

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier **AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL**

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

Uses: Unleaded piston engine fuel for aircraft engines.

Not to be used for: None specified

1.3. Details of the supplier of the safety data sheet

Company Identification

Address and Telephone No.

Hjelmco Oil AB

Runskogsvägen 4B

192 48 SOLLENTUNA

Sweden

Tel: +46 (0)8-626 93 86

Fax: +46 (0)8-626 94 16

Lars Hjelmberg

hjelmco.oil@mailbox.swipnet.se

www.hjelmco.com

Contact

E-mail:

Web-site

1.4. Emergency telephone number

Acute: 112 (Poison information centre)

Non-acute: +46 8-33 12 31 (Office hours)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Extremely flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

CLP Classification	DPD Classification
Flammable Liquid Category 2 – H225 Aspiration Hazard Category 1 - H304 Skin Irritation Category 2 - H315 STOT SE Category 3 - H336 Repro. Toxic Category 2 - H361 STOT RE Category 2 - H373 Aquatic Chronic Category 1 - H410 For full wording of Hazard statements see Section 16	F, Xn, N – R11-38-48/20-63-65-67-50/53 - For full wording of Risk phrases see Section 16

2.2. Label elements

DANGER Contains: 2,2,4-Trimethylpentane, Iso-pentane, Toluene, 2,3,4-Trimethylpentane, 2,3,3-Trimethylpentane and n-Hexane.



H225 - Highly flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

Product AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL

Page: 2 of 13

Supersedes: Version 2 Dated 22.01.2011

Version: 3

Date Prepared: 25 February 2011

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.
H410 - Very toxic to aquatic life with long lasting effects.

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.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331 - Do NOT induce vomiting.

2.3. Other hazards

May be irritating to eyes.
Does not fulfil the criteria for classification as PBT or vPvB.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous component(s)
Under CLP EC1272/2008

Ingredient	CAS/EC Number	REACH Registration Number	%	CLP Hazard Category	H-Statements
2,2,4-Trimethyl pentane	540-84-1/ 208-759-1	Not yet available	26-40	Flam. Liq. 2	H225
				Asp. Tox. 1	H304
				Skin Irrit. 2	H315
				STOT SE 3	H336
				Aquatic Acute 1	H400
Isopentane**	78-78-4/ 201-142-8	Not yet available	15-25	Aquatic Chronic 1	H410
				Flam. Liq. 1	H224
				Asp. Tox. 1	H304
				STOT SE 3	H336
				Aquatic Chronic 2	H411
Toluene**	108-88-3/ 203-625-9	Not yet available	0-25		EUH066
				Flam. Liq. 2	H225
				Repr. 2	H361d
				Asp. Tox. 1	H304
				STOT RE 2	H373
2,3,4-Trimethyl pentane	565-75-3/ 209-292-6	Not yet available	0-13	Skin Irrit. 2	H315
				STOT SE 3	H336
				Flam. Liq. 2	H225
				Asp. Tox. 1	H304
				Skin Irrit. 2	H315
2,3,3-Trimethyl pentane	560-21-4/ 209-207-2	Not yet available	0-10	STOT SE 3	H336
				Aquatic Acute 1	H400
				Aquatic Chronic 1	H410
				Flam. Liq. 2	H225
				Asp. Tox. 1	H304
				Skin Irrit. 2	H315
				STOT SE 3	H336
				Aquatic Acute 1	H400
				Aquatic Chronic 1	H410

