Safety Data Sheet

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

Revision date: 08/04/2014

Version:

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

Product identifier 1.1.

Product form

: Mixture

Trade name

1ST AYD STARTING FLUID 25% 10.7 OZ

Product code

1-11

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

Use of the substance/mixture

: Starting Fluid

Details of the supplier of the safety data sheet

FIRST AYD CORPORATION 1325 GATEWAY DRIVE **ELGIN.IL 60123** T 800-422-3033

Emergency telephone number

Emergency number

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

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1.

Classification (GHS-US)

Flam, Aerosol 1 Compressed gas H280 H315 Skin Irrit. 2 H340 Muta. 1B Carc. 1A H350 H361 Repr. 2 STOT SE 3 H336 STOT RE 2 H373

Full text of H-phrases: see section 16

Label elements 2.2.

GHS-US labeling

Hazard pictograms (GHS-US)



GHS02





GHS04

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

H340 - May cause genetic defects

H350 - May cause cancer

H361 - Suspected of damaging fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

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

P260 - Do not breathe dust,fumes,gas,mist,vapor spray 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.

P314 - Get medical advice/attention if you feel unwell P321 - Specific treatment: See section 4.1 on SDS

P332+P313 - If skin irritation occurs: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

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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

: Contains gas under pressure; may explode if heated.

Unknown acute toxicity (GHS-US) 2.4.

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2, Mixture

Name	Product identifier	%	Lou-ist in in-
Heplane, Branched Cyclic	(CAS No) 426260-76-6	44.64 - 46.5	Classification (GHS-US) Flam. Liq. 1, H224 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304
Diethyl Ether	(CAS No) 60-29-7	10 - 30	Aqualic Chronic 3, H412 Flam. Liq. 1, H224
Petroleum Gases, Liquefied, Sweetened	(CAS No) 68476-86-8	10 - 30	Acute Tox. 4 (Oral), H302 Flam. Gas 1, H220
Heplane	(6)		Flam. Liq. 1, H224 Muta. 1B, H340 Carc. 1A, H350
Carbon Dioxide, Liquefied, Under Pressure	(CAS No) 142-82-5	11.625 - 20.925	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Toluene	(CAS No) 124-38-9	5 - 10	Compressed gas, H280
Distillator (Petroloum) United	(CAS No) 108-88-3	0.465 - 1.86	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
Distifiates (Petroleum), Hydrotreated Heavy Naphthenic	(CAS No) 64742-52-5	<1	Not classified

SECTION 4: First aid measures

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 to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact

Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation

First-aid measures after eye contact

First-aid measures after ingestion

occurs: Get medical advice/attention. Specific treatment: See section 4.1 on SDS. 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.

: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries

: May cause genetic defects. Suspected of damaging fertility or the unborn child. Causes damage

Symptoms/injuries after inhalation

: Shortness of breath. May cause cancer by inhalation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact

: Causes skin irritation.

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

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

: Extremely flammable aerosol.

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Explosion hazard

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

Advice for firefighters 5.3.

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.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures

No naked lights. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove

ignition sources. Use special care to avoid static electric charges.

For non-emergency personnel 6.1.1.

Protective equipment

: Gloves, Safety glasses.

Emergency procedures

: Evacuate unnecessary personnel.

For emergency responders

Protective equipment

Equip cleanup crew with proper protection. Avoid breathing dust, fume, gas, mist, vapor spray.

: Ventilate area. Emergency procedures

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

For containment

: Dam up the liquid spill.

Methods for cleaning up

: Store away from other materials.

Reference to other sections 6.4.

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

Precautions for safe handling

Additional hazards when processed

: Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn,

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. Eliminate all ignition sources if safe to do so. Avoid breathing dust, furne, gas, mist, vapor spray. Use only outdoors or in

a well-ventilated area.

Hygiene measures

: Wash affected areas thoroughly after handling.

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: ignition sources, heat sources. Store in a well-ventilated place.

Storage area

Specific end use(s) 7.3.

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

Control parameters 8.1.

Diethyl Ether (60-29-7	7)		
USA ACGIH	ACGIH TWA (mg/m³)	1200	
JSA ACGIH	ACGIH TWA (ppm)	400 ppm	
JSA ACGIH	ACGIH STEL (mg/m³)	1500 mg/m³	
JSA ACGIH	ACGIH STEL (ppm)	500 ppm	
USA OSHA	OSHA PEL (TWA) (mg/m³)	1200 mg/m³	

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Diethyl Ether (60-29-	7)	-guiation's	
USA OSHA	OSHA PEL (TWA) (ppm)		
	1 7 7 4 4 5 1 1 1	400 ppm	
Toluene (108-88-3)			
USA ACGIH	ACGIH TWA (mg/m³)		
USA ACGIH	ACGIH TWA (ppm)	75 mg/m³	
USA OSHA		20 ppm	
	OSHA PEL (TWA) (ppm)	200 ppm	·
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm	
Heptane (142-82-5)			
USA ACGIH	ACGIH TWA (ppm)	400 ppm	
ICA ACCILL	**************************************	400 ppn	

reptane (142-82-5)		
USA ACGIH	ACGIH TWA (ppm)	
LICA ACOUL		400 ppm
	ACGIH STEL (ppm)	400 ppm
Heptane, Branched Cyclic /	430000 TO 0	

Heptane, Branched	Cyclic (426260-76-6)	
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA OSHA	ACGIH STEL (ppm)	500 ppm
	OSHA PEL (TWA) (ppm)	500 ppm
Distillates (Petroleus	m). Hydrotreated Heavy New Market	

	Distillates (Petroleum), Hydr	otreated Heavy Naphthenic (64742-52-5)		
	UOA COUL	ACGIH TWA (mg/m³)	5 mg/m³ MIST 8 HOURS	
1			5 mg/m³ MIST 8 HOURS	
- 1	Petroleum Gasos Liquotical	0		

Petroleum Gases, Li	quefied, Sweetened (68476-86-8)	
USA ACGIH	ACGIH TWA (ppm)	1000 ppm Listed under Aliphatic hydrocarbon gases
USA OSHA	OSHA PEL (TWA) (mg/m³)	aixaile C1-C4
USA OSHA	OSHA PEL (TWA) (ppm)	1800 mg/m³
	OSTATEE (TVVA) (ppm)	1000 ppm
Carbon Dioxide Ligg	efied Under December 1464 and	

SA ACGIH	uefied, Under Pressure (124-38-9) ACGIH TWA (mg/m²)	
JSA ACGIH	· · · · · · · · · · · · · · · · · · ·	9000 mg/m³
	ACGIH TWA (ppm)	5000 ppm
USA ACGIH	ACGIH STEL (mg/m³)	
USA ACGIH	ACGIH STEL (ppm)	54000
USA OSHA		30000 ppm
	OSHA PEL (TWA) (mg/m³)	9000 mg/m³
JSA OSHA	OSHA PEL (TWA) (ppm)	9000 tillitus
2. Exposure cor	1 - 20 WILLE (IVVA) (ppm)	5000 ppm

Exposure controls

Appropriate engineering controls

: Local exhaust venilation, vent hoods.

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

Other information

: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties 9.1.

Physical state

: Gas

Appearance

: Colorless to pale yellow liquid.

Color

: Colourless to light yellow.

Odor

: Sweet.

Odor threshold

: No data available

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

: No data available Freezing point : -42 °C (LOWEST COMPONENT)

Boiling point -23 °C Flash point

: 180 °C (LOWEST COMPONENT) Auto-ignition temperature

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

Relative vapor density at 20 °C : > 1.5

: No data available Relative density : Poorly soluble in water. Solubility : No data available Log Pow : No data available Log Kow : No data available Viscosity, kinematic No data available Viscosity, dynamic

: Heating may cause an explosion. Heating may cause a fire. Explosive properties

: No data available Oxidizing properties : No dala available Explosive limits

Other information 9.2.

: 93.3 % CARB METHOD 310 VOC content

SECTION 10: Stability and reactivity

Reactivity 10.1.

No additional information available

Chemical stability 10.2.

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

Possibility of hazardous reactions 10.3.

Not established.

Conditions to avoid 10.4.

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

Incompatible materials 10.5.

Strong acids. Strong bases.

Hazardous decomposition products 10.6.

Toxic fume. . Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

Acute toxicity

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: Not classified

Diethyl Ether (60-29-7)	4000
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)

-	leptane (142-82-5) D50 oral rat	> 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)	
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	7) March 25, 2012 / Rules and Regulations
Heptane (142-82-5)	
LD50 dermal rabbit LC50 inhalation rat (mg/l) LC50 inhalation rat (ppm)	> 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across) 103 mg/l/4h (Rat; Literature study) 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) LC50 inhalation rat (ppm)	103 mg/l/4h (Rat; Literature study)
	25000 ppm/4h (Rat; Literature study)
Distillates (Petroleum), Hydrotreated	J Heavy Naphthenic (64742-52-5)
LD50 oral rat LD50 dermal rabbit	> 5000 mg/kg body weight
LC50 inhalation rat (mg/l)	> 2000 mg/kg body weight
Skin corrosion/irritation	> 5.2 mg/l/4h
Own concentration	Causes skin irritation

Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation Not classified Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : May cause genetic defects. Carcinogenicity : May cause cancer.

Toluene (108-88-3)
IARC group 3
Distillates (Petroleum). Hydrotreated Hogas Northbard (Orthon

Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5) IARC group 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

: May cause damage to organs through prolonged or repeated exposure. exposure)

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 cancer by inhalation. May cause drowsiness or dizziness. Symptoms/injuries after skin contact : Causes skin irritation.

SECTION 12: Ecological information

12.1. Toxicity	
Diethyl Ether (60-29-7)	
LC50 fish 1	> 10000 ppm (00 t. I.
EC50 Daphnia 1	> 10000 ppm (96 h; Lepomis macrochirus)
LC50 fish 2	165 mg/l (24 h; Daphnia magna)
EC50 Daphnia 2	2560 mg/l (96 h; Pimephales promelas)
TLM fish 1	1380 mg/l (48 h; Daphnia magna)
TLM other aquatic organisms 1	> 1000 mg/l (96 h; Pisces)
	> 1000 mg/l (96 h)
Toluene (108-88-3)	
LC50 fish 1	24 mg/l 96 h; Salma gairda ai (O.
EC50 Daphnia 1	24 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
LC50 fish 2	84 mg/l (24 h; Daphnia magna; Locomotor effect)
EC50 Daphnia 2	13 mg/l (96 h; Lepomis macrochirus)
Threshold limit algae 1	11.5 - 19.6 mg/l (48 h; Daphnia magna)
Threshold limit algae 2	> 400 mg/l (168 h; Scenedesmus quadricauda; Toxicity test)
	105 mg/l (192 h; Microcystis aeruginosa)
Heptane (142-82-5)	
LC50 fish 1	375 mg/l (96 h; Tilapia mosambica; Nominal concentration)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
EC50 Daphnia 1	1.5 mg/l (48 h; Daphnia magna)
I C60 feb 2	

Heptane (142-82-5)	
LC50 fish 1 LC50 other aquatic organisms 1 EC50 Daphnia 1 LC50 fish 2 TLM fish 1	375 mg/l (96 h; Tilapia mosambica; Nominal concentration) > 1000 mg/l (96 h) 1.5 mg/l (48 h; Daphnia magna) > 100 mg/l (96 h; Oncorhynchus kisutch)
01/12/2014	4924 mg/l (48 h; Gambusia affinis) EN (English US)

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Salety Data Officer	Deputations
" To Federal Deviator (Mol. 77, No. 58 /	Monday, March 26, 2012 / Rules and Regulations
according to Federal Register 7 vol. 71, 110, 507	Inorrady, men = 1

eptane (142-82-5)	ACCOUNT (ACCOUNT)
nreshold limit other aquatic organisms 1	> 1000 mg/l (96 h) > 200 mg/l (Scenedesmus quadricauda; Toxicity test)
rreshold fimit algae 1	> 200 mg/l (Scenedestrius quadricatura, Toxicity tost) 1.5 mg/l (8 h; Algae; Photosynthesis)
hreshold limit algae 2	
arbon Dioxide, Liquefied, Under Pressure	(124-38-9)
C50 fish 1	1 35 mg/l 196 h: Salmo galiditeli (Oliconi) fichida in yilisay, zadialy
C50 fish 2	60 - 240 mg/l (12 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal)
2. Persistence and degradability	
2. Persistence and degradability ST AYD STARTING FLUID 25% 10.7 OZ.	
	Not established.
Persistence and degradability	
Diethyl Ether (60-29-7)	Not readily biodegradable in water. No (test)data on mobility of the substance available.
Persistence and degradability	Reacts with air.
1 (BOD)	0.03 g O ₂ /g substance
Biochemical oxygen demand (BOD)	0.026 g O ₂ /g substance (KMnO4)
Chemical oxygen demand (COD)	2.60 g O ₂ /g substance
ThOD	0.012 % ThOD
3OD (% of ThOD)	
Toluene (108-88-3)	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Persistence and degradability	Readily blodegradable in water, blodegradable in the com, con position
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 0.69 % ThOD
BOD (% of ThOD)	0.03 % 11100
Heptane (142-82-5)	" A death a late the soil
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Adsorbs into the soil.
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)	> % ThOD (5 day(s)) > 0.5
Heptane, Branched Cyclic (426260-76-6)	May cause long-term adverse effects in the environment.
Persistence and degradability	
Petroleum Gases, Liquefied, Sweetened	(68476-86-8)
Persistence and degradability	Not established.
Carbon Dioxide, Liquefied, Under Press	ure (124-38-9)
Persistence and degradability	Biodegradability: not applicable. No (lest)data on mobility of the education
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
	Not established.
1ST AYD STARTING FLUID 25% 10.7 OZ	
1ST AYD STARTING FLUID 25% 10.7 OZ Bioaccumulative potential	
Bioaccumulative potential	
	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks)
Diethyl Ether (60-29-7) BCF fish 1 Log Pow	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential Toluene (108-88-3)	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential Toluene (108-88-3) BCF fish 1	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value) Low potential for bioaccumulation (BCF < 500). 13.2 (Anguilla japonica) 90 (72 h; Leuciscus idus)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential Toluene (108-88-3) BCF fish 1 BCF fish 2	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value) Low potential for bioaccumulation (BCF < 500). 13.2 (Anguilla japonica) 90 (72 h; Leuciscus idus) 380 (24 h; Chlorella sp.; Fresh weight)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential Toluene (108-88-3) BCF fish 1 BCF fish 2 BCF other aquatic organisms 1	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value) Low potential for bioaccumulation (BCF < 500). 13.2 (Anguilla japonica) 90 (72 h; Leuciscus idus) 380 (24 h; Chlorella sp.; Fresh weight) 4,2 (Mytilus edulis; Fresh weight)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential Toluene (108-88-3) BCF fish 1 BCF fish 2 BCF other aquatic organisms 1 BCF other aquatic organisms 2	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value) Low potential for bioaccumulation (BCF < 500). 13.2 (Anguilla japonica) 90 (72 h; Leuciscus idus) 380 (24 h; Chlorella sp.; Fresh weight) 4.2 (Mytilus edulis; Fresh weight) 2.73 (Experimental value; Other, 20 °C)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential Toluene (108-88-3) BCF fish 1 BCF fish 2 BCF other aquatic organisms 1 BCF other aquatic organisms 2 Log Pow	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value) Low potential for bioaccumulation (BCF < 500). 13.2 (Anguilla japonica) 90 (72 h; Leuciscus idus) 380 (24 h; Chlorella sp.; Fresh weight) 4,2 (Mytilus edulis; Fresh weight)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential Toluene (108-88-3) BCF fish 1 BCF fish 2 BCF other aquatic organisms 1 BCF other aquatic organisms 2 Log Pow Bioaccumulative potential	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value) Low potential for bioaccumulation (BCF < 500). 13.2 (Anguilla japonica) 90 (72 h; Leuciscus idus) 380 (24 h; Chlorella sp.; Fresh weight) 4.2 (Mytilus edulis; Fresh weight) 2.73 (Experimental value; Other, 20 °C)
Bioaccumulative potential Diethyl Ether (60-29-7) BCF fish 1 Log Pow Bioaccumulative potential Toluene (108-88-3) BCF fish 1 BCF fish 2 BCF other aquatic organisms 1 BCF other aquatic organisms 2 Log Pow	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) 0.82 - 0.89 (Experimental value) Low potential for bioaccumulation (BCF < 500). 13.2 (Anguilla japonica) 90 (72 h; Leuciscus idus) 380 (24 h; Chlorella sp.; Fresh weight) 4.2 (Mytilus edulis; Fresh weight) 2.73 (Experimental value; Other, 20 °C)

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Heptane (142-82-5)		
Log Pow	4 66 (Experimental value 4.5.4)	
Bioaccumulative potential	4.66 (Experimental value; 4.5; Literature)	
	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).	
Heptane, Branched Cyclic (426260-	76-6)	
Bioaccumulative potential	Not established.	
Potrolous O		
Petroleum Gases, Liquefied, Sweete	ned (68476-86-8)	
Bioaccumulative potential	Not established.	
Carbon Diovido Liguadia I II I		
Carbon Dioxide, Liquefied, Under Pr	essure (124-38-9)	
Log Pow	0.83 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
2.4. Mobility in soil	Log Kow < 4).	

Surface tension	0.017 N/m (20 °C)	
Toluene (108-88-3)		
Surface tension	0.03 N/m (20 °C)	
Heptane (142-82-5)		
Surface tension	0.020 N/m (20 °C)	

Other information

: Avoid release to the environment.

SECTION 13: Disposal considerations

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.

SECTION 14: Transport information

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

US DOT (ground):

UN1950, Aerosols, 2.1, Limited Quantity

ICAO/IATA (air): IMO/IMDG (water):

UN1950, Aerosols, 2.1, Limited Quantity UN1950, Aerosols, 2.1, Limited Quantity

Special Provisions:

Hazard labels (DOT)

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

UN proper shipping name

Proper Shipping Name (DOT)

: Aerosols

flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)

Department of Transportation (DOT) Hazard

: 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

: 2.1 - Flammable gas



DOT Special Provisions (49 CFR 172.102)

DOT Packaging Exceptions (49 CFR 173.xxx)

: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols. 306

DOT Packaging Non Bulk (49 CFR 173.xxx)

: 304 : None

DOT Packaging Bulk (49 CFR 173.xxx)

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.

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

Air transport

DOT Quantity Limitations Passenger aircraft/rail : Forbidden

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

SECTION 15: Regulatory information

15.1. US Federal regulations

1ST AYD STARTING FLUID 25% 10.7 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)		
04.D.4. 0 - 15 044/040 (Innered Classes)	Delayed (chronic) health hazard	

SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard
t	

Toluene (108-88-3) Listed on United States SARA Section 313

Listed on the United States TSCA (Toxic Substances Control Act) inventory

0,40,000,000	Delayed (chronic) health hazard Fire hazard
	Immediate (acute) health hazard

Heptane, Branched Cyclic (426260-76-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Fire hazard SARA Section 311/312 Hazard Classes Immediate (acute) health hazard Delayed (chronic) health hazard

Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)		aphthenic (64742-52-5)	
1	SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	

Petroleum Gases.	Liquefied.	Sweetened ((68476-86-8)

- 1	Lettotenut cases, Fidaction, etteriore (1-1	
	SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
		Fire hazard
ĺ		Sudden release of pressure hazard

15.2. International regulations

CANADA	
1ST AYD STARTING FLUID 25% 1	0.7 OZ.
WHMIS Classification	Class B Division 5 - Flammable Aerosol Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Toluene (108-88-3)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Heptane, Branched Cyclic (42626	0-76-6)
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

		٦
١	Toluene (108-88-3)	ᅱ
1	Listed on the FEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	J

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

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Repr.Cat.3; R63

F+: R12 Xn; R22

Xi; R38

R19

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

Yes
U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

Τo	luene	(108	-88-31

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

SECTION 16: Other information

Training advice

: Ensure operators understand the flammability hazard. Ensure operators understand the hazard of oxygen enrichment. Receptacle under pressure.

: None.

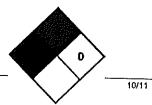
Other information

Full text of H-phrases: see section 16:

The state of the s	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquati-
Aquatic Chronic 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 1
Asp. Tox. 1	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 1A	Aspiration hazard Category 1
Compressed gas	Carcinogenicity Category 1A
Flam. Aerosol 1	Gases under pressure Compressed gas
Flam. Gas 1	Flammable aerosol Category 1
Flam. Liq. 1	Flammable gases Category 1
Flam. Liq. 2	Flammable liquids Category 1
Muta. 1B	Flammable liquids Category 2
Repr. 2	Germ cell mutagenicity Category 1B
Skin Irrit, 2	Reproductive toxicity Category 2
STOT RE 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (repeated exposure) Category 2
H220	Specific target organ toxicity (single exposure) Category 3
H222	Extremely flammable gas
H224	Extremely flammable aerosol
H225	Extremely flammable liquid and vapor
H280	Highly flammable liquid and vapor
H302	Contains gas under pressure; may explode if heated
H304	Harmful if swallowed
H315	May be fatal if swallowed and enters airways
H336	Causes skin irritation
	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to assess the unborn child
	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.



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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 Commission. All closures have been lested in accordance with the above. The date of manufacture is stamped on the product

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