

## SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

### FE-1 with NaBr and corrosion inhibitor

Revision Date: 06-Oct-2015

Revision Number: 1

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

**1.1. Product Identifier**

Product Name FE-1 with NaBr and corrosion inhibitor  
 Internal ID Code HM008164

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

Recommended Use Acid

**1.3. 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

[www.halliburton.com](http://www.halliburton.com)

For further information, please contact

E-Mail address: [fdunexchem@halliburton.com](mailto:fdunexchem@halliburton.com)

**1.4. Emergency telephone number**

+44 8 08 189 0979 / 1-760-476-3961

Emergency telephone - §45 - (EC)1272/2008	
Europe	112
Croatia	Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health)
Cyprus	+210 7793777
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
Romania	+40 21 318 36 06
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

#### SECTION 2: Hazards Identification

**2.1. Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

Specific Target Organ Toxicity - (Repeated Exposure)	Category 2 - H373
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**2.2. Label Elements**

Hazard Pictograms

**Signal Word****Warning****Hazard Statements**

H373 - May cause damage to organs through prolonged or repeated exposure

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

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P314 - Get medical attention/advice if you feel unwell

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

**Contains****Substances**

Thioglycolic acid  
 Potassium iodide  
 Acetic acid

**CAS Number**

68-11-1  
 7681-11-0  
 64-19-7

**2.3. Other Hazards**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

**SECTION 3: Composition/information on Ingredients****3.2. Mixtures**

Mixture

Substances	EINECS	CAS Number	PERCENT (w/w)	EU - CLP Substance Classification	REACH No.
Thioglycolic acid	200-677-4	68-11-1	0.1 - 1%	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Corr. 1 (H318) STOT SE 3 (H335)	No data available
Potassium iodide	231-659-4	7681-11-0	1 - 5%	Skin Irrit. 2 (H315) STOT RE 1 (H372)	No data available
Acetic acid	EEC No. Present	64-19-7	5 - 10%	Skin Corr. 1A (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Flam. Liq. 3 (H226)	No data available

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

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

If inhaled, move victim to fresh air and seek medical attention.

**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**

Flush skin with large amounts of water. If irritation persists, get medical attention. Remove contaminated clothing and launder before reuse.

**Ingestion**

Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

**4.2. Most Important symptoms and effects, both acute and delayed**

May cause damage to internal organs.

**4.3. Indication of any immediate medical attention and special treatment needed****Notes to Physician** Treat symptomatically**SECTION 5: Firefighting Measures****5.1. Extinguishing media****Suitable Extinguishing Media**

Water fog, carbon dioxide, foam, dry chemical.

**Extinguishing media which must not be used for safety reasons**

None known.

**5.2. Special hazards arising from the substance or mixture****Special Exposure Hazards**

May be ignited by heat, sparks or flames. Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce harmful gases. Fight fire from a safe distance and from a protected location.

**5.3. Advice for firefighters****Special Protective Equipment for Fire-Fighters**

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

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapors.

See Section 8 for additional information

**6.2. Environmental precautions**

Prevent from entering sewers, waterways, or low areas. Prevent contamination of soil.

**6.3. Methods and material for containment and cleaning up**

Contain spill with sand or other inert materials. Scoop up and remove.

**6.4. Reference to other sections**

See Section 8 and 13 for additional information.

**SECTION 7: Handling and Storage****7.1. Precautions for Safe Handling**

Use appropriate protective equipment. Ensure adequate ventilation. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

**7.2. Conditions for safe storage, including any incompatibilities**

Store away from oxidizers. Store away from alkalis. Keep from heat, sparks, and open flames. Keep container closed when not in use. Product has a shelf life of 24 months.

**7.3. Specific End Use(s)****Exposure Scenario** No information available**Other Guidelines** No information available**SECTION 8: Exposure Controls/Personal Protection****8.1. Control parameters****Exposure Limits**

Substances	CAS Number	EU	UK	Netherlands	France
Thioglycolic acid	68-11-1	Not applicable	TWA: 1 ppm TWA: 3.8 mg/m <sup>3</sup> STEL: 3 ppm STEL: 11.4 mg/m <sup>3</sup>	1 ppm	1 ppm
Potassium iodide	7681-11-0	Not applicable	Not applicable	Not applicable	Not applicable
Acetic acid	64-19-7	Not applicable	Not applicable	Not applicable	STEL: 10 ppm STEL: 25 mg/m <sup>3</sup>

