



MATERIAL SAFETY DATA SHEET

Issuing date 25-Jun-2004

Revision Date 23-Feb-2012

Version 1

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

1.1 Product identifier

Product name PS-102

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
1004 S. Plainsman Road
Marlow, OK 73055
Phone +1 (580) 658-6608
Fax +1 (580) 658-3223

CESI Chemical, Holland Branch
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: +31 (0)30-2748888

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Acute inhalation toxicity - gas	Category 3
Acute inhalation toxicity - dust/mist	Category 2
Specific target organ systemic toxicity (single exposure)	Category 1
Ozone	Not applicable
Physical hazards Flammable liquids	Category 3

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)

T - Toxic

R-code(s)

R10 - T;R39/23/24/25 - Xn;R20/21/22

R-phrase(s)

R10 - Flammable

Risk Combination Phrases

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed

2.2 Label Elements**Signal Word**

Danger

Hazard Statements

H330 - Fatal if inhaled

H370 - Causes damage to organs

H226 - Flammable liquid and vapor

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

P310 - Immediately call a POISON CENTER or doctor/ physician

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

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P320 - Specific treatment is urgent (see supplemental first aid instructions on this label)

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

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

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

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
Methyl alcohol	200-659-6	67-56-1	10-25	F; R11 T; R23/24/25-39/23/24/25		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. Keep eye wide open while rinsing. Consult a physician.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Ingestion

Call a physician or Poison Control Center immediately. Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

Inhalation

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

Protection of First-aiders

Remove all sources of ignition. 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

Vapor explosion hazard indoors, outdoors or in sewers. Vapors may travel to source of ignition and flash back.

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

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment.

See Section 12 for additional Ecological information.

6.2 Environmental precautions

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Soak up with inert absorbent material. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal. 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. Ensure adequate ventilation. Do not breathe vapors or spray mist. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

7.3 Specific end uses

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl alcohol 67-56-1	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m ³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³

Exposure limits

Chemical Name	European Union	The United Kingdom	France	Spain	Germany
Methyl alcohol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³	STEL: 250 ppm STEL: 333 mg/m ³ TWA: 200 ppm TWA: 266 mg/m ³	VME: 200 ppm VME: 260 mg/m ³ VLCT: 1000 ppm VLCT: 1300 mg/m ³		MAK: 200 ppm MAK: 270 mg/m ³ Ceiling / Peak: 800 ppm Ceiling / Peak: 1080 mg/m ³ TWA: 200 ppm TWA: 270 mg/m ³
Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Methyl alcohol 67-56-1					TWA: 200 ppm TWA: 260 mg/m ³ Skin
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Methyl alcohol 67-56-1	Skin STEL 800 ppm STEL 1040 mg/m ³ MAK: 200 ppm MAK: 260 mg/m ³	STEL: 800 ppm STEL: 1040 mg/m ³			

Derived No Effect Level (DNEL)

No information available

Predicted No Effect Concentration (PNEC)

No information available

8.2 Exposure controls

Engineering Measures

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

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. When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Liquid	Appearance	clear - cloudy
Odor	none, -, Slight	Color	colorless

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	6.48	
Freezing Point	<-17.8 °C / <0 °F	
Boiling point/boiling range		No data available
Flash Point	42.2 °C / 108 °F	Closed cup
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	1.034	
Water solubility	Soluble 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
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	8.63 lbs/gal	
Bulk Density		

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible Materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents.

10.6 Hazardous Decomposition Products

Carbon oxides. Nitrogen oxides (NOx). Phosphorous oxides.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product Information

Inhalation	Avoid breathing vapors or mists. May cause irritation of respiratory tract. Causes headache, drowsiness or other effects to the central nervous system.
Eye contact	Irritating to eyes.
Skin contact	May cause irritation. May be absorbed through the skin in harmful amounts. Prolonged skin contact may defat the skin and produce dermatitis.
Ingestion	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be fatal or cause blindness if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	64000 ppm (Rat) 4 h 83.2 mg/L (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

Developmental Toxicity 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.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Methyl alcohol		13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	

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

No information available

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**

Packaging size <119 gal
Proper shipping name Not Regulated

Packaging size >119 gal
Proper shipping name NA1993, Combustible liquid, n.o.s., (contains Methanol solution), Combustible, PG III
Hazard class Combustible
UN/ID No NA1993
Packing Group PG III

IMDG/IMO

Proper shipping name UN1992, Flammable liquids, toxic, n.o.s., (contains Methanol solution), 3, PG III
Hazard class 3
UN/ID No UN1992
Packing Group PG III

ADR/RID

Proper shipping name UN1992, Flammable liquids, toxic, n.o.s., (contains Methanol solution), 3, PG III
Hazard class 3
UN/ID No UN1992
Packing Group PG III

ICAO/IATA

UN/ID No UN1992
Proper shipping name UN1992, Flammable liquids, toxic, n.o.s., (contains Methanol solution), 3, PG III
Hazard class 3
Packing Group PG III

15. REGULATORY INFORMATION

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

TSCA	Complies
EINECS/ELINCS	Complies
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.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
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, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Methyl alcohol	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Chemical Name	WHMIS Hazard Class
Methyl alcohol	1 % B2,D1B,D2A,D2B

Chemical Name	NPRI
Methyl alcohol	X

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 3	Stability 0	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 3	Physical Hazard 0	Personal protection - .



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

R11 - Highly flammable

R10 - Flammable

R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

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

H330 - Fatal if inhaled

H370 - Causes damage to organs

H226 - Flammable liquid and vapor

Prepared By QHSE Department

Issuing date 25-Jun-2004

Revision Date 23-Feb-2012

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.