Product **AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL** **Page:** 3 of 13
Supersedes: Version 2 Dated 22.01.2011 **Version:** 3 **Date Prepared:** 25 February 2011

n-Hexane**	110-54-3/ 203-777-6	Not yet available	0-<5	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2	H225 H361f H304 H373 H315 H336 H411
m-Xylene**	108-38-3/ 203-576-3	Not yet available	0-4.3	Flam Liq. 3 Acute Tox4 Acute Tox4 Skin Irrit. 2	H226 H332 H312 H315
o-Xylene**	95-47-6/ 203-396-5	Not yet available	0-2.2	Flam Liq. 3 Acute Tox4 Acute Tox4 Skin Irrit. 2	H226 H332 H312 H315
p-Xylene**	106-42- 3/202-422- 2	Not yet available	0-1.9	Flam Liq. 3 Acute Tox4 Acute Tox4 Skin Irrit. 2	H226 H332 H312 H315
Ethyl benzene**	100-41-4/ 202-849-4	Not yet available	0-1.6	Flam. Liq. 2 Acute Tox. 4	H225 H332
Benzene**	71-43-2/ 200-753-7	Not yet available	0-10 ppm	Flam. Liq. 2 Carc. 1A Muta. 1B STOT RE 1 Asp. Tox. 1 Eye Irrit. 2 Skin Irrit. 2	H225 H350 H340 H372 H304 H319 H315

For full wording of H-statements see Section 16.

** Subject to EU exposure limit – See Section 8.

Under DPD EC1999/45

Ingredient	CAS/EC Number	REACH Registration Number	%	Symbol	Risk Phrases
2,2,4- Trimethyl pentane	540-84-1/ 208-759-1	Not yet available	26-40	F, Xn, N	R11-38-65-67- 50/53
Isopentane**	78-78-4/ 201-142-8	Not yet available	15-25	F+, Xn, N	R12-65-66-67- 51/53
Toluene**	108-88-3/ 203-625-9	Not yet available	0-25	F, Xn	R11-38-48/20-63- 65-67
2,3,4- Trimethyl pentane	565-75-3/ 209-292-6	Not yet available	0-13	F, Xn, N	R11-38-65-67- 50/53
2,3,3- Trimethyl pentane	560-21-4/ 209-207-2	Not yet available	0-10	F, Xn, N	R11-38-65-67- 50/53
n-Hexane**	110-54-3/ 203-777-6	Not yet available	0-<5	F, Xn, N	R11-38-48/20-62- 65-67-51/53
m-Xylene**	108-38-3/ 203-576-3	Not yet available	0-4.3	Xn	R10-20/21-38
o-Xylene**	95-47-6/ 203-396-5	Not yet available	0-2.2	Xn	R10-20/21-38

Product **AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL** Page: 4 of 13
 Supersedes: Version 2 Dated 22.01.2011 Version: 3 Date Prepared: 25 February 2011

p-Xylene**	106-42-3/202-422-2	Not yet available	0-1.9	Xn	R10-20/21-38
Ethyl benzene**	100-41-4/202-849-4	Not yet available	0-1.6	F, Xn	R11-20
Benzene**	71-43-2/200-753-7	Not yet available	0-10 ppm	F, T	R11-36/38-45-46-48/23/24/25-65

For full wording of Risk phrases see Section 16.

* Subject to EU exposure limit – See Section 8.

SECTION 4. FIRST-AID MEASURES

4.1. Description of first aid measures

Inhalation	Remove patient to fresh air, allow to rest and keep warm. If not breathing, give artificial respiration and seek medical attention.
Skin contact	Remove contaminated clothing, shoes and jewellery and wash before reuse. Wash skin with soap and water for several minutes. Get medical attention if symptoms persist.
Eye contact	Rinse with a gentle stream water for at least 5 minutes. Hold eye lids open. Remove any contact lenses. Get medical attention if symptoms persist.
Ingestion	DO NOT induce vomiting! Rinse mouth out. Give 2 tablespoons cream, ice cream or milk fat to coat the product. Contact a doctor immediately (risk of aspiration into the lungs especially if nausea or irritation are experienced). If the victim vomits, keep head low so that the vomit does not enter the lungs
Personal precautions	Ensure that those giving first aid treatment do not get contaminated by product spills, etc. Wear suitable protective clothing, gloves and eye protection. See also Section 8 for details.

