



MATERIAL SAFETY DATA SHEET

Issuing date 01-Mar-1994

Revision Date 01-Jul-2011

Version 1

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

1.1 Product identifier

Product name CFL-160

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

Recommended Use Oilfield Chemical

Uses advised against No information available

1.3 Details of the supplier of the safety data sheet

Supplier

CESI Chemical (a Flotek Industries, Inc. company)
1004 S. Plainsman Road
Marlow, OK 73055
Phone (580) 658-6608, Fax (580) 658-3223

CESI Chemical, Holland Branch (a Flotek Industries, Inc. company)
Waanderweg 64
7812 HZ, Emmen
The Netherlands
Phone +31 (0) 591-677550

For further information, please contact:

E-mail Address information@cesichem.com

1.4 Emergency telephone number

Emergency telephone US: 1-405-282-8510
EU: (0031)(0)30-2748888

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Acute inhalation toxicity - vapor	Category 4
Ozone	Not applicable

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

Symbol(s)

Not dangerous

2.2 Label Elements**Signal Word**

Warning

Hazard Statements

H332 - Harmful if inhaled

2.3 Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No	CAS-No	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
Cellulose	232-674-9	9004-34-6	0-1	-		No data available

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

4. FIRST AID MEASURES

4.1 Description of first-aid measures**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin contact

Wash off with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If symptoms persist, call a physician.

Ingestion

Call a physician or Poison Control Center immediately. If swallowed, do not induce vomiting - seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Protection of First-aiders

Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed**4.3 Indication of any immediate medical attention and special treatment needed****Notes to physician**

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Use CO₂, dry chemical, or foam.

Extinguishing media which shall not be used for safety reasons

No information available

5.2 Special hazards arising from the substance or mixture**Special Hazard**

None in particular

5.3 Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Evacuate non-essential personnel. Remove all sources of ignition.

See Section 12 for additional Ecological information.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so

6.3 Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Do not flush into surface water or sanitary sewer system.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Do not breathe vapors/dust. Ensure adequate ventilation. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

7.3 Specific end uses

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cellulose 9004-34-6	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust 5 mg/m ³ respirable dust

Exposure limits

Chemical Name	European Union	The United Kingdom	France	Spain	Germany

Cellulose 9004-34-6		STEL: 20 mg/m ³ STEL: 12 mg/m ³ TWA: 10 mg/m ³ TWA: 4 mg/m ³	VME: 10 mg/m ³		
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Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location.
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye Protection

Safety glasses with side-shields. Goggles.

Hand Protection

Impervious gloves.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	solid	Appearance	powder
Odor	Mild	Color	tan

Property	Values	Remarks/ Method
pH	6-9	No data available
Melting point/range		No data available
Boiling point/boiling range		No data available
Flash Point		None known
Evaporation rate		No data available
Flammability (solid, gas)		No data available
Flammability Limits in Air		No data available
upper flammability limit		
lower flammability limit		
Vapor pressure		No data available
Vapor density		No data available
Relative density		No data available
Water solubility	completely 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, kinematic		No data available
Explosive properties	No data available	

Oxidizing Properties	No data available
Softening point	
Molecular Weight	
VOC Content	No data available
Density	
Bulk Density	~40lbs/ft3

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to Avoid

Dust formation.

10.5 Incompatible Materials

Oxidizing agents.

10.6 Hazardous Decomposition Products

Carbon oxides. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product Information

Inhalation	None known. May cause irritation of respiratory tract.
Eye contact	Moderately irritating to the eyes.
Skin contact	Repeated or prolonged exposure may cause irritation of eyes and skin.
Ingestion	There is no data available for this product.
LD50 Oral	3800 mg/kg

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cellulose	5 g/kg (Rat)	2 g/kg (Rabbit)	5800 mg/m ³ (Rat) 4 h

Chronic toxicity

Carcinogenicity

Contains no ingredient listed as a carcinogen

Sensitization

No information available

Reproductive toxicity

No information available

Mutagenic effects

No information available

Teratogenicity No information available

Target Organ Effects No information available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxicity effects

The environmental impact of this product has not been fully investigated.

12.2 Persistence and degradability

No information available

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers.

EWC Waste Disposal No.

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used

14. TRANSPORT INFORMATION

DOT

Not regulated

IMDG/IMO

Not regulated

ADR/RID

Not regulated

ICAO/IATA

Not regulated

15. REGULATORY INFORMATION

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

International Inventories

TSCA	Complies
EINECS/ELINCS	-
DSL/NDSL	Complies
PICCS	-
ENCS	-
IECSC	-
AICS	-
KECL	-

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical Safety Assessment**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Cellulose	9004-34-6	0-1	

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

16. OTHER INFORMATION

NFPA	Health Hazard 1	Flammability 1	Stability 0	Physical and chemical hazards -
HMIS	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal protection -



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

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

H332 - Harmful if inhaled

Prepared By QHSE Department

Issuing date 01-Mar-1994

Revision Date 01-Jul-2011

Revision Note Not Applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

US Only: This safety data sheet complies with the requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.