Substances	CAS Number	Germany	Spain	Portugal	Finland
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Thioglycolic acid	68-11-1	1 ppm	TWA: 1 ppm TWA: 3.8 mg/m <sup>3</sup>	TWA: 1 ppm	TWA: 1 ppm TWA: 3.8 mg/m <sup>3</sup> STEL: 3 ppm STEL: 11 mg/m <sup>3</sup>
Potassium iodide	7681-11-0	Not applicable	Not applicable	Not applicable	Not applicable
Acetic acid	64-19-7	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> 15 ppm STEL [VLA-EC]; 37 mg/m <sup>3</sup> STEL [VLA-EC]	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm	TWA: 5 ppm TWA: 13 mg/m <sup>3</sup> STEL: 10 ppm STEL: 25 mg/m <sup>3</sup>

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Thioglycolic acid	68-11-1	TWA: 1 ppm TWA: 4 mg/m <sup>3</sup> STEL" 2 ppm STEL" 8 mg/m <sup>3</sup>	1 ppm TWA; 5 mg/m <sup>3</sup> TWA 3 ppm STEL (calculated); 15 mg/m <sup>3</sup> STEL (calculated)	TWA: 1 ppm TWA: 4 mg/m <sup>3</sup> STEL: 2 ppm STEL: 8 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 5 mg/m <sup>3</sup> STEL: 3 ppm STEL: 10 mg/m <sup>3</sup>
Potassium iodide	7681-11-0	Not applicable	Not applicable	Not applicable	Not applicable
Acetic acid	64-19-7	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL" 20 ppm STEL" 50 mg/m <sup>3</sup>	10 ppm TWA; 25 mg/m <sup>3</sup> TWA 15 ppm STEL; 37 mg/m <sup>3</sup> STEL	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 20 ppm STEL: 50 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 20 ppm STEL: 37.5 mg/m <sup>3</sup>

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Thioglycolic acid	68-11-1	Not applicable	TWA: 4 mg/m <sup>3</sup> STEL: 8 mg/m <sup>3</sup>	TWA: 4 mg/m <sup>3</sup>	Not applicable
Potassium iodide	7681-11-0	Not applicable	Not applicable	Not applicable	Not applicable
Acetic acid	64-19-7	Not applicable	TWA: 15 mg/m <sup>3</sup> STEL: 30 mg/m <sup>3</sup>	Not applicable	TWA: 25 mg/m <sup>3</sup>

Substances	CAS Number	Denmark	Romania	Croatia	Cyprus
Thioglycolic acid	68-11-1	TWA: 1 ppm TWA: 5 mg/m <sup>3</sup>	Not applicable	Not applicable	Not applicable
Potassium iodide	7681-11-0	Not applicable	Not applicable	Not applicable	Not applicable
Acetic acid	64-19-7	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)**  
**Worker**

No information available.

**General Population**

**Predicted No Effect Concentration (PNEC)**

No information available.

**8.2. Exposure controls**

**Engineering Controls**

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

**Personal protective equipment**

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

**Respiratory Protection**

Organic vapor/acid gas respirator. Positive pressure self-contained breathing apparatus in enclosed areas.

**Hand Protection**

Impervious rubber gloves.

**Skin Protection**

Rubber apron.

**Eye Protection**

Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions**

Eyewash fountains and safety showers must be easily accessible.

**Environmental Exposure Controls** Do not allow material to contaminate ground water system

## SECTION 9: Physical and Chemical Properties

**9.1. Information on basic physical and chemical properties**

**Physical State:** Liquid

**Color:** Not determined

**Odor:** Mild pungent

**Odor Threshold:** No information available

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
<b>pH:</b>	No data available
<b>Freezing Point/Range</b>	
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	No data available
<b>Flash Point</b>	Not determined.
<b>Flammability (solid, gas)</b>	No data available
upper flammability limit	
lower flammability limit	
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	1.164
<b>Water Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available
<b>9.2. Other information</b>	
<b>VOC Content (%)</b>	No data available

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Not expected to be reactive.

### 10.2. Chemical Stability

Stable

### 10.3. Possibility of Hazardous Reactions

Will Not Occur

### 10.4. Conditions to Avoid

Keep away from heat, sparks and flame.

### 10.5. Incompatible Materials

Strong oxidizers. Strong alkalis.

### 10.6. Hazardous Decomposition Products

Oxides of nitrogen. Oxides of sulfur. Carbon monoxide and carbon dioxide.