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

May be fatal if swallowed and enters airways. Irritating to skin. Can cause drowsiness or dizziness. Limited evidence of harm to the unborn child. May cause damage to organs through prolonged or repeated exposure.

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

Keep victim warm and quiet. Never give anything by mouth to an unconscious person. In case of doubt or if symptoms persist, seek medical advice. Show this safety data sheet to the duty doctor. Ensure provision of emergency shower and eye wash facilities.

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

- Suitable
- Not to be used

Foam, carbon dioxide or dry powder.
 Do not use water at high pressure, which can spread the fire.

Product **AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL** Page: 5 of 13
Supersedes: Version 2 Dated 22.01.2011 Version: 3 Date Prepared: 25 February 2011

5.2. Special hazards arising from the substance or mixture

Risk of explosion of vapours which are heavier than air and accumulate in depressions or enclosed spaces. Explosion hazard increased due to pressure increase on the product containers or tanks when in the fire. When exposed to heat / fire, produces toxic gases containing CO and CO₂.

5.3. Advice for fire fighters

Keep containers cool with water if exposed to fire due to explosion risk. Remove, immediately if possible, any undamaged containers or tanks out of the danger zone. Eliminate all ignition sources. Wear full protective equipment for chemical fires, including breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact. Use with adequate ventilation. Use appropriate protective equipment, see Section 8. Eliminate all ignition sources.

6.2. Environmental precautions

Prevent from entering sewers or the immediate environment. Contact emergency services if released.

6.3. Methods and material for containment and cleaning up

- on soil

Absorb spillage with inert absorbent such as sand, sawdust or vermiculite. Small spills can be absorbed by paper. Flush contaminated area with water. The waste should be placed in a sealed container and disposed of as hazardous waste in accordance with Section 13.

- on water

Prevent spread of product by using booms, etc and physically recover as much as possible by pumping with flameproof pumps or by absorbing onto suitable inert material as above.

6.4. Reference to other sections

See Section 8 for details of protective equipment.
See Section 13 for details of disposal.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from ignition sources. Take precautionary measures (eg earthing) against static electricity. Ensure adequate ventilation when handling the product. Minimize evaporation and skin contact during handling and movement of product. Avoid breathing vapour. Use personal protective equipment in accordance with Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Store in area suitable for flammable liquid Class 2. Use with adequate ventilation. Take precautions to prevent the discharge into sewers, soil or waterways. The handling and

Product **AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL** Page: 6 of 13
 Supersedes: Version 2 Dated 22.01.2011 Version: 3 Date Prepared: 25 February 2011

storage of flammable liquids usually requires notification or permission from the appropriate authority.

7.3. Specific end use(s)

Fuel for aircraft engines.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational Exposure Levels

EU ILV or IOELV

Isopentane	3000 mg/m ³ (1000 ppm) 8-hour TWA value
Ethylbenzene	442 mg/m ³ (100 ppm) 8-hour TWA value
(skin)	884 mg/m ³ (200 ppm) 15-min TWA value
n-Hexane	72 mg/m ³ (50 ppm) 8-hour TWA value
Toluene	192 mg/m ³ (50 ppm) 8-hour TWA value
(skin)	384 mg/m ³ (100 ppm) 15-min TWA value
Xylene, all isomers	221 mg/m ³ (50 ppm) 8-hour TWA value
(skin)	442 mg/m ³ (100 ppm) 15-min TWA value
Benzene	3.25 mg/m ³ (1 ppm) 8-hour TWA value

Monitoring procedures

None specified

DNEL

None set

PNEC Ingredient

Toluene

74 mg/l aquatic
 8.4 mg/l microbial Nitrification
 1.1 mg/l microbial respiration
 0.26 mg/kg wet weight, soil

8.2. Exposure Controls

Recommended engineering controls

Ensure good ventilation, where possible at local site of handling. Ensure provision of eye wash facilities and emergency shower.

