FVP 50% STARTING FLUID

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	FVP 50% STARTING FLUID 7.2 OZ. Product
code	:	FVPSF7-12
Other means of identification	:	This diesel fuel additive complies with federal low sulfur content requirements for us in diesel motor vehicles and non-road engines.

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

Use of the substance/mixture	:	Starting Fluid

1.3. Details of the supplier of the safety data sheet

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

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Aerosol 1	H222
Compressed gas	H280
Skin Irrit. 2	H315
Repr. 2	H361
STOT SE 3	H336

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

JOHNSEN'S 50% STARTING FLUID 7.2 OZ.

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Hazard pictograms (GHS-US) :

GHS02 GHS04 GHS07 GHS08

Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H222 - Extremely flammable aerosol H280 - Contains gas under pressure; may explode if heated H315 - Causes skin irritation H336 - May cause drowsiness or dizziness H361 - Suspected of damaging fertility or the unborn child
Precautionary statements (GHS-US)	: P201 - Obtain special instructions 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 P211 - Do not spray on an open flame or other ignition source P251 - Pressurized container: Do not pierce or burn, even after use P261 - Avoid breathing dust,fume,gas,mist,vapor spray P264 - Wash affected areas thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves,protective clothing,eye protection,face protection P302+P352 - If on skin: Wash with plenty of soap and water P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P308+P313 - If exposed or concerned: Get medical advice/attention P312 - Call a POISON CONTROL CENTER, doctor, if you feel unwell. P321 - Specific treatment: See section 4.1 on SDS P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up P410+P403 - Protect from sunlight. Store in a well-ventilated place P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F 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

: Contains gas under pressure; may explode if heated. None under normal conditions.

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Diethyl Ether	(CAS No) 60-29-7	50 - 70	Flam. Liq. 1, H224 Acute Tox. 4 (Oral), H302 STOT SE 3, H336
Petroleum Gases, Liquefied, Sweetened	(CAS No) 68476-86-8	10 - 30	Flam. Gas 1, H220 Flam. Liq. 1, H224
Heptane, Branched Cyclic	(CAS No) 426260-76-6	15.264 - 15.9	Flam. Liq. 1, H224 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
n-Heptane	(CAS No) 142-82-5	3.975 - 7.155	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Carbon Dioxide, Liquefied, Under Pressure	(CAS No) 124-38-9	5 - 10	Compressed gas, H280
Distillates (Petroleum), Hydrotreated Heavy Naphthenic	(CAS No) 64742-52-5	< 1	Not classified
Toluene	(CAS No) 108-88-3	0.159 - 0.636	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304

The exact percentage is a trade secret.

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.

First-aid measures after inhalation : Cough. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Direct contact with the eyes is likely to be irritating. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : Suspected of damaging fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after inhalation : Shortness of breath. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Itching. Red skin. Skin rash/inflammation. Causes skin irritation.

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 harmful if swallowed and enters airways. 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 : Extremely flammable aerosol.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

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. DO NOT fight fire when fire reaches explosives. Evacuate area.

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

Other information : Aerosol level 3.

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

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. Avoid breathing dust,fume,gas,mist,vapor spray.

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.

Methods for cleaning up : Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.

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. Do not spray on an open flame or other ignition source. Obtain special instructions . Do not handle until all safety precautions have been read and understood. Avoid breathing dust,fume,gas,mist,vapor spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash affected areas thoroughly after handling. 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. Remove contaminated clothes. Always wash hands after handling the product. 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.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

Follow Label Directions.

8.1. Control parameters

Diethyl Ether (60-29-7)		
USA ACGIH	ACGIH TWA (mg/m³)	1200
USA ACGIH	ACGIH TWA (ppm)	400 ppm (Ethyl ether; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

USA ACGIH	ACGIH STEL (mg/m³)	1500 mg/m³
USA ACGIH	ACGIH STEL (ppm)	500 ppm

Diethyl Ether (60-29-7)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	1200 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm
Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (mg/m³)	75 mg/m³
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm
n-Heptane (142-82-5)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm (Heptane, all isomers; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA ACGIH	ACGIH STEL (ppm)	500 ppm (Heptane, all isomers; USA; Short time value; TLV - Adopted Value)
Heptane, Branched Cyclic (426260-76-6)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm
Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)		
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³ MIST 8 HOURS
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³ MIST 8 HOURS
Petroleum Gases, Liquefied, Sweetened (68476-86-8)		
USA ACGIH	ACGIH TWA (ppm)	1000 ppm Listed under Aliphatic hydrocarbon gases alkane C1-C4
USA OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Carbon Dioxide, Liquefied, Under Pressure (124-38-9)		
USA ACGIH	ACGIH TWA (mg/m³)	9000 mg/m³
USA ACGIH	ACGIH TWA (ppm)	5000 ppm (Carbon dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA ACGIH	ACGIH STEL (mg/m³)	54000
USA ACGIH	ACGIH STEL (ppm)	30000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	9000 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	5000 ppm

8.2. Exposure controls

Appropriate engineering controls : Local exhaust venilation, vent hoods . Ensure good ventilation of the work station. Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.

Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
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.

9.1. Information on basic physical and chemical properties

Physical state	:	Gas
Appearance	:	Liquid.
Color	:	Colourless to light yellow.
Odor	:	Ether-like odour.
Odor threshold	:	No data available

pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: -31.1 °C (Lowest Component)
Flash point	: -96.23 °C (Lowest Component)
Auto-ignition temperature	: 180 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Poorly soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Heating may cause a fire or explosion.
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

VOC content	: 93.3 %
Gas group	: Compressed gas

10.1. Reactivity

No additional information available

10.2. Chemical stability

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

11.1. Information on toxicological effects

Acute toxicity : Not classified

Diethyl Ether (60-29-7)	
LD50 oral rat	1215 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 1600 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 14200 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	99 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	32000 ppm/4h (Rat)
Toluene (108-88-3)	
LD50 oral rat	5580 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Literature study; 5580 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 5000 mg/kg body weight LD50 quoted as 14.1 mL/kg (12267 mg/kg using density of 0.87)

LC50 inhalation rat (mg/l)	> 28.1 mg/l/4h (Rat; Air, Literature study)
n-Heptane (142-82-5)	
LD50 oral rat	> 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)

n-Heptane (142-82-5)	
LD50 dermal rabbit	> 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across)
LC50 inhalation rat (mg/l)	103 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	25000 ppm/4h (Rat; Literature study)
Heptane, Branched Cyclic (426260-76-6)	
LD50 oral rat	> 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across)
LC50 inhalation rat (mg/l)	103 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	25000 ppm/4h (Rat; Literature study)
Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)	
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg body weight
LC50 inhalation rat (mg/l)	> 5.2 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Toluene (108-88-3)	
IARC group	3
Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)	
IARC group	3

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms

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

Symptoms/injuries after inhalation : Shortness of breath. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Itching. Red skin. Skin rash/inflammation. Causes skin irritation.

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 harmful if swallowed and enters airways. May be fatal if swallowed and enters airways.

12.1. Toxicity

Diethyl Ether (60-29-7)	
LC50 fish 2	2560 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 2	1380 mg/l (EC50; 48 h)
n-Heptane (142-82-5)	
EC50 Daphnia 1	0.2 mg/l (LC50; Other; 96 h; Chaetogammarus marinus; Semi-static system; Salt water; Experimental value)
Carbon Dioxide, Liquefied, Under Pressure (124-38-9)	
LC50 fish 1	35 mg/l (LC50; 96 h; Salmo gairdneri)

12.2. Persistence and degradability	
JOHNSEN'S 50% STARTING FLUID 7.2 OZ.	
Persistence and degradability	Not established.
Diethyl Ether (60-29-7)	

Persistence and degradability	Not readily biodegradable in water. No (test)data on mobility of the substance available. Reacts with air.
Biochemical oxygen demand (BOD)	0.03 g O_2 /g substance
Chemical oxygen demand (COD)	0.026 g O_2 /g substance (KMnO4)
ThOD	2.60 g O_2 /g substance
BOD (% of ThOD)	0.012

Toluene (108-88-3)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	2.15 g O_2 /g substance
Chemical oxygen demand (COD)	2.52 g O_2 /g substance
ThOD	3.13 g O_2 /g substance
BOD (% of ThOD)	0.69
n-Heptane (142-82-5)	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Low potential for adsorption in soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	1.92 g O_2 /g substance
Chemical oxygen demand (COD)	0.06 g O_2 /g substance
ThOD	3.52 g O_2 /g substance
BOD (% of ThOD)	> 0.5 (5 days; Literature study)
Heptane, Branched Cyclic (426260-76-6)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Petroleum Gases, Liquefied, Sweetened (68476-86-8)	
Persistence and degradability	Not established.
Carbon Dioxide, Liquefied, Under Pressure (124-38-9)	
Persistence and degradability	Biodegradability: not applicable. Not applicable (gas).
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

JOHNSEN'S 50% STARTING FLUID 7.2 OZ.	
Bioaccumulative potential	Not established.
Diethyl Ether (60-29-7)	
BCF fish 1	0.9 - 9.1 (BCF)
Log Pow	0.82 - 0.89 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Toluene (108-88-3)	
BCF fish 2	90 (BCF; 72 h; Leuciscus idus; Static system; Fresh water)
Log Pow	2.73 (Experimental value; Other; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
n-Heptane (142-82-5)	
BCF other aquatic organisms 1	552 (BCF; BCFBAF v3.00)
Log Pow	4.66 (Experimental value; 4.5; Literature study)
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).
Heptane, Branched Cyclic (426260-76-6)	
Bioaccumulative potential	Not established.
Petroleum Gases, Liquefied, Sweetened (68476-86-8)	
Bioaccumulative potential	Not established.
Carbon Dioxide, Liquefied, Under Pressure (124-38-9)	
Log Pow	0.83 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

Diethyl Ether (60-29-7)	
Surface tension	0.017 N/m (20 °C)
Toluene (108-88-3)	
Surface tension	0.03 N/m (20 °C)
n-Heptane (142-82-5)	
Surface tension	0.019 N/m (25 °C; 0.020 N/m; 20 °C)
Log Koc	log Koc,SRC PCKOCWIN v2.0; 2.38; Calculated value

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. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information : Flammable vapors may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

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

US DOT (ground): UN1950, Aerosols, 2.1, Limited Quantity

ICAO/IATA (air): UN1950, Aerosols, 2.1 , Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1 (Marine Pollutant-Heptane), Limited Quantity

Special Provisions: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Aerosols
flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)

Transport hazard class(es) (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas

DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Packaging Non Bulk (49 CFR 173.xxx) : 304

DOT Packaging Bulk (49 CFR 173.xxx) : None

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.

DOT Vessel Stowage Other : 48 - Stow ‘‘away from’’ sources of heat,87 - Stow ‘‘separated from’’ Class 1 (explosives) except Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials

Subsidiary risks (IMDG) : Marine Pollutant-Heptane

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)

: Forbidden

: 150 kg

15.1. US Federal regulations

JOHNSEN'S 50% STARTING FLUID 7.2 OZ.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard Sudden release of pressure hazard
Diethyl Ether (60-29-7)	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard

Toluene (108-88-3)	
Subject to reporting requirements of United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard
Heptane, Branched Cyclic (426260-76-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
Distillates (Petroleum), Hydrotreated Heavy Naphthenic **(64742-52-5)**	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
Petroleum Gases, Liquefied, Sweetened (68476-86-8)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Sudden release of pressure hazard
Carbon Dioxide, Liquefied, Under Pressure (124-38-9)	
SARA Section 311/312 Hazard Classes	Sudden release of pressure hazard Immediate (acute) health hazard

15.2. International regulations

CANADA

JOHNSEN'S 50% STARTING FLUID 7.2 OZ.	
WHMIS Classification	Class B Division 5 - Flammable Aerosol
Toluene (108-88-3)	
Listed on the Canadian DSL (Domestic Sustances List)	
WHMIS Classification	Class B Division 2 - Flammable Liquid 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
Heptane, Branched Cyclic (426260-76-6)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

Toluene (108-88-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Heptane, Branched Cyclic (426260-76-6)

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

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

Carc.Cat.1; R45
Muta.Cat.2; R46
F+; R12
Xn; R22
Xi; R38
R19

Full text of R-phrases: see section 16

15.2.2. National regulations

Heptane, Branched Cyclic (426260-76-6)

All components are either listed on the US TSCA Inventory, or are not regulated under TSCA under 40 CFR 720.30.

15.3. US State regulations

JOHNSEN'S 50% STARTING FLUID 7.2 OZ.	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive	No

Toxicity - Female	
U.S. - California - Proposition 65 - Reproductive	No

JOHNSEN'S 50% STARTING FLUID 7.2 OZ.				
Toxicity - Male				
State or local regulations		U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)		
Diethyl Ether (60-29-7)				
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	No significant risk level (NSRL)
No	No	No	No	
Toluene (108-88-3)				
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	No significant risk level (NSRL)
No	Yes	Yes	No	
n-Heptane (142-82-5)				
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	No significant risk level (NSRL)
No	No	No	No	
Heptane, Branched Cyclic (426260-76-6)				
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	No significant risk level (NSRL)
No	No	No	No	
Distillates (Petroleum), Hydrotreated Heavy Naphthenic **(64742-52-5)**				
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	No significant risk level (NSRL)
No	No	No	No	
Petroleum Gases, Liquefied, Sweetened (68476-86-8)				
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	No significant risk level (NSRL)
No	No	No	No	
Carbon Dioxide, Liquefied, Under Pressure (124-38-9)				
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	No significant risk level (NSRL)
No	No	No	No	
Diethyl Ether (60-29-7)				
State or local regulations				
U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)				
Toluene (108-88-3)				
State or local regulations				
U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL) U.S. - New Jersey - Special Health Hazards Substances List New Jersey Right-to-Know U.S. - Massachusetts - Right To Know List Rhode Island Right to Know U.S. - Michigan - Critical Materials List U.S. - New Jersey - Environmental Hazardous Substances List U.S. - Illinois - Toxic Air Contaminants U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List				

Petroleum Gases, Liquefied, Sweetened (68476-86-8)
State or local regulations
New Jersey Right-to-Know Minnesota Right-to-Know Rhode Island Right to Know U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List

Other information : None.
Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Compressed gas	Gases under pressure Compressed gas
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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 : 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

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	: 4 Severe Hazard
Physical	: 1 Slight Hazard
Personal Protection	: B

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 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 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

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.