Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 07/12/18

Version: 1.1

Product identifier 1.1.

Product form	:	Mixture
Trade name	:	FVP OCTANE BOOST 12 FL.OZ.
Product code	:	FVPOB-12

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

Use of the substance/mixture

Details of the supplier of the safety data sheet 1.3.

Factory Motor Parts 1380 Corporate Center Curve, Suite 200 Eagan, MN 55121 (866) 387-3343

1.4. **Emergency telephone number**

Emergency number

: Infotrac 1-800-535-5053

: Octane Enhancer

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

2.4. Unknown acute toxicity (GHS US)

No data available

: None under normal conditions.

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Not applicable

3.2. Mixture

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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4.1. Description of first aid measures

First-aid measures general		espiratory arrest: artificial respiration or oxygen. Never give anything by mouth to an conscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation		emove the victim into fresh air. If you feel unwell, seek medical advice. Allow victim to breathe esh air. Allow the victim to rest.
First-aid measures after skin contact	Re	ash contaminated clothing before reuse. If skin irritation occurs: seek medical attention. emove affected clothing and wash all exposed skin area with mild soap and water, followed warm water rinse.
First-aid measures after eye contact	mi	et medical advice/attention. Immediately flush eyes thoroughly with water for at least 15 nutes. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or dness persist.
First-aid measures after ingestion	: Rii	nse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

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

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

No additional information available

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

5.3. 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.

6.1. 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.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment	Dam up the liquid spill. Contain released substance, pump into suitable containers. Plug the
	leak, cut off the supply.

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Methods for cleaning up	Absorbed substance: shovel into drums. Cover spill with inert material, e.g.: sand, earth, vermiculite or kieselguhr, powdered limestone. Soak up spills with inert solids, such as clay or distances up or the concerned processing of the concerned procesing of the concerned processin
	diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. **Reference to other sections**

See Heading 8. Exposure controls and personal protection.

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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	5	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	\ s ł	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.

Tollow Laber Directions.

8.1. Control parameters

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

- : Wear protective gloves.
- : Face shield. Chemical goggles or safety glasses.
- : Protective clothing.

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

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Other information

: Do not eat, drink or smoke during use.

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
рН	:	N/A
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	> 240 °C

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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 %
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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.

11.1. Information on toxicological effects

Acute toxicity

: Not classified

JOHNSEN'S OCTANE BOOST 12 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 (Rabb	pit)		
LC50 inhalation rat (mg/l) 85 mg/l/4h (Rat		85 mg/l/4h (Rat)			
LC50 inhalation rat (ppm) 23		23576 ppm/4h (Rat)	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)	LC50 inhalation rat (mg/l) > 5.28 mg/l/4h Bas		I on lack of mortality and systemic effects		
Skin corrosion/irritation		: Not classified			
		pH: N/A			
Serious eye damage/irritation		: Not classified			
		pH: N/A			
Respiratory or skin sensitization		: Not classified			
Germ cell mutagenicity		: Not classified			

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Carcinogenicity

: Not classified

3

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

IARC	group
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Reproductive toxicity	• •	Not classified
Specific target organ toxicity (single exposure)	•••	Not classified

Specific target organ toxicity (repeated exposure)

: Not classified

Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
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.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways.

12.1. Toxicity

2 - 706 mg/l (LC50; 96 h; Pimephales promelas)
1 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna)

12.2. Persistence and degradability		
JOHNSEN'S OCTANE BOOST 12 FL.OZ.		
Persistence and degradability	Not established.	
2-Methoxy-2-Methylpropane (1634-04-4)		
Persistence and degradability	Not readily biodegradable in water.	
Distillates (Petroleum), Hydrotreated Light (64742-47-8)		
Persistence and degradability	Not established.	

12.3. Bioaccumulative potential

JOHNSEN'S OCTANE BOOST 12 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)				
Bioaccumulative potential	Not established.			

12.4. Mobility in soil

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

Surface tension

0.020 N/m (20 °C)

12.5. Other adverse effects

Other information

: Avoid release to the environment.

13.1. Waste treatment methods

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

US DOT (ground):	UN1993, Flammable liquids, n.o.s. (Petroleum Distillates, MTBE), 3, III, Limited Quantity
ICAO/IATA (air):	UN1993, Flammable liquids, n.o.s. (Petroleum Distillates, MTBE), 3 , III, Limited Quantity
IMO/IMDG (water):	UN1993, Flammable liquids, n.o.s. (Petroleum Distillates, MTBE)(55 deg C c.c.), 3 , III, Limited Quantity
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 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 IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 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



14.2. UN proper shipping name

14.2. UN proper shipping name				
Proper Shipping Name (DOT)	:	Flammable liquids, n.o.s. (Petroleum Distillates, MTBE)		
Class (DOT)	:	3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120		
Hazard labels (DOT)		3 - Flammable liquid		
DOT Symbols		G - Identifies PSN requiring a technical name		
,				
Packing group (DOT) DOT Special Provisions (49 CFR 172.102)	:	 III - Minor Danger 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 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		
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

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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 (49 CFR 173.27)		60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	• •	220 L

15.1. US Federal regulations				
JOHNSEN'S OCTANE BOOST 12 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	Pazard 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

JOHNSEN'S OCTANE BOOST 12 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]

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

R10

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

JOHNSEN'S OCTANE BOOST 12 FL.OZ.						
U.S California - Proposition 65 - Carcinogens List		Ν	lo			
U.S California - Proposition	n 65 - Developmental	Ν	lo			
Toxicity						
U.S California - Proposition	n 65 - Reproductive	Ν	lo			
Toxicity - Female						
U.S California - Proposition	n 65 - Reproductive	Ν	lo			
Toxicity - Male						
2-Methoxy-2-Methylpropan	e (1634-04-4)					
U.S California -	U.S California -		U.S California -	U.S California -		Non-significant risk level
Proposition 65 -	Proposition 65 -		Proposition 65 -	Proposition 65 -		(NSRL)
Carcinogens List	Developmental Toxicity		Reproductive Toxicity -	Reproductive Toxicity	y -	
			Female	Male		
No	No		No	No		
Distillates (Petroleum), Hyd	drotreated Light (64742-47	-8)				
U.S California -	U.S California -		U.S California -	U.S California -		Non-significant risk level
Proposition 65 -	Proposition 65 -		Proposition 65 -	Proposition 65 -		(NSRL)
Carcinogens List	Developmental Toxicity		Reproductive Toxicity -	Reproductive Toxicity	y -	
			Female	Male		
No	No		No	No		

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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	:	В			

SDS US (GHS HazCom 2012) - TCC

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 product st hat 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 Comm ission. 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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