

MATERIAL SAFETY DATA SHEET

Product Trade Name: **PARASPERSE LR**

Revision Date: 20-Feb-2014

Revision Number: 10

1. Product and Company Identification

Product Identifier
Product Trade Name: PARASPERSE LR
Synonyms: None
Chemical Family: Blend
Internal ID Code: HM001170

Product Use
Application: Cleaner

Manufacturer's Name and Contact Details
Name and Address: Halliburton Energy Services
645 - 7th Ave SW Suite 2200
Calgary, AB
T2P 4G8
Canada
Emergency Telephone Number: (281) 575-5000

Prepared By: Chemical Compliance
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com

2. Hazard(s) Identification

WHMIS Classification
WHMIS Hazard Class: D2B Toxic Materials

WHMIS Symbol(s)



Summary of hazards of the product
Hazard Overview: May cause eye and skin irritation.

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	HMIRA Registry Number	Filing Date
n-Methylpyrrolidone	872-50-4	1 - 5%	Not applicable	Not applicable
Diethylene glycol monobutyl ether	112-34-5	0.1 - 1%	Not applicable	Not applicable
Ethylene glycol monobutyl ether	111-76-2	1 - 5%	Not applicable	Not applicable

4. First aid measures

Description of first aid measures

Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

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

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder 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

No information available

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically

5. Fire Fighting Measures

Extinguishing media

Suitable Extinguishing Media

All standard fire fighting media

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.

Advice for firefighters

Special Protective Equipment for Fire-Fighters

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

Hazardous combustion products

Carbon monoxide and carbon dioxide.

6. Accidental release measures

Personal precautions and emergency procedures

Protective Equipment

Use appropriate protective equipment.

Environmental Precautionary Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning / Absorption

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

7. Handling and Storage

Precautions for safe handling

Avoid contact with eyes, skin, or clothing.

Conditions for safe storage and Incompatible materials for storage

Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 24 months.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits**Exposure Limits**

Substances	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA
n-Methylpyrrolidone	872-50-4	Not applicable	Not applicable
Diethylene glycol monobutyl ether	112-34-5	Not applicable	Not applicable
Ethylene glycol monobutyl ether	111-76-2	TWA: 20 ppm	50 ppm

Appropriate engineering controls**Engineering Controls**

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

Personal Protective Equipment (PPE)**Respiratory Protection**

Not normally needed. But if significant exposures are possible then the following respirator is recommended:
Organic vapor respirator.

Hand Protection

Impervious rubber gloves.

Skin Protection

Neoprene coated apron or clothing.

Eye Protection

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

Other Precautions

Eyewash fountains and safety showers must be easily accessible.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State: Liquid
Odor: Bland

Color: Orange
Odor Threshold: No information available

PropertyValues

Remarks/ - Method

pH:

7

pH Concentration of Solution:

No information available.

Freezing Point/Range

No information available.

Melting Point/Range

No information available

Boiling Point/Range (C):

No information available.

Flash Point/Range (C):

No information available.

Flash Point Method:

PMCC

Autoignition Temperature (C):

No information available.

Flammability Limits in Air - Lower (%):

No information available.

Flammability Limits in Air - Upper (%):

No information available.

Evaporation Rate (Butyl Acetate=1):

No information available.

Vapor Pressure @ 20 C (mmHg):

< 0.01

Vapor Density (Air=1):

No information available.

Specific Gravity @ 20 C (Water=1):

0.89

Solubility in Water (g/100ml):

Emulsifies, forms colloids

Solubility in other solvents

No information available.

Partition Coefficient (n-Octanol/Water):

No information available.

Decomposition Temperature (C):

No information available.

Viscosity

No information available

Explosive Properties

No information available

Oxidizing Properties

No information available

Other Information**Molecular Weight (g/mole):**

No information available.

VOC Content (%)

No information available

10. Stability and Reactivity

Conditions of Reactivity**Conditions to Avoid****Hazardous Polymerization:**None anticipated
Will Not Occur**Chemical Stability**

Stable

Sensitivity to Static Discharge

Not available

Sensitivity to Mechanical Impact

Not available

Incompatible materials

Strong oxidizers. Strong acids.

Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

11. Toxicological Information

Routes of entry

Eye or skin contact, inhalation.

Information on Toxicological Effects**Acute effects from exposure****Inhalation**

May cause respiratory irritation.

Eye Contact

May cause eye irritation

Skin Contact

May cause skin irritation.

Ingestion

Irritation of the mouth, throat, and stomach.

Chronic effects from exposure**Chronic Effects/Carcinogenicity**

May cause reproductive effects based on animal studies.

Irritancy of product**Irritation**

Irritating to eyes and skin

Sensitization of product**Sensitization**

Not confirmed to cause skin or respiratory sensitization.