Personal protection

Always check applicability with your supplier of protective equipment.

- Respiratory protection Always use a respirator for continuous operation or whether the current exposure limits might be exceeded. Use respiratory protection against organic vapours. Contact your supplier of protective equipment for more details.
- Skin protection Wear protective clothing to prevent contact with skin. Contact your supplier of protective equipment for more details.
- Eye protection Not normally required. However, where splashing in the eyes is possible wear safety glasses or goggles.
- Hand protection Always wear protective gloves for direct contact.

Chemical protection of 4-8 hours: eg nitrile rubber, polyvinyl alcohol (PVA), 4H, responder.

Chemical Protection <1 hour: eg butyl rubber, natural rubber, neoprene, PVC or Viton. Contact your supplier of protective equipment for more details.

Product AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL

Page: 7 of 13

Supersedes: Version 2 Dated 22.01.2011

Version: 3

Date Prepared: 25 February 2011

Note: Break-through times can vary depending on thickness, use and source. Change gloves regularly.

- General hygiene

Do not eat, drink, or smoke while using this product. Immediately take off any contaminated clothing and launder before re-use. Wash hands and / or face before breaks and at the end of the shift. After the session, wash the skin and apply skin cream.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Colourless, brown or orange, low viscosity liquids
Odour	Hydrocarbon
Odour Threshold Value:	Not established
pH (concentrated product)	Not applicable
Melting point (°C)	< -60
Boiling point/range (°C)	> 35 ≤ 170
Flash point (°C)	< -40
Evaporation rate	Not determined
Flammability	Highly flammable liquid
Explosive properties/limits	Lower: 1.4 vol%, Upper: 7.6 vol%
Vapour pressure (kPa at 38°C)	38-49 kPa (water = 6.5 kPa)
Vapour density	> 3 (Air = 1)
Density at 15°C (g/cm ³)	Approximately 0.72
Solubility in water	Poorly soluble (toluene, 100 mg/l at 20°C)
Solubility in solvents	Soluble
Partition coefficient (log P _{OW})	Not determined for product (naphtha hydrocarbons = 2-7)
Auto-ignition temperature (°C)	> 400
Decomposition temperature (°C)	Not determined
Viscosity (mm ² /s at 7.8°C)	<1.5 (water = 0.6)
Oxidising properties	None

9.2. Other information

Note: These are typical values and do not constitute a specification.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable product under recommended storage and handling conditions.

10.2. Chemical stability

Stable product under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Stable product under recommended storage and handling conditions.

10.4. Conditions to avoid

Avoid contact with sources of ignition, static electricity and sparks.

Product **AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL** Page: 8 of 13
 Supersedes: Version 2 Dated 22.01.2011 Version: 3 Date Prepared: 25 February 2011

10.5. Incompatible materials

Strong oxidising agents and acids.

10.6. Hazardous decomposition products

Dangerous gases including carbon oxides can form in the fire.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data available on mixture. Data based on individual components shown below:

