

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

NFC-15

Revision Date: 03-Jan-2012

Revision Number: 6

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

Product Identifier

Product Name NFC-15

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 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**

Acute Oral Toxicity	Category 4- H302
Acute Inhalation Toxicity - Dusts and Mists	Category 4- H332
Serious Eye Damage / Eye Irritation	Category 1- H318
Reproductive Toxicity	Category 1B- H360Df

2. HAZARDS IDENTIFICATION

Oxidizing solids.

Category 2- H272

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** Xi - Irritant.**Risk Phrases**

R36/37/38 Irritating to eyes, respiratory system and skin.

Label Elements**Hazard Pictograms****Signal Word****Danger****Hazard Statements**

H360Df - May damage the unborn child. Suspected of damaging fertility

H272 - May intensify fire; oxidizer

H302 - Harmful if swallowed

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

Contains**Substances**

Sodium perborate tetrahydrate

CAS Number

10486-00-7

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

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P220 - Keep/Store away from clothing/ combustible materials

P221 - Take any precaution to avoid mixing with combustibles

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P312 - Call a POISON CENTER/doctor/physician if you feel unwell

Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Sodium perborate tetrahydrate	Not applicable	10486-00-7	60 - 100%	Xi; R36/37/38	Acute Tox. 4 (H302) Acute Tox. 4 (H332) Eye Dam. 1 (H318) Repr. 1B (H360Df) STOT SE 3 (H335) Ox. Sol. 2 (H272)	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 to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

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. Remove contaminated clothing and laundry before reuse.

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, skin, and respiratory burns.

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. Releases oxygen at high temperatures.

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 contact with eyes, skin, or clothing. Avoid creating or inhaling dust.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store away from combustibles. 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
Sodium perborate tetrahydrate	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Sodium perborate tetrahydrate	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

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

Hand Protection

Impervious rubber gloves.

Skin Protection

Rubber apron.

Eye Protection

Dust proof goggles.

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: Powder

Color: White

Odor: Odorless

Odor Threshold: No information available

Property

Values

Remarks/ Method

pH:

10.2 (1%)

Melting Point/Range

No data available

Freezing Point/Range (C):

No data available

Boiling Point/Range

130°C

Flash Point

No data available

Evaporation rate

No data available

Vapor Pressure

No data available

Vapor Density

No data available

Specific Gravity

0.82

Water Solubility

Partly soluble

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

Viscosity

No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Explosive Properties
Oxidizing Properties

No information available
No information available

Other information
Molecular Weight
VOC Content (%)

153.86
No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable

Chemical Stability

Stable

Possibility of Hazardous Reactions

Will Not Occur

Conditions to Avoid

Avoid contact with organic materials.

Incompatible Materials

Contact with water. Organic matter. All flammables, especially petroleum products, asphalt & other volatile flammables. Strong acids. Metal salts such as aluminum chloride.

Hazardous Decomposition Products

Oxygen.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Inhalation

Causes severe respiratory irritation. May be absorbed through inhalation contributing to symptoms listed under ingestion.

Eye Contact

Causes severe eye irritation which may damage tissue. May cause eye burns.

Skin Contact

May cause skin irritation.

Ingestion

Causes burns of the mouth, throat and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea.

Chronic Effects/Carcinogenicity

Prolonged or repeated exposure may cause gastrointestinal effects and muscular dysfunction.

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium perborate tetrahydrate	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)
Sodium perborate tetrahydrate	No information available	TLM24: 160-320 mg/l (Oncorhynchus mykiss)	No information available	No information available

Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

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**

Disposal should be made in accordance with 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/NDL** - 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**

R36/37/38 Irritating to eyes, respiratory system and skin.

Key literature references and sources for datawww.ChemADVISOR.com/

Revision Date: 03-Jan-2012
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