Mutagenicity

Mutagenic Effects

Not regarded as mutagenic

Carcinogenicity

Carcinogenic Effects

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA.

Reproductive Toxicity

Reproductive Toxicity

Contains ingredients that are suspected reproductive hazards

Teratogenicity/embryotoxicity

Teratogenic

Not a teratogen or embryotoxin.

Toxicologically synergistic material Not available**Acute Toxicity**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
n-Methylpyrrolidone	872-50-4	3598 mg/kg (Rat) 3500 mg/kg (Rabbit)	2500 mg/kg (Rat) 2000 mg/kg (Rabbit)	3.1 mg/L (Rat) 4 h

Diethylene glycol monobutyl ether	112-34-5	3384 mg/kg (Rat) 6560 mg/kg (Rat) 5660 mg/kg (Rat) 2406 mg/kg (Mouse) 2000 mg/kg (Guinea pig)	2700 mg/kg (Rabbit) 2764 mg/kg (Rabbit)	No data available
Ethylene glycol monobutyl ether	111-76-2	470 mg/kg (Rat) 1414 mg/kg (Guinea pig) 1746 mg/kg (Rat) 320 mg/kg (Rabbit) 530 mg/kg (Rat) 560 mg/kg (Rat) 3000 mg/kg (Rat) 2400 (Rat)	220 mg/kg (Rabbit) 2270 mg/kg (Rat) 200 mg/kg (Guinea pig) >2000 mg/kg (Rabbit) 841 mg/kg (Rabbit) 435 mg/kg (Rabbit) >2000 mg/kg (Guinea pig) >2000 mg/kg (Rat) 100 mg/kg (Rabbit) 207 mg/kg (Guinea pig) 400-500 mg/kg (Rabbit)	450 ppm (Rat) 4h 2.174 mg/L (Rat) 4h 2.21 mg/L (Rat) 4h 450-486 ppm (Rat) 4h 925 ppm (Rat) 4h >633 ppm (Guinea pig) 1h

12. Ecological Information

Toxicity

Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity for Invertebrates
n-Methylpyrrolidone	872-50-4	EC50(72h): >500 mg/L (Desmodesmus subspicatus)	LC50(96h): 832 mg/l (Lepomis macrochirus) LC50(96h): 4000 mg/L (Leuciscus idus) LC50(96h): 1072 mg/L (Pimephales promelas) LC50(96h): 1400 mg/L (Poecilia reticulata)	No information available	EC50(48h): 4897 mg/L (Daphnia magna)
Diethylene glycol monobutyl ether	112-34-5	EC50: > 100 mg/L (Desmodesmus subspicatus)	LC50: 1300 mg/L (Lepomis macrochirus)	EC10: >1995 mg/L (Activated sludge, industrial)	EC50: > 100 mg/L (Daphnia magna)
Ethylene glycol monobutyl ether	111-76-2	EC50: 839.56 mg/l (Skeletonema costatum) EC50(72h): 911 mg/L (biomass) EC50: > 500 mg/l (Scenedesmus subspicatus) NOEC(72h): 88 mg/L (biomass)(Pseudokirchnerella subcapitata)	LC50: > 1000 mg/l (Scophthalmus maximus juvenile) LC50(96h): 1474 mg/L (Oncorhynchus mykiss) NOEC(21d): > 100mg/L (Danio rerio)	TT/EC3(48h): 463 mg/L (Uronema parduzci) TT/EC3(72h): 73 mg/L (Entosiphon sulcatum) TT/EC3(16h): 700 mg/L (Pseudomonas putida)	EC50: >1000 mg/L (Daphnia magna) EC50 (48h): 1800 mg/L (Daphnia magna) EC50: 1875 mg/l (Daphnia magna) NOEC(21d)(reproduction): 100 mg/L (Daphnia magna)

Persistence and Degradability

No information available

Bioaccumulation potential

No information available

Substances	Log Pow
n-Methylpyrrolidone	-0.46
Diethylene glycol monobutyl ether	1.0
Ethylene glycol monobutyl ether	0.81

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

Disposal Method	Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging	Empty container completely. Transport with all closures in place. Return for reuse or dispose in a sanitary landfill according to national or local regulations.

14. Transport Information

Canadian TDG

UN Number:	Not restricted.
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable

IATA/CAO

UN Number:	Not restricted.
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable

IMDG/IMO

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory Information

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

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

WHMIS Hazard Class D2B Toxic Materials

WHMIS Symbol(s)

**US Regulations**

US TSCA Inventory All components listed on inventory or are exempt.

16. Other Information

Preparation Information**Prepared By**

Chemical Compliance
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com

Revision Date:

20-Feb-2014

Not applicable

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Key or legend to abbreviations and acronyms

WHMIS: Workplace Hazardous Materials Information System

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

END OF MSDS