

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 07/11/2013 : Version:

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixtures

Trade name : PETRA WASHER FLUID CONCENTRATE 12/16OZ

Product code : 9014

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

Use of the substance/mixture : FOLLOW LABEL DIRECTIONS

1.3. Details of the supplier of the safety data sheet

Petra Oil Company

6100 West by Northwest Blvd. Ste. 190

Houston, TX 77040

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 2 H225 Acute Tox. 1 (Oral) H300 Eye Dam. 1 H318 Repr. 1B H360 STOT SE 1 H370

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



E B

GHS05





Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapor

H300 - Fatal if swallowed

H318 - Causes serious eye damage

H360 - May damage fertility or the unborn child

H370 - Causes damage to organs

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical/ventilating/lighting/... equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash ... thoroughly after handling

P270 - Do no eat, drink or smoke when using this product

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

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P308+P313 - IF exposed or concerned: Get medical advice/attention

P310 - Immediately call a POISON CENTER/doctor/...

P321 - Specific treatment (see ... on this label)

P330 - If swallowed, rinse mouth

P370+P378 - In case of fire: Use ... for extinction P403+P235 - Store in a well-ventilated place. Keep cool

P405 - Store locked up

P501 - Dispose of contents/container to ...

17/07/2013 EN (English US) 1/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification (GHS-US)
methanol	(CAS No) 67-56-1	>= 85	Flam. Liq. 2, H225 Acute Tox. 1 (Oral), H300 Eye Dam. 1, H318 Repr. 1B, H360 STOT SE 1, H370
polyethylene glycol 200-600	(CAS No) 25322-68-3	<= 0.0045	Not classified
NONYL NONOXYNOL-5	(CAS No) 9014-93-1	<= 0.003	Not classified
hydrogen [4-[4-(diethylamino)-2',4'- disulphonatobenzhydrylidene]cyclohexa-2,5-dien-1- ylidene]diethylammonium, sodium salt	(CAS No) 129-17-9	~ 0.000001	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical

advice/attention. Call a POISON CENTER or doctor/physician. Specific treatment (see ... on this

label)

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or

doctor/physician. Specific treatment (see ... on this label).

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

Symptoms/injuries : May damage fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : Fatal if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Avoid (reject) fire-fighting water to enter environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No

smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapors/spray.

Emergency procedures : Ventilate area.

17/07/2013 EN (English US) 2/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and material for containment and cleaning up

Methods for cleaning up

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not

breathe dust/fume/gas/mist/vapors/spray.

Hygiene measures Wash ... thoroughly after handling. Do no eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Technical measures

Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/...

Storage conditions

Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof

place. Keep container tightly closed.

Incompatible products

: Strong bases. Strong acids.

Incompatible materials

: Sources of ignition. Direct sunlight. Heat sources.

Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

Control parameters

methanol (67-56-1)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (ppm)	250 ppm

Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection Wear protective gloves.

Eve protection Chemical goggles or safety glasses.

Respiratory protection Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Liquid Appearance : Liquid. Molecular mass : 32.04 g/mol Color : Blue.

Odor Characteristic odour. Mild odour. Pleasant odour. Alcohol odour. Commercial/unpurified

substance: Irritating/pungent odour.

Odor threshold 2000 - 8800 ppm

2620 - 11528 mg/m³

pΗ : No data available

Relative evaporation rate (butyl acetate=1) : 4.1 Relative evaporation rate (ether=1) 6.3 Melting point -98 ℃

Freezing point : No data available

Boiling point : 65 ℃ : 11 ℃ Flash point Critical temperature : 240 ℃

17/07/2013 EN (English US) 3/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Self ignition temperature : 455 ℃

Decomposition temperature : No data available Flammability (solid, gas) : No data available

Vapor pressure : 128 hPa Vapor pressure at 50 $^{\circ}$: 552 hPa Critical pressure : 79547 hPa

Relative vapor density at 20 $^{\circ}$: 1.1 Relative density : 0.79 Relative density of saturated gas/air mixture : 1.0 Density : 792 kg/m³

Solubility : Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform.

Water: Complete Ethanol: Complete Ether: Complete Acetone: Complete

Log Pow : -0.77 (Experimental value; Other, Experimental value; Other)

Log Kow: No data availableViscosity, kinematic: No data availableViscosity, dynamic: 0.6 mPa.s (20 °C)Explosive properties: No data availableOxidizing properties: No data availableExplosive limits: 5.5 - 36.5 vol °s

9.2. Other information

Minimum ignition energy : 0.14 mJSaturation concentration : 166 g/m^3 VOC content : > 98 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established. Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Fatal if swallowed.

methanol (67-56-1)	hanol (67-56-1)	
LD50 oral rat	> 5000 mg/kg (1187-2769 mg/kg bodyweight; Rat; Rat)	
LD50 dermal rabbit	15800 mg/kg (Rabbit)	
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat)	
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat)	

polyethylene glycol 200-600 (25322-68-3)	
LD50 oral rat	> 15000 mg/kg (Rat)
LD50 dermal rabbit	> 20000 mg/kg (Rabbit)

hydrogen [4-[4-(diethylamino)-2',4'-disulphonatobenzhydrylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt (129-17-9)	
LD50 oral rat	3001 mg/kg (Rat)

17/07/2013 EN (English US) 4/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization Not classified

Germ cell mutagenicity Not classifiedBased on available data, the classification criteria are not met

Carcinogenicity : Not classified

hydrogen [4-[4-(diethylamino)-2',4'-disulphonatobenzhydrylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt (129-17-	٠
9)	

IARC group

Reproductive toxicity : May damage fertility or the unborn child.Based on available data, the classification criteria are

not met

3

Specific target organ toxicity (single exposure) : Causes damage to organs.