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

#### **Acute Toxicity**

##### **Inhalation**

May cause mild respiratory irritation.

##### **Eye Contact**

May cause mild eye irritation.

##### **Skin Contact**

May cause mild skin irritation.

##### **Ingestion**

May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression.

**Chronic Effects/Carcinogenicity**      May cause damage to organs through prolonged or repeated exposure.

### Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Thioglycolic acid	68-11-1	73 mg/kg (Rat)	848 mg/kg (Rabbit)	0.21 mg/L (Rat) 4h 1.388 mg/L (Rat) 4h
Potassium iodide	7681-11-0	2779 mg/kg (Rat)	No data available	No data available
Acetic acid	64-19-7	3310 mg/kg (Rat)	1060 mg/kg (Rabbit)	11.4 mg/L (Rat) 4h

Substances	CAS Number	Skin corrosion/irritation
Thioglycolic acid	68-11-1	Corrosive to skin
Potassium iodide	7681-11-0	Causes moderate skin irritation. (Rabbit) (similar substances)
Acetic acid	64-19-7	Corrosive to skin

Substances	CAS Number	Eye damage/irritation
Thioglycolic acid	68-11-1	Corrosive to eyes
Potassium iodide	7681-11-0	No data of sufficient quality are available.
Acetic acid	64-19-7	Corrosive to eyes

Substances	CAS Number	Skin Sensitization
Thioglycolic acid	68-11-1	Not regarded as a sensitizer.
Potassium iodide	7681-11-0	Not regarded as a sensitizer.
Acetic acid	64-19-7	Not regarded as a sensitizer.

Substances	CAS Number	Respiratory Sensitization
Thioglycolic acid	68-11-1	No information available
Potassium iodide	7681-11-0	No information available
Acetic acid	64-19-7	No data of sufficient quality are available.

Substances	CAS Number	Mutagenic Effects
Thioglycolic acid	68-11-1	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.
Potassium iodide	7681-11-0	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Acetic acid	64-19-7	Did not show mutagenic effects in animal experiments. In vitro tests did not show mutagenic effects. (similar substances)

Substances	CAS Number	Carcinogenic Effects
Thioglycolic acid	68-11-1	Did not show carcinogenic effects in animal experiments
Potassium iodide	7681-11-0	Did not show carcinogenic effects in animal experiments
Acetic acid	64-19-7	Did not show carcinogenic effects in animal experiments

Substances	CAS Number	Reproductive toxicity
Thioglycolic acid	68-11-1	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Potassium iodide	7681-11-0	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Acetic acid	64-19-7	Not a confirmed teratogen or embryotoxin. Animal testing did not show any effects on fertility.

Substances	CAS Number	STOT - single exposure
Thioglycolic acid	68-11-1	May cause respiratory irritation.
Potassium iodide	7681-11-0	No information available
Acetic acid	64-19-7	Causes severe respiratory irritation.

Substances	CAS Number	STOT - repeated exposure
Thioglycolic acid	68-11-1	Not applicable due to corrosivity of the substance.
Potassium iodide	7681-11-0	Causes damage to organs through prolonged or repeated exposure if swallowed: (Thyroid)
Acetic acid	64-19-7	Not applicable due to corrosivity of the substance.

Substances	CAS Number	Aspiration hazard
Thioglycolic acid	68-11-1	Not applicable
Potassium iodide	7681-11-0	Not applicable
Acetic acid	64-19-7	Not applicable

## SECTION 12: Ecological Information

### 12.1. Toxicity Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Thioglycolic acid	68-11-1	EC50 (72h) > 100 mg/L (Scenedesmus subspicatus) (similar	LC50 (96h) > 100 mg/L (Oncorhynchus mykiss)	EC50 (3h) 530 mg/L (Activated sludge) (similar substance)	EC50 (48h) 38 mg/L (Daphnia magna)

