

Safety Data Sheet

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

Version: 1.2

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

1.1. Product identifier

Product form : Mixture

Trade name : PETRA OCTANE BOOST W/ SUPERIOR INJECTOR CLEANER 12 FL. OZ.

Product code : PETRA 2004B

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

Use of the substance/mixture : Octane Enhancer

1.3. Details of the supplier of the safety data sheet

Petra Oil Company 11085 Regency Green Drive Cypress, TX 77429 T 713-856-5700

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 4 H227 Asp. Tox. 1 H304

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H227 - Combustible liquid

H304 - May be fatal if swallowed and enters airways

Precautionary statements (GHS-US) : P210 - Keep away from all iginition sources. - No smoking

P280 - Wear protective gloves, protective clothing, eye protection, face protection P301+P310 - If swallowed: Immediately call a poison control center, doctor, physician,

P331 - Do NOT induce vomiting

P370+P378 - In case of fire: See Section 5.1 Extinguishing Media

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

P405 - Store locked up

P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with

local, regional, national, international regulations.

2.3. Other hazards

Other hazards not contributing to the

classification

: None under normal conditions.

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	%	GHS-US classification
Distillates (Petroleum), Hydrotreated Light	(CAS No) 64742-47-8	>= 95	Asp. Tox. 1, H304
2-Methoxy-2-Methylpropane	(CAS No) 1634-04-4	1 - 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315

The exact percentage is a trade secret.

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SECTION 4: First aid measures

Description of first aid measures

First-aid measures general Respiratory arrest: artificial respiration or oxygen. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Remove the victim into fresh air. If you feel unwell, seek medical advice. Allow victim to breathe First-aid measures after inhalation

fresh air. Allow the victim to rest.

First-aid measures after skin contact Wash contaminated clothing before reuse. If skin irritation occurs: seek medical attention.

Remove affected clothing and wash all exposed skin area with mild soap and water, followed

by warm water rinse.

Get medical advice/attention. Immediately flush eyes thoroughly with water for at least 15 First-aid measures after eye contact

minutes. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or

redness persist.

Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician. First-aid measures after ingestion

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

Symptoms/injuries : If you feel unwell, seek medical advice.

Symptoms/injuries after inhalation May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/injuries after skin contact May cause slight irritation . May cause moderate irritation. Itching. Red skin. Skin

rash/inflammation.

May cause slight eye irritation . May cause severe irritation. Irritation of the eye tissue. Symptoms/injuries after eye contact

Inflammation/damage of the eye tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

Extinguishing media

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

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

Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid

Explosion hazard : May form flammable/explosive vapor-air mixture. Reactivity : On heating: release of harmful/irritant gases/vapours.

Advice for firefighters

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

chemical fire. Prevent fire-fighting water from entering environment.

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

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures : Eliminate ignition sources. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Use protective clothing. Ventilate area.

Remove ignition sources. Use special care to avoid static electric charges. No open flames. No

smoking.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

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

: Dam up the liquid spill. Contain released product, pump into suitable containers. Plug the leak, For containment

cut off the supply.

Absorbed substance: shovel into drums. Cover spill with inert material, e.g.: sand, earth, Methods for cleaning up vermiculite or kieselguhr, powdered limestone. 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.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

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

heat, sparks, open flames, hot surfaces. - No smoking.

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 open flames. No smoking.

Handling temperature : Do not heat or store at temperature above 120 F

Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash affected areas thoroughly after handling. Always wash hands after handling the product. Remove contaminated clothes. Separate working clothes

from town clothes. Launder separately.

7.2. 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. Comply with applicable regulations. Provide local exhaust or general room ventilation. Take precautionary measures against static discharge.

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

closed when not in use. Keep in fireproof place.

Incompatible products : Oxidizing agent. Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

USA ACGIH ACGIH TWA (ppm) 50 ppm (Methyl-tert butyl ether (MTBE); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)	2-Methoxy-2-Methylpropane (1634-04-4)		
	USA ACGIH	ACGIH TWA (ppm)	weighted average exposure limit 8 h; TLV - Adopted

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

USA ACGIH	ACGIH TWA (ppm)	200 ppm 8 Hours

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Ensure good ventilation of the work

station. Local exhaust venilation, vent hoods.

Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.





Materials for protective clothing : GIVE EXCELLENT RESISTANCE:

Hand protection : Wear protective gloves.

Eye protection : Face shield. Chemical goggles or safety glasses.

Skin and body protection : Protective clothing.

Respiratory protection : Wear gas mask if concentration in air > exposure limit. Respiratory protection of the dependent

type. Wear respiratory protection.

Environmental exposure controls : Avoid release to the environment.

Consumer exposure controls : Avoid contact during pregnancy/while nursing.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.

Color : Colourless to light yellow.

Odor : Ethereal. Strong odour.

Odor threshold : No data available

pH : N/A

Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available

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Freezing point : No data available
Boiling point : > 240 °C
Flash point : 55 °C

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

Vapor pressure : N/A

Relative vapor density at 20 °C : No data available

Relative density : 0.798

Solubility : Poorly soluble in water.