(a) acute toxicity

- Isopentane LC₅₀ Inhalation Mouse 2h: > 419 mg/l.
In high concentrations, can affect the central nervous system.
- Toluene LD₅₀ Oral Rat: > 2600 mg/kg body weight (not classified as hazardous)
LC₅₀ Inhalation Rat 4h: 15 mg/l (not classified as hazardous)
LD₅₀ Dermal Rat: 12124 mg/kg body weight (not classified as hazardous)
LD₅₀ Dermal Rabbit: 12300 mg/kg body weight (not classified as hazardous)
LD_{Lo} Oral Man 50 mg/kg. (ADI 20.3 mg/person).
Damages the nervous system in humans.
- n-Hexane LD₅₀ Oral Rat: 15000 mg/kg body weight (not classified as hazardous)
LC₅₀ Inhalation Rat 4h: 170 mg/l (not classified as hazardous)
- m-Xylene LD₅₀ Oral Rat: 4300 mg/kg body weight (not classified as hazardous)
LC₅₀ Inhalation Rat 4h: 29 mg/l (not classified as hazardous)
LD₅₀ Dermal Rabbit: 14100 mg/kg body weight (not classified as hazardous)
- o-Xylene LD₅₀ Oral Rat: 3600 mg/kg body weight (not classified as hazardous)
LC₅₀ Inhalation Rat 4h: < 19 mg/l (harmful)
LD₅₀ Dermal Rabbit: > 2000 mg/kg body weight (not classified as hazardous)
- p-Xylene LD₅₀ Oral Rat: 3900 mg/kg body weight (not classified as hazardous)
LC₅₀ Inhalation Rat 4h: 20.0 mg/l (not classified as hazardous)
- Ethylbenzene LD₅₀ Oral Rat: 3500 mg/kg body weight (not classified as hazardous)
LC₅₀ Inhalation Rat 4h: 17.2 mg/l (not classified as hazardous)
LD₅₀ Dermal Rabbit: 17000 mg/kg body weight (not classified as hazardous)

(b) skin corrosion/irritation

Irritating to skin.

(c) serious eye damage/irritation

May be irritating to eyes.

(d) respiratory or skin sensitisation

Reason for no classification: Data conclusive but not sufficient for classification.

(e) germ cell mutagenicity

Reason for no classification: Data conclusive but not sufficient for classification.

(f) carcinogenicity

Reason for no classification: Data conclusive but not sufficient for classification.

(g) reproductive toxicity

Limited evidence of harm to the unborn child.

Toluene is classified as Reproductive Toxin EC category 3.

(h) STOT-single exposure

May cause drowsiness or dizziness.

(i) STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

(j) aspiration hazard

May be fatal if swallowed and enters airways.

Likely routes of exposure

Contact with skin and eyes, or by inhalation of vapours.

Product **AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL** Page: 9 of 13
 Supersedes: Version 2 Dated 22.01.2011 Version: 3 Date Prepared: 25 February 2011

Symptoms related to the physical, chemical and toxicological characteristics

Irritating to skin. May be irritating to eyes. Inhalation may cause drowsiness or dizziness. May be fatal if it reaches the airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Limited evidence of harm to the unborn child. May cause damage to organs through prolonged or repeated exposure.

Other information

None

SECTION 12. ECOLOGICAL INFORMATION

No data available on mixture. Data based on individual components shown below:

12.1. Toxicity

2,2,4-trimethylpentane	
LC ₅₀ fish 96h:	1 - 10 mg/l (toxic)
EC ₅₀ Daphnia 48h:	0.4 mg/l (highly toxic)
Isopentane	
LC ₅₀ fish, Oncorhynchus mykiss, 96h:	3.1 mg/l (toxic)
EC ₅₀ Daphnia magna 48h:	2.3 mg/l (toxic)
Toluene	
LC ₅₀ fish, Oncorhynchus kisutch, 96h:	6.4 mg/l (toxic)
EC ₅₀ Daphnia magna 48h:	11.5 mg/l (harmful)
IC ₅₀ Algae, Selenastrum capricornutum, 72h:	12.5 mg/l (harmful)
2,3,4-trimethylpentane	
EC ₅₀ Daphnia 48h:	0.4 mg/l (highly toxic)
n-Hexane	
LC ₅₀ fish, Pimephales promelas, 96h:	2.5 mg/l (toxic)
EC ₅₀ Daphnia magna 48h:	2.1 mg/l (toxic)
IC ₅₀ Algae 72h:	0.3 mg/l (highly toxic)
m-Xylene	
LC ₅₀ fish, Oncorhynchus mykiss, 96h:	8.4 mg/l (toxic)
EC ₅₀ Daphnia magna 48h:	9.59 mg/l (toxic)
IC ₅₀ Algae, Selenastrum sp., 72h:	3.2 mg/l (Toxic)
o-Xylene	
LC ₅₀ fish, Oncorhynchus mykiss, 96h:	7.6 mg/l (toxic)
EC ₅₀ Daphnia magna 48h:	3.1 mg/l (toxic)
IC ₅₀ Algae, Selenastrum sp., 72h:	3.2 mg/l (Toxic)
p-Xylene	
LC ₅₀ fish, Roccus saxatilis, 96h:	2 mg/l (toxic)
EC ₅₀ Daphnia magna 48h:	8.5 mg/l. (toxic)
IC ₅₀ Algae, Selenastrum capicosmutum, 72h:	3.2 mg/l (toxic)
Ethylbenzene	
LC ₅₀ fish, Oncorhynchus mykiss, 96h:	4.2 mg/l (toxic)
EC ₅₀ Daphnia magna 48h:	2.1 mg/l (toxic)
IC ₅₀ Algae, Skeletonema costatum, 72h:	4.9 mg/l (toxic)

