HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

MYF-1D

Revision Date: 04-Jan-2011 Revision Number: 8

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name MYF-1D

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

Recommended Use Gelling Agent

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Halliburton Energy Services

Halliburton House, Howemoss Place

Kirkhill Industrial Estate

Dyce

Aberdeen, AB21 0GN

United Kingdom

Emergency Phone Number: +44 1224 795277 or +1 281 575 5000

www.halliburton.com

For further information, please contact

E-Mail address: fdunexchem@halliburton.com

Emergency telephone number

+44 1224 795277 or +1 281 575 5000

| +44 1224 /952// or +1 281 5/5 5000 | | | | |
|---|---|--|--|--|
| Emergency telephone §45 - (EC)1272/2008 | | | | |
| Europe | 112 | | | |
| Denmark | Poison Control Hotline (DK): +45 82 12 12 12 | | | |
| France | ORFILA (FR): + 01 45 42 59 59 | | | |
| Germany | Poison Center Berlin (DE): +49 030 30686 790 | | | |
| Italy | Poison Center, Milan (IT): +39 02 6610 1029 | | | |
| Netherlands | National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals) | | | |
| Norway | Poisons Information (NO):+ 47 22 591300 | | | |
| Poland | Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97 | | | |
| Spain | Poison Information Service (ES): +34 91 562 04 20 | | | |
| United Kingdom | NHS Direct (UK): +44 0845 46 47 | | | |

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Not classified

Classification according to EU Directives 67/548/EEC or 1999/45/EC For the full text of the R-phrases mentioned in this Section, see Section 16

Classification Not Classified

2. HAZARDS IDENTIFICATION

Risk Phrases None

Label Elements
Not classified

Hazard Pictograms

Signal Word Not Hazardous

Contains

SubstancesCAS NumberGuar gum9000-30-0

Other Hazards

Dust can form an explosive mixture in air

| 3. COMPOSITION/INFORMATION ON INGREDIENTS | | | | | | |
|---|-----------|------------|-----------|-----------------------|--------------------------------------|-------------------|
| Substances | EINECS | CAS Number | PERCENT | EEC Classification | EU - CLP Substance Classification | REACH No. |
| Guar gum | 232-536-8 | 9000-30-0 | 60 - 100% | Not applicable | Not applicable | No data available |

For the full text of the R-phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory

irritation develops or if breathing becomes difficult.

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of

water for at least 15 minutes and get medical attention immediately after flushing.

Skin Wash with soap and water. Get medical attention if irritation persists.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Most Important symptoms and effects, both acute and delayed

May cause eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIREFIGHTING MEASURES

Extinguishing mediaó Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance of mixture

Special Exposure Hazards

Decomposition in fire may produce toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

Advice for firefighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid creating and breathing dust.

See Section 12 for additional information

Environmental precautions

Prevent from entering sewers, waterways, or low areas.

Methods and material for containment and cleaning up

Scoop up and remove.

Reference to other sections

See Section 12 for additional information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid creating or inhaling dust. Avoid dust accumulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store away from oxidizers. Store in a dry location. Product has a shelf life of 12 months.

Specific End Use(s)

Exposure Scenario No information available Other Guidelines No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Substances | EU | UK OEL | Netherlands | France OEL | Germany MAK/TRK |
|------------|----------------|----------------------|----------------|----------------|-----------------|
| Guar gum | Not applicable | 10 mg/m ³ | Not applicable | Not applicable | Not applicable |

| Substances | Italy | Poland | Hungary | Czech Republic | Denmark |
|------------|----------------|----------------|----------------|-----------------------|----------------|
| Guar gum | Not applicable | Not applicable | Not applicable | 6.0 mg/m ³ | Not applicable |

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

No information available. No information available.

(PNEC)

Exposure controls

Engineering Controls A well ventilated area to control dust levels.

Personal protective equipment

Respiratory Protection Not normally needed. But if significant exposures are possible then the following respirator

is recommended:

Dust/mist respirator. (N95, P2/P3)

Hand Protection Normal work gloves.
Skin Protection Normal work coveralls.

Eye Protection Wear safety glasses or goggles to protect against exposure. **Other Precautions** Eyewash fountains and safety showers must be easily accessible.

Environmental Exposure Controls No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Solid Color: Off white

Odor: Bean Odor Threshold: No information available

<u>Property</u> <u>Values</u>

Remarks/ Method

pH: 8.6

Melting Point/RangeNo data availableFreezing Point/Range (C):No data availableBoiling Point/RangeNo data availableFlash PointNo data availableEvaporation rateNo data availableVapor PressureNo data availableVapor DensityNo data available

Specific Gravity 1.473

Water Solubility
Soluble in water
Solubility in other solvents
No data available
Partition coefficient: n-octanol/water
Autoignition Temperature
Decomposition Temperature
Viscosity
No data available
No data available
No data available

Explosive PropertiesOxidizing Properties
No information available
No information available

Other information

VOC Content (%)

No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable

Chemical Stability

Stable

Possibility of Hazardous Reactions

Will Not Occur

Conditions to Avoid

None anticipated

Incompatible Materials

Strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Inhalation May cause respiratory irritation. May cause allergic respiratory reaction.

Eye Contact May cause eye irritation. **Skin Contact** May cause mild skin irritation.

Ingestion Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting, nausea,

and diarrhea.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1%

are chronic health hazards.

| Substances | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------|------------|-------------------|-------------------|
| Guar gum | 9400 mg/kg | No data available | No data available |

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity Effects

| Substances | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|------------|--------------------------|--------------------------|----------------------------|-------------------------------|
| Guar gum | No information available | No information available | No information available | No information available |

Persistence and degradability

Readily biodegradable

Bioaccumulative potential

No information available

Mobility in soil

No information available

Results of PBT and vPvB assessment

No information available.

Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Method Bury in a licensed landfill according to federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

IMDG/IMO

UN Number: Not restricted. UN Proper Shipping Name: Not restricted Not restricted Not applicable

RID

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

ADR

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

IATA/ICAO

UN Number: Not restricted.
UN Proper Shipping Name: Not restricted
Transport Hazard Class(es): Not applicable

14. TRANSPORT INFORMATION

Special Precautions for User None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. REGULATORY INFORMATION

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

International Inventories

EINECS Inventory This product, and all its components, complies with EINECS

US TSCA Inventory

All components listed on inventory or are exempt.

All components listed on inventory or are exempt.

All components listed on inventory or are exempt.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering

Classes (WGK)

WGK 1: Low hazard to waters.

Chemical Safety Assessment

No information available

16. OTHER INFORMATION

Full text of R-phrases referred to under Sections 2 and 3

None

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 04-Jan-2011 Revision Note Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer Statement

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End of Safety Data Sheet