes date** 13-Jan-2013**SDS No.** 11284**Risk Phrases In Full**

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

NC Not classified.

Hazard Statements In Full

H373 May cause damage to organs <<Organs>> through prolonged or repeated exposure.

MAX BORE* HDD**Disclaimer**

MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We cannot make any assertions as to its reliability or completeness; therefore, user may rely only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.