

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

ENHANCEMENT PACKAGE 1

Revision Date: 29-Jul-2011

Revision Number: 5

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

Product Identifier**Product Name** ENHANCEMENT PACKAGE 1**Relevant identified uses of the substance or mixture and uses advised against****Recommended Use** Additive**Uses Advised Against** No information available**Details of the supplier of the safety data sheet**

Halliburton Manufacturing Services, Ltd.
Halliburton House, Howemoss Crescent
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**

Carcinogenicity	Category 1A - (H350)
Specific Target Organ Toxicity - (Repeated Exposure)	Category 1 - (H372)

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

2. HAZARDS IDENTIFICATION

Classification Crystalline silica is not classified as a carcinogen in EU Council Directives 67/548/EEC and 88/379/EEC.

Risk Phrases None

Label Elements

Hazard Pictograms



Signal Word Danger

Hazard Statements

H372 - Causes damage to organs through prolonged or repeated exposure
H350i - May cause cancer by inhalation

Contains

Substances

Calcium carbonate
Sepiolite
Crystalline silica, cristobalite
Crystalline silica, tridymite
Crystalline silica, quartz

CAS Number

471-34-1
63800-37-3
14464-46-1
15468-32-3
14808-60-7

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use
P308 + P313 - IF exposed or concerned: Get medical advice/attention

Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Calcium carbonate	207-439-9	471-34-1	60 - 100%	Not applicable	Not applicable	No data available
Sepiolite	264-465-3	63800-37-3	10 - 30%	Not applicable	Not applicable	No data available
Crystalline silica, cristobalite	238-455-4	14464-46-1	0 - 1%	Not applicable	Carc. 1A (H350i) STOT RE 1 (H372)	No data available
Crystalline silica, tridymite	239-487-1	15468-32-3	0 - 1%	Not applicable	Carc. 1A (H350i) STOT RE 1 (H372)	No data available
Crystalline silica, quartz	238-878-4	14808-60-7	1 - 5%	Not applicable	Carc. 1A (H350i) STOT RE 1 (H372)	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. Get medical attention if irritation persists.
Ingestion	Under normal conditions, first aid procedures are not required.

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 media

Suitable Extinguishing Media

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance of mixture

Special Exposure Hazards

Not applicable.

Advice for firefighters

Special Protective Equipment for Fire-Fighters

Not applicable.

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

None known.

Methods and material for containment and cleaning up

Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal.

Reference to other sections

See Section 12 for additional information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, European Standard En 149, or equivalent respirator when using this product. Material is slippery when wet.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store in a cool, dry location. Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container. Product has a shelf life of 36 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
Calcium carbonate	Not applicable	10 mg/m ³	Not applicable	10 mg/m ³	Not applicable
Sepiolite	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Crystalline silica, cristobalite	Not applicable	0.1 mg/m ³	0,075 mg/m ³	0.05 mg/m ³	0,15 mg/m ³
Crystalline silica, tridymite	Not applicable	0.1 mg/m ³	0,075 mg/m ³	0.05 mg/m ³	Not applicable
Crystalline silica, quartz	Not applicable	0.1 mg/m ³	0,075 mg/m ³	0.1 mg/m ³	0,15 mg/m ³

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Calcium carbonate	Not applicable	10 mg/m ³	Not applicable	Not applicable	Not applicable
Sepiolite	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Crystalline silica, cristobalite	Not applicable	2 mg/m ³	0.15 mg/m ³	0.1 mg/m ³	Not applicable
Crystalline silica, tridymite	Not applicable	2 mg/m ³	0.15 mg/m ³	0.1 mg/m ³	Not applicable
Crystalline silica, quartz	Not applicable	2 mg/m ³	0.15 mg/m ³	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 approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits listed in Section 2.

Personal protective equipment**Respiratory Protection**

Wear a NIOSH certified, European Standard EN 149 (FFP2/FFP3), or equivalent respirator when using this product.

Hand Protection

Normal work gloves.

Skin Protection

Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

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**Physical State:** Powder**Color:** Pink to tan to gray**Odor:** Mild earthy**Odor Threshold:** No information availablePropertyRemarks/ MethodValues**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

1.9 - 2.7

Water Solubility

Insoluble in water

Solubility in other solvents

No data available

Partition coefficient: n-octanol/water

No data available

Autoignition Temperature

No data available

Decomposition Temperature

No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	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

Hydrofluoric acid.

Hazardous Decomposition Products

Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Inhalation

Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridymite (IARC, Group 2A).

Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects (See "Chronic Effects/Carcinogenicity" subsection below).

Eye Contact

May cause eye irritation.

Skin Contact

May cause skin irritation.

Ingestion

Irritation of the mouth, throat, and stomach.

11. TOXICOLOGICAL INFORMATION

Chronic Effects/Carcinogenicity Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

Cancer Status: The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 1 - carcinogenic to humans) and has determined that there is sufficient evidence in experimental animals for the carcinogenicity of tridymite (Group 2A - possible carcinogen to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (June 1997) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other internal organs) and kidney disease.

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium carbonate	6450 mg/kg	No data available	No data available
Sepiolite	No data available	No data available	No data available
Crystalline silica, cristobalite	No data available	No data available	No data available
Crystalline silica, tridymite	No data available	No data available	No data available
Crystalline silica, quartz	No data available	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)
Calcium carbonate	No information available	No information available	No information available	No information available
Sepiolite	No information available	No information available	No information available	No information available
Crystalline silica, cristobalite	No information available	No information available	No information available	No information available
Crystalline silica, tridymite	No information available	No information available	No information available	No information available
Crystalline silica, quartz	No information available	No information available	No information available	No information available

Persistence and degradability No information available

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

Product contains one or more components not listed on the inventory.

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/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering Classes (WGK)

WGK 0: Generally not water endangering.

Chemical Safety Assessment

No information available

16. OTHER INFORMATION

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

None

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

H350i - May cause cancer by inhalation

H372 - Causes damage to organs (a,b,c) through prolonged or repeated exposure if inhaled

H302 - Harmful if swallowed

Key literature references and sources for datawww.ChemADVISOR.com/**Revision Date:** 29-Jul-2011**Revision Note** Not applicable**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer Statement**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet