

SDS no. PID1654
Version 14
Revision date 07/Jun/2017
Supersedes date 04/Apr/2017

M-I SWACO

A Schlumberger Company

Safety Data Sheet VERSACOAT* HF

1. Identification

1.1 Product identifier

Product name VERSACOAT* HF
Product code PID1654

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

Recommended Use Drilling fluid additive.
Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier

M-I L.L.C.
P.O.Box 42842
Houston, TX 77242
www.miswaco.slb.com
Telephone: 1 281-561-1511

M-I SWACO, A Schlumberger Company
200 - 125, 9th Avenue SE
Calgary, Alberta T2G 0P6, Canada
Telephone: 1-780-962-8221

E-mail address sdsmi@slb.com

Prepared by

Global Regulatory Compliance - Chemicals (GRC - Chemicals)

1.4 Emergency Telephone Number

Emergency telephone (24 Hour) Asia Pacific +65 3158 1074, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, USA +1 281 561 1600, Canada +1 800 579 7421, Argentina: +54 11 5984 3690, Brazil : 0800-720-8000 0800-777-2323 (WGRA)

2. Hazards identification

2.1 Classification of the substance or mixture

GHS - Classification

Health hazards

Skin sensitization

Sub-Category 1A

Environmental hazards

Not classified

Physical Hazards

Flammable Liquids

Category 4

2.2 Label elements



Signal word

WARNING

Hazard statements

H317 - May cause an allergic skin reaction

H227 - Combustible liquid

Precautionary statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P370 + P378 - In case of fire: Use dry sodium carbonate to extinguish

P403 + P235 - Store in a well-ventilated place. Keep cool

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P272 - Contaminated work clothing should not be allowed out of the workplace

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P362 + P364 - Take off contaminated clothing and wash it before reuse

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Hazards not otherwise classified

None known

Unknown acute toxicity

Not applicable.

3. Composition/information on Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical Name	CAS No	Weight-%
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	68990-47-6	60 - 100
Dipropylene glycol methyl ether	34590-94-8	5 - 10

Comments

The product contains other ingredients which do not contribute to the overall classification. The exact percentage (concentration) of composition has been withheld as a trade secret

4. First aid measures

4.1 First aid measures

Inhalation	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
Ingestion	Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
Skin contact	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation persists. Wash contaminated clothing before re-use.
Eye Contact	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses. Get medical attention if any discomfort continues.

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

Symptoms

Inhalation	Please see Section 11. Toxicological Information for further information.
Ingestion	Please see Section 11. Toxicological Information for further information.
Skin contact	Please see Section 11. Toxicological Information for further information.
Eye contact	Please see Section 11. Toxicological Information for further information.

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

Water Fog, Alcohol Foam, CO₂, Dry Chemical.

Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

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

Unusual fire and explosion hazards

Combustible liquid. Vapors may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Heating of containers may cause pressure rise, with risk of bursting.

Hazardous combustion products

Carbon oxides (CO_x), Nitrogen oxides (NO_x).

5.3 Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Special Fire-Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate and ventilate the area. Use personal protective equipment identified in Section 8. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. If spilled, take caution, as material can cause surfaces to become very slippery. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Large spills released to the environment may disturb the natural chemical balance of soil/fresh water.

Environmental exposure controls

Avoid release to the environment. The product should not be allowed to enter drains, water courses or the soil. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills.

Methods for cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13). Take precautionary measures against static discharges. Use non-sparking tools and equipment. Ground and bond containers when transferring material.

6.4 Reference to other sections

See section 13 for more information.

7. Handling and storage

7.1 Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid spills and splashing during use. Avoid breathing vapors or mists. If spilled, take caution, as material can cause surfaces to become very slippery. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions

Ensure adequate ventilation. Keep airborne concentrations below exposure limits. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Ensure all equipment is electrically grounded before beginning transfer operations.

Storage precautions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking. Keep away from open flames, hot surfaces and sources of ignition.

8. Exposure controls/personal protection

8.1 Control parameters

Component Information

Chemical Name	ACGIH TLV	OSHA PEL
Fatty acids, tall-oil, reaction products with	Not determined	Not determined

diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine		
Dipropylene glycol methyl ether	100 ppm	100 ppm

8.2 Exposure controls

A risk assessment is recommended to be performed by a qualified and trained personnel to analyze the worksite and recommends the appropriate controls such as engineering controls, work practice controls, and administrative controls as primary means of reducing employee exposure. When there is a remaining hazards after applying the primary controls, Personal Protective Equipment (PPE) must be used.

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering Controls

Keep airborne concentrations below exposure limits. Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation.

Personal protective equipment

Eye protection

Tightly fitting safety goggles.

Hand protection

Use protective gloves made of: Neoprene™ Nitrile rubber Be aware that liquid may penetrate the gloves. Frequent change is advisable.

Respiratory Protection

All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent. If exposed to airborne mist/aerosol of this product, use an organic vapor cartridge with a P-95 pre-filter attached. In work environments containing oil mist/aerosol, use an organic vapor cartridge with a P-95 pre-filter attached. If exposed to vapors from this product, use a NIOSH/MSHA-approved respirator with an organic vapor cartridge.

Skin and body protection

Wear suitable protective clothing, Eye wash and emergency shower must be available at the work place.

Hygiene measures

Wash hands before breaks and immediately after handling the product, Remove and wash contaminated clothing before re-use.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Transparent
Color	Amber
Odor	Slight
Odor threshold	Not applicable

Property	Values	Remarks
pH	No information available	
pH @ dilution	No information available	
Melting / freezing point	No information available	
Boiling point/range	No information available	
Flash point	> 72 °C / > 161.6 °F	
Evaporation rate (BuAc =1)	No information available	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	

Vapor density	No information available
Specific gravity	No information available
Bulk density	No information available
Water solubility	Insoluble in water
Solubility in other solvents	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	> 20.5 cSt @ 40 °C
Dynamic viscosity	No information available
log Pow	No information available

Explosive properties	No information available
Oxidizing properties	No information available

9.2 Other information

Pour point	No information available
Molecular weight	No information available
VOC content(%)	No information available
Density	No information available

Comments

The data listed above are typical physical and chemical properties and should not be construed as product specification.

10. Stability and reactivity

10.1 Reactivity

Combustible liquid.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Keep away from sources of ignition - No smoking.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon oxides (COx). Nitrogen oxides (NOx).

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Inhalation Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.

Eye contact May cause irritation.

Skin contact Prolonged contact may cause redness and irritation. May cause an allergic skin reaction.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Toxicology data for the components

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	No data available	No data available	No data available
Dipropylene glycol methyl ether	= 5400 µL/kg (Rat)	= 9500 mg/kg (Rabbit)	No data available

Chemical Name	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	No data available	No data available	No data available	No data available
Dipropylene glycol methyl ether	No data available	No data available	No data available	No data available

Sensitization

May cause allergic skin reaction.

Mutagenic effects

Not known to cause heritable genetic damage.

Carcinogenicity

Contains no ingredients above reportable quantities listed as a carcinogen.

Reproductive toxicity

Not known to adversely affect reproductive functions and organs.

Developmental toxicity

Not known to cause birth defects or have a deleterious effect on a developing fetus.

Routes of exposure

Inhalation. Skin contact. Eye contact.

Routes of entry

Inhalation. Skin contact.

**Specific target organ toxicity -
Single exposure**

Not classified

**Specific target organ toxicity -
Repeated exposure**

Not classified.

Aspiration hazard

Not classified.

12. Ecological information

12.1 Toxicity

Toxicity to algae

See component information below.

Toxicity to fish

See component information below.

Toxicity to daphnia and other aquatic invertebrates

See component information below.

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride,	No information available	No information available	No information available

tetraethylenepentamine and triethylenetetramine			
Dipropylene glycol methyl ether	> 10000 mg/L LC50 Pimephales promelas 96 h	No information available	= 1919 mg/L LC50 Daphnia magna 48 h

12.2 Persistence and degradability

No product level data available.

12.3 Bioaccumulative potential

No product level data available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects.

None known.

13. Disposal considerations

13.1 Waste treatment methods

Disposal Method

Disposal should be made in accordance with federal, state and local regulations.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal. Empty containers may contain flammable or explosive vapors. Do not burn, or use a cutting torch on, the empty drum.

14. Transport information

14.1. UN number

UN No. (DOT)	NA1993
UN No. (TDG)	Not regulated
UN/ID No. (ADR/RID/ADN/ADG)	Not regulated
UN No. (IMDG)	Not regulated
UN No. (ICAO)	Not regulated

14.2. UN proper shipping name

Combustible liquid, n.o.s., (Dipropylene glycol methyl ether)
Not regulated for U.S. ground transport in non-bulk containers (<119 gallons).

14.3 Hazard class(es)

DOT Hazard class	Combustible liquid
TDG Hazard class	Not regulated
ADR/RID/ADN/ADG Hazard class	Not regulated
IMDG Hazard class	Not regulated
ICAO Hazard class/division	Not regulated

14.4 Packing group

DOT Packing group	PG III
TDG Packing group	Not regulated
ADR/RID/ADN/ADG Packing group	Not regulated
IMDG Packing group	Not regulated
ICAO Packing group	Not regulated

14.5 Environmental hazard

Marine pollutant No

14.6 Special precautions

Not applicable

15. Regulatory information

International inventories

USA (TSCA)	Complies
Canada (DSL)	Complies
European Union (EINECS and ELINCS)	Complies
Philippines (PICCS)	Complies
Japan (ENCS)	Does not Comply
China (IECSC)	Complies
Australia (AICS)	Complies
Korean (KECL)	Complies
New Zealand (NZIoC)	Complies

IMPORTS, Canada

No import volume restrictions.

U.S. Federal and State Regulations

SARA 311/312 Hazard Categories

Fire hazard. Immediate (acute) health hazard.

Chemical Name	SARA 302 / TPQs	SARA 313	CERCLA RQ
Fatty acids, tall-oil, reaction products with diethylenetriamine, maleic anhydride, tetraethylenepentamine and triethylenetetramine	N/A	N/A	N/A
Dipropylene glycol methyl ether	N/A	N/A	N/A

State Comments

Proposition 65: This product is not known to contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer and/or reproductive toxicity at levels that are expected to pose a significant risk under anticipated use conditions.

Canadian Classification

This Safety Data Sheet has been prepared in compliance with the Hazardous Products Regulations.

HMIRA Registration Number: 11470

Filing Date: 19/May/2017

16. Other information

Supersedes date 04/Apr/2017

Revision date 07/Jun/2017

Version 14

This SDS has been revised in the following section(s) 1, 2, 4, 6, 7, 9, 11, 14, 15, 16. Updated according to WHMIS 2015.

HMIS classification

Health	2
Flammability	2
Physical hazard	0
PPE	X

N/A - Not Applicable, N/D - Not Determined.

*A mark of M-I L.L.C., a Schlumberger Company

Disclaimer

The information contained herein is considered in good faith as reliable of the date issued and is based upon on measurements, tests or data derived from supplier's own study or furnished by others. In providing this SDS information, Supplier makes no express or implied warranties as to the information or product; merchantability or fitness of purpose; any express or implied warranty; or non-infringement of intellectual property rights; and supplier assumes no responsibility for any direct, special or consequential damages, results obtained, or the activities of others. To the maximum extent permitted by law, supplier's warranty obligations and buyer's sole remedies are as stated in separate agreement between the parties.