		substance)			
Potassium iodide	7681-11-0	MIC100 (10d) 356.8 mg/L (Dunaliella salina) TT (7d) 2370 mg/L (biomass) (Scenedesmus quadricauda) (Similar substance)	LC50 (96h) 896 mg/L (Oncorhynchus mykiss) LC50 (96h) 3780 mg/L (Oncorhynchus mykiss) (similar substance) LC100 (22d) 166,002.8 mg/L (Oncorhynchus mykiss)	MIC100 (24h) 358.3 mg/L (Staphylococcus aureus)	EC50 (48h) 7.5 mg/L (Daphnia magna) LC50 (48h) 575 mg/L (Acartia tonsa) EC50 (10d) 218.8 mg/L (Corophium volutator)
Acetic acid	64-19-7	EC50 (72h) 55.22 mg/L (Anabaena flos-aquae)	LC50 (96h) 75 mg/L (Lepomis macrochirus) LC50 (96h) > 300.82 mg/L (Oncorhynchus mykiss) LC50 (96h) 251 mg/L (Gambusia affinis)	NOEC (16h) 1150 mg/L (Pseudomonas putida)	EC50 (48h) 65 mg/L (Daphnia magna)

### 12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Thioglycolic acid	68-11-1	(67% @ 28d)
Potassium iodide	7681-11-0	Readily biodegradable (50% @ 15d) (calculated)
Acetic acid	64-19-7	(99% @ 7d)

### 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Thioglycolic acid	68-11-1	-2.99
Potassium iodide	7681-11-0	0.11
Acetic acid	64-19-7	-0.17

### 12.4. Mobility in soil

Substances	CAS Number	Mobility
Thioglycolic acid	68-11-1	No information available
Potassium iodide	7681-11-0	No information available
Acetic acid	64-19-7	No information available

### 12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Substances	PBT and vPvB assessment
Thioglycolic acid	Not PBT/vPvB
Potassium iodide	Not applicable
Acetic acid	Not PBT/vPvB

### 12.6. Other adverse effects

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

#### Disposal Method Contaminated Packaging

Disposal should be made in accordance with federal, state, and local regulations.  
Follow all applicable national or local regulations.

## SECTION 14: Transport Information

### IMDG/IMO

UN Number:	Not restricted
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

### RID

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**ADR**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**IATA/ICAO**

<b>UN Number:</b>	Not restricted
<b>UN Proper Shipping Name:</b>	Not restricted
<b>Transport Hazard Class(es):</b>	Not applicable
<b>Packing Group:</b>	Not applicable
<b>Environmental Hazards:</b>	Not applicable

**14.1. UN Number:** Not restricted

**14.2. UN Proper Shipping Name:** Not restricted

**14.3. Transport Hazard Class(es):** Not applicable

**14.4. Packing Group:** Not applicable

**14.5. Environmental Hazards:** Not applicable

**14.6. Special Precautions for User:** None

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

## SECTION 15: Regulatory Information

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

#### International Inventories

<b>EINECS Inventory</b>	This product does not comply with EINECS
<b>US TSCA Inventory</b>	All components listed on inventory or are exempt.
<b>Canadian DSL Inventory</b>	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 2: Hazard to waters.

### 15.2. Chemical Safety Assessment

No information available

## SECTION 16: Other Information

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

H226 - Flammable liquid and vapor  
H301 - Toxic if swallowed  
H311 - Toxic in contact with skin  
H314 - Causes severe skin burns and eye damage  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
H331 - Toxic if inhaled  
H335 - May cause respiratory irritation  
H372 - Causes damage to organs through prolonged or repeated exposure  
H373 - May cause damage to organs through prolonged or repeated exposure

**Key or legend to abbreviations and acronyms**

bw – body weight

CAS – Chemical Abstracts Service

CLP – REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures

EC – European Commission

EC10 – Effective Concentration 10%

EC50 – Effective Concentration 50%

EEC – European Economic Community

ErC50 – Effective Concentration growth rate 50%

IBC Code – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

LC50 – Lethal Concentration 50%

LD50 – Lethal Dose 50%

LL0 – Lethal Loading 0%

LL50 – Lethal Loading 50%

MARPOL – International Convention for the Prevention of Pollution from Ships

mg/kg – milligram/kilogram

mg/L – milligram/liter

NIOSH – National Institute for Occupational Safety and Health

NOEC – No Observed Effect Concentration

NTP – National Toxicology Program

OEL – Occupational Exposure Limit

PBT – Persistent Bioaccumulative and Toxic

PC – Chemical Product category

PEL – Permissible Exposure Limit

ppm – parts per million

PROC – Process category

REACH – REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL – Short Term Exposure Limit

SU – Sector of Use category

**Key literature references and sources for data**[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)**Revision Date:** 06-Oct-2015**Revision Note**

Not applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010****Disclaimer Statement**

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**End of Safety Data Sheet**