Water: < 2 % Slight

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : 1.7 cSt @ 40 deg C
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : 0.7 - 6 vol % Estimated

9.2. Other information

VOC content : 2.5 %

SECTION 10: Stability and reactivity

10.1. Reactivity

On heating: release of harmful/irritant gases/vapours.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7). Combustible liquid. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

May react violently with oxidants. Not established.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

PETRA OCTANE BOOST W/ INJECTOR CLEANER12 FL.OZ.	
LC50 inhalation rat (ppm)	23576 ppm/4h Methlyl tert-butyl ether (MTBE)
2-Methoxy-2-Methylpropane (1634-04-4)	
LD50 oral rat	4000 mg/kg (Rat)
LD50 dermal rat	> 6800 mg/kg (Rat)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	23576 ppm/4h (Rat)
Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.28 mg/l/4h Based on lack of mortality and systemic effects
Skin corrosion/irritation	Not classified
	pH: N/A
Serious eye damage/irritation	Not classified
	pH: N/A

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: Not classified Respiratory or skin sensitization Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

2-Methoxy-2-Methylpropane (1634-04-4)

3 IARC group

: Not classified Reproductive toxicity Specific target organ toxicity - single exposure : Not classified Specific target organ toxicity - repeated : Not classified

exposure

: May be fatal if swallowed and enters airways.

Potential Adverse human health effects and

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

symptoms

Symptoms/injuries after inhalation

: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/injuries after skin contact

May cause slight irritation . May cause moderate irritation. Itching. Red skin. Skin

rash/inflammation.

Symptoms/injuries after eye contact

May cause slight eye irritation. May cause severe irritation. Irritation of the eye tissue.

Inflammation/damage of the eye tissue. Redness of the eye tissue.

: May be fatal if swallowed and enters airways. Symptoms/injuries after ingestion

SECTION 12: Ecological information

Toxicity 12.1.

Aspiration hazard

2-Methoxy-2-Methylpropane (1634-04-4)	
LC50 fish 1	672 - 706 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	651 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna)

12.2. Persistence and degradability

PETRA OCTANE	BOOST W/ INJECTOR	CLEANER12 FL.OZ.

Persistence and degradability Not established.

2-Methoxy-2-Methylpropane (1634-04-4)

Not readily biodegradable in water Persistence and degradability

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

Persistence and degradability Not established.

12.3. **Bioaccumulative potential**

PETRA OCTANE BOOST W/ INJECTOR CLEANER12 FL.OZ.

Bioaccumulative potential Not established. 2-Methoxy-2-Methylpropane (1634-04-4)

BCF fish 1	1.5 (BCF; 672 h)
Log Pow	1.06 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Distillates (Petroleum), Hydrotreated Light (64742-47-8)

Not established. Bioaccumulative potential

12.4. Mobility in soil

2-Methoxy-2-Methylpropane (1634-04-4)

0.02 N/m (20 °C) Surface tension

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

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

contents/container to appropriate waste disposal facility, in accordance with local, regional,

national, international regulations.

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.

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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): UN1993, Flammable liquids, n.o.s. (Petroleum Distillates, MTBE) (55 deg C c.c.), 3, III, Limited Quantity ICAO/IATA (air): UN1993, Flammable liquids, n.o.s. (Petroleum Distillates, MTBE) (55 deg C c.c.), 3, III, Limited Quantity UN1993, Flammable liquids, n.o.s. (Petroleum Distillates, MTBE) (55 deg C c.c.), 3, III, Limited Quantity IMO/IMDG (water):

Special Provisions: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging

requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 Č (100 F), then

the bulk packaging requirements of 173.242 of this subchapter are applicable.

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672)

T4 - 2.65 178.274(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.

TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

14.2. **UN proper shipping name**

Proper Shipping Name (DOT) : Flammable liquids, n.o.s. (Petroleum Distillates, MTBE) (55 deg C c.c.)

: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 Class (DOT)

Hazard labels (DOT) : 3 - Flammable liquid



DOT Symbols : G - Identifies PSN requiring a technical name

: III - Minor Danger Packing group (DOT)

DOT Special Provisions (49 CFR 172.102) B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a

flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

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DOT Packaging Exceptions (49 CFR 173.xxx) : 150 DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

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Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

SECTION 15: Regulatory information

15.1. US Federal regulations		
PETRA OCTANE BOOST W/ INJECTOR CLEANER12 FL.OZ.		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Delayed (chronic) health hazard	
2-Methoxy-2-Methylpropane (1634-04-4)		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard	
Distillates (Petroleum), Hydrotreated Light (64742-47-8)		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard	

15.2. International regulations

CANADA

PETRA OCTANE BOOST W/ INJECTOR CLEANER12 FL.OZ.	
WHMIS Classification Class B Division 2 - Flammable Liquid	
Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification Uncontrolled product according to WHMIS classification criteria	

EU-Regulations

No additional information available

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

No

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R10

No

Full text of R-phrases: see section 16

National regulations 15.2.2.

No additional information available

15.3. US State regulations

PETRA OCTANE BOOST W/ INJECTOR CLEANER12 FL.OZ.				
U.S California - Propos	sition 65 - Carcinogens List	No		
U.S California - Propos Toxicity	sition 65 - Developmental	No		
U.S California - Propos Toxicity - Female	sition 65 - Reproductive	No		
U.S California - Proposition 65 - Reproductive Toxicity - Male		No		
2-Methoxy-2-Methylpropane (1634-04-4)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	
Distillates (Petroleum), Hydrotreated Light (64742-47-8)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)

No

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CECTION	1 4C. O4b	information
SECTION	I In Corner	

Other information : None.

Full text of H-phrases:

H225	Highly flammable liquid and vapor
H227	Combustible liquid
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt

medical attention is given.

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high

temperature before ignition can occur.

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 : 2 Moderate Hazard Physical : 0 Minimal Hazard

Personal Protection : B

SDS US (GHS HazCom 2012) - TCC

The Supplier identified in Section 1 of this SDS 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

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