

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name: **Micro HEC - 10**

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

Product application: Well Cementing in Oilfield.

Details of the supplier of the safety data sheet

Address/Phone No.: Elkem Oilfield Chemicals FZCO
 Bldg 16, Office 405, Jebel Ali Free Zone
 PO Box 262213, Dubai, U.A.E
 Telephone: +971 4 887 6069
 Telefax: +971 4 887 2155
 e-mail: sds.esm@elkem.no

Emergency Phone No.: +1-800-424-9300

2. Hazards identification

Classification of the substance or mixture

Product classification

Hazard class and category:	The product does not meet the criteria for hazard classification according to Regulation (EC) No 1272/2008 (CLP) and the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 6 th revision.
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Other hazards: The product can form flammable (explosive) dust clouds in air.

3. Composition/information on ingredients

Mixture

Name	CAS No.	EINECS No.	Weight %	Classification: 1272/2008/EC, Annex VI, Table 3.1
Ethandial... %, glyoxal...% (CEFIC, photometrical test with MBTH)	107-22-2	203-474-9	< 0.1 %	Skin Irrit. 2, H315. Eye Irrit. 2, H319. Skin Sens. 1, H317. Acute Tox. 4, H332. Muta. 2, H341.

For full text of Hazard-statements: see section 16.

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4. First aid measures

After contact with eyes:	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
After ingestion:	Rinse mouth. If symptoms persist, call a physician.

5. Firefighting measures

Suitable extinguishing media:	Sand, Alcohol-resistant foam, dry chemical, carbon dioxide (CO ₂), water-spray.
Specific hazards arising from the chemical:	Carbon monoxide and carbon dioxide
Special protective equipment for fire-fighters:	In case of fire, wear suitable respiratory equipment with positive air supply.

6. Accidental release measures

Personal precautions:	Avoid dust formation. Do not breathe dust. Forms slippery surfaces with water.
Environmental precautions:	Do not discharge large amounts into the drains or bodies of water.
Methods for cleaning up/taking up:	Pick up mechanically, avoiding dust, and provide disposal in suitable recipients.
Information for disposal look up chapter 13.	

7. Handling and storage

Handling

Advice on safe handling:	Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Avoid the formation of dust. Any dust build-up that cannot be avoided should be removed regularly.
Advice on protection against fire and explosion:	The product can form flammable (explosive) dust clouds in air. Keep away from sources of ignition – No smoking.

Storage

Further information on storage conditions:	No special storage conditions required.
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8. Exposure controls/personal protection

Exposure limit values

Additional advice on limit values: Obey TLV for common dust, if applicable.

Storage

Occupational exposure controls: Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.



Protective and hygiene measures: Wash hands before breaks and at the end of workday.
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.
Short term: filter apparatus, Filter P1
Hand Protection: If used properly, protective gloves are normally not required. Otherwise, wear protective gloves which are impermeable and resistant to the product, substance or preparation.
Eye Protection: If used properly, no need to wear eye protection. Otherwise, wear protective goggles with integrated side shields.

9. Physical and chemical properties

General information

Physical State : Powder
Odor: Characteristic
Color: Whitish

Important health, safety and environmental information

pH-Value (at 20 °C): 6-8

Changes in the physical state

Melting Point: n.a.
Boiling Point: n.a.
Flash Point: n.a.

Explosive properties

The product is considered non-explosive; nevertheless explosive dust/air mixture can be generated

Dust Explosive: St 1; KSt > 0 bis 200 bar/m/sec
Lower explosion limits: 30 g/m³
Upper explosion limits:

Density: 1.1-1.5 g/cm³
Water solubility (at 20 °C): > 10 g/L
Partition coefficient: log POW < 1%

Other information

Auto-ignition temperature > 120 °C
solid:
Ignition temperature: > 460 °C
Bulk density: 200 – 600 g/l
Burning class: 5
Smoulder temperature: 280 °C
Pmax: 10 bar
Minimum ignition energy: > 10 mJ

10. Stability and reactivity

Conditions to avoid:	No decomposition if stored and applied as directed.
Materials to avoid:	Strong oxidizing agents.
Hazardous decomposition products:	Not known.

11. Toxicological information

Acute toxicity:	LD50/oral/rat: > 2000 mg/kg
Irritation corrosivity:	Non-irritant
Sensitizing effects:	Non-sensitising
Further information:	Classification in compliance with the assessment procedure specified in the EC guidelines 1999/45/EG Based on experience gathered in various companies no detrimental effects to the health are known under the usual workplace hygiene-related circumstances.

12. Ecological information

Ecotoxicity:	EC50 bacteria > 1000 mg/l (OECD 209) LC50/96h Fish > 500 mg/l (Danio) (OECD 203) COD < 1500 mg/g
Persistence and degradability:	Product is biodegradable. When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.
Further information:	Do not release undiluted or in higher quantities into the groundwater, sewerage or waters. Low hazard to waters.

13. Disposal considerations

Advice on disposal:	Where possible recycling is preferred to disposal. Can be incinerated together with household refuse in accordance with the regulations and on consultation with the disposal agency and the relevant authorities. It is not possible to give this product a waste code number according to the European waste catalogue because only the intended use of the user consent the assignment of a specific code number. The waste code number must be agreed with the disposer/ manufacturer/ competent authority. May be taken to household waste disposal or incineration plant, but care for official regulations.
Waste disposal number of waste from residues / unused products:	160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off -specification batches and unused products; organic wastes other than those mentioned in 16 03 05
Contaminated packaging:	Water Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

14. Transport Information

Not classified as Dangerous according to TDG (Transportation of Dangerous Goods) and DOT (Department of Transportation)

Land Transportation (ADR/RID):	Not regulated
Air Transportation (ICAO/IATA):	Not regulated
Sea Transportation (IMO/IMDG):	Not regulated
UN No.:	Not applicable
UN Proper Shipping Name:	Not applicable
Transport hazard class:	Not applicable
Environmental hazard:	Not applicable
Special precautions for user:	Not applicable

15. Regulatory information

Labeling

Additional advice on labeling: Does not require a hazard warning label, but the normal safety precautions for handling chemicals must be observed.

National regulatory information

Water contaminating class (D): 1 – slightly water contaminating

Additional information

The substance resp. all components are in:

TSCA:	listed
EINECS/ELINCS:	listed
DSL:	listed
AICS:	listed
ENCS/MITI:	listed
PICCS (PH):	listed
KECI (KR):	listed
HSNO:	listed
IECS:	listed

16. Other Information

Relevant H-statements:

H315 – Causes skin irritation.

H319: Causes serious eye irritation.

H317 – May cause an allergic skin reaction.

H332 – Harmful if inhaled.

H341 – Suspected of causing genetic defects.

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)