Specific target organ toxicity (repeated

exposure)

: Not classifiedBased on available data, the classification criteria are not met

Aspiration hazard : Not classifiedBased on available data, the classification criteria are not met Potential Adverse human health effects and

: Based on available data, the classification criteria are not met. Fatal if swallowed.

symptoms

Symptoms/injuries after eye contact

: Causes serious eye damage.

Symptoms/injuries after ingestion : Fatal if swallowed.

SECTION 12: Ecological information

Toxicity

methanol (67-56-1)	
LC50 fish 1	15400 mg/l (96 h; Lepomis macrochirus; LETHAL)
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna; LETHAL)
LC50 fish 2	10800 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	24500 mg/l (48 h; Daphnia magna)
Threshold limit other aquatic organisms 1	6600 mg/l (16 h; Pseudomonas putida)
Threshold limit algae 1	530 mg/l (192 h; Microcystis aeruginosa)
Threshold limit algae 2	8000 mg/l (168 h; Scenedesmus quadricauda)

polyethylene glycol 200-600 (25322-68-3)	
LC50 fish 1	> 1000 mg/l (96 h; Pisces)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
LC50 fish 2	> 5000 mg/l (24 h; Carassius auratus)
Threshold limit other aquatic organisms 1	<= 100 mg/l (96 h; Plankton)
Threshold limit other aquatic organisms 2	> 1000 mg/l
Threshold limit algae 2	500 mg/l (720 h; Algae; NO EFFECT)

12.2. Persistence and degradability

PETRA WASHER FLUID CONCENTRATE 12/160Z	
Persistence and degradability	Not established.

methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O²/g substance
Chemical oxygen demand (COD)	1.42 g O ² /g substance
ThOD	1.5 g O²/g substance
BOD (% of ThOD)	0.40 - 0.73 % ThOD

polyethylene glycol 200-600 (25322-68-3)	
Persistence and degradability	Biodegradability in water: no data available.

NONYL NONOXYNOL-5 (9014-93-1) Not established. Persistence and degradability

hydrogen [4-[4-(diethylamino)-2',4'-disulphonatobenzhydrylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt (129-179)		
	Persistence and degradability	Biodegradability in water: no data available

12.3. **Bioaccumulative potential**

PETRA WASHER FLUID CONCENTRATE 12/16OZ	
Log Pow	-0.77 (Experimental value; Other, Experimental value; Other)
Bioaccumulative potential	Not established.

17/07/2013 EN (English US) 5/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

methanol (67-56-1)	
BCF fish 1	< 10 (Leuciscus idus)
Log Pow	-0.77 (Experimental value; Other, Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

polyethylene glycol 200-600 (25322-68-3)	
Log Pow	-1.2
Bioaccumulative potential	Bioaccumulation: not applicable.

NONYL NONOXYNOL-5 (9014-93-1)	
Bioaccumulative potential	Not established.

hydrogen [4-[4-(diethylamino)-2',4'-disulphonatobenzhydrylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt (129-17-9)	
Log Pow	-5.340 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

methanol (67-56-1)	
Surface tension	0.023 N/m (20 ℃)

Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to ...

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

US DOT (ground): UN1993, Flammable liquids, n.o.s. (Methanol Mixture), 3, II, Limited Quantity UN1993, Flammable liquids, n.o.s. (Methanol Mixture), 3, II, Limited Quantity ICAO/IATA (air): IMO/IMDG (water): UN1993, Flammable liquids, n.o.s. (Methanol Mixture), 3, II, Limited Quantity

Special Provisions: T11 - 6 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees

celsius of the liquid during filling.

TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

UN proper shipping name

DOT Proper Shipping Name : Flammable liquids, n.o.s. (Methanol Mixture)

Department of Transportation (DOT) Hazard

Classes

: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquids



DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) T11 - 6 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as

defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx)

17/07/2013 EN (English US) 6/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Packaging Non Bulk (49 CFR 173.xxx) : 201
DOT Packaging Bulk (49 CFR 173.xxx) : 243

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location

: E - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length, but is prohibited from carriage on passenger vessels in which the limiting number of passengers is exceeded.

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 30 L

CFR 175.75)

SECTION 15: Regulatory information

15.1. US Federal regulations

PETRA WASHER FLUID CONCENTRATE 12/16OZ	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard

methanol (67-56-1)	
Listed on SARA Section 302 (Specific toxic chemical listings)	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard

15.2. International regulations

CANADA

PETRA WASHER FLUID CONCENTRATE	ETRA WASHER FLUID CONCENTRATE 12/16OZ	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects	
methanol (67-56-1)		
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects	

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11

T; R23/24/25

T; R39/23/24/25

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

17/07/2013 EN (English US) 7/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Indication of changes : Revision - See : *.

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 1 (Oral)	Acute toxicity (oral) Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Flam. Liq. 2	Flammable liquids Category 2
Repr. 1B	Reproductive toxicity Category 1B
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
H225	Highly flammable liquid and vapor
H300	Fatal if swallowed
H318	Causes serious eye damage
H360	May damage fertility or the unborn child
H370	Causes damage to organs

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual

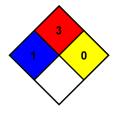
injury even if no treatment is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all

ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard Physical : 0 Minimal Hazard

SDS US (GHS HazCom 2012) - Technical Chemical

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

17/07/2013 EN (English US) 8/8