

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

WG-20 GELLING AGENT

Revision Date: 30-Nov-2010

Revision Number: 8

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

Product Identifier

Product Name WG-20 GELLING AGENT

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

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****Substances**

Guar gum derivative

CAS Number

Proprietary

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 derivative | Not Listed | Proprietary | 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, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Skin

Wash with soap and water.

Ingestion

Under normal conditions, first aid procedures are not required.

Most important symptoms and effects, both acute and delayed

No significant hazards expected.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Treat symptomatically

5. FIREFIGHTING MEASURES**Extinguishing media****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 or 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

Slippery when wet. Avoid contact with eyes, skin, or clothing. 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 cool, dry location.

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 derivative | Not applicable | 10 mg/m ³ | Not applicable | Not applicable | Not applicable |

| Substances | Italy | Poland | Hungary | Czech Republic | Denmark |
|---------------------|----------------|----------------|----------------|----------------|----------------|
| Guar gum derivative | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls**Engineering Controls**

Use in a well ventilated area.

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

None known.

Environmental Exposure Controls

No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| Physical State: Solid Odor: Odorless | Color: White to light straw Odor Threshold: No information available |
|---|---|

| <u>Property</u> <u>Remarks/ Method</u> | <u>Values</u> |
|---|--------------------------|
| pH: | No data available |
| Melting Point/Range | No data available |
| Freezing Point/Range (C): | No data available |
| Boiling Point/Range | No data available |
| Flash Point | No data available |
| Evaporation rate | No data available |
| Vapor Pressure | No data available |
| Vapor Density | No data available |
| Specific Gravity | 1.4 |
| Water Solubility | Soluble in water |
| Solubility in other solvents | No data available |
| Partition coefficient: n-octanol/water | No data available |
| Autoignition Temperature | 500°C |
| Decomposition Temperature | No data available |
| Viscosity | No data available |
| Explosive Properties | No information available |
| Oxidizing Properties | No information available |

| | |
|--------------------------|-------------------|
| <u>Other information</u> | |
| 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 allergic respiratory reaction. May cause respiratory irritation. |
| Eye Contact | May cause eye irritation. |
| Skin Contact | May cause mild skin irritation. |
| Ingestion | None known |

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 derivative | 9500 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 derivative | No information available | No information available | No information available | TLM96: > 3300 ppm (Crangon crangon) |

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
Transport Hazard Class(es): 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

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. |
| Canadian DSL Inventory | 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: | 30-Nov-2010 |
| 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