12.2. Persistence and degradability

Toluene	
Degradability: BOD5/COD: 0 to 0.65	> 60%% degraded in 14 days OECD 301C
m-Xylene	
Degradability: BOD5/COD: 0.55	

Product AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL **Page:** 10 of 13
Supersedes: Version 2 Dated 22.01.2011 **Version:** 3 **Date Prepared:** 25 February 2011

o-Xylene
Degradability: BOD5/COD: 0.55
p-Xylene
Degradability: BOD5/COD: 0.55
Ethylbenzene
Degradability: BOD5/COD: <0.5 50% degraded in 28 days OECD 301C

12.3. Bioaccumulative potential

2,2,4-trimethylpentane
Accumulation: BCF: 372 and log Pow: 4.53 (potential for bioaccumulation)
Isopentane
Accumulation: BCF: 70 and log Pow: 2.30 (expected to bioaccumulate)
Toluene
Accumulation: BCF: 10 - 90 and log Pow: 2.75 (expected to bioaccumulate)
n-Hexane
Accumulation: BCF: 199.53 and log Pow: 4.11 (potential for bioaccumulation)
m-Xylene
Accumulation: BCF: 24 and log Pow: 3.30 (possible risk of bioaccumulation)
o-Xylene
Accumulation: BCF: 6 - 21 and log Pow: 3.16 (possible risk of bioaccumulation)
p-Xylene
Accumulation: BCF: 24 and log Pow: 3.15 (possible risk of bioaccumulation)
Ethylbenzene
Accumulation: BCF: 15 and log Pow: 3.15 (possible risk of bioaccumulation)

12.4. Mobility in soil

Not determined, but poorly soluble in water.

12.5. Results of PBT and vPvB assessment

Does not fulfil the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

The product is classified as very toxic to aquatic life with long lasting effects. Contains substances that are hazardous and which are not readily biodegradable. Do not release into sewers or waterways.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal of product

Waste product is considered Hazardous Waste and should be disposed of via a licensed operator. European Waste Catalogue Index No. 13 07 02*; "Wastes of liquid fuels - petrol" may be applicable, if not mixed with other waste.

Disposal of packaging

Contaminated packing should be disposed of as Hazardous Waste, as above, according to local authority guidelines.

Product **AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL** Page: 11 of 13
 Supersedes: Version 2 Dated 22.01.2011 Version: 3 Date Prepared: 25 February 2011

SECTION 14. TRANSPORT INFORMATION



14.1. UN number	1203
14.2. UN proper shipping name	MOTOR SPIRIT or GASOLINE or PETROL
14.3. Transport hazard class(es)	3
14.4. Packing group	II
14.5. Environmental hazards	Environmental pollutant
14.6. Special precautions for user	See P statements in Section 2
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	<p>UN 1203 Petrol (alkylate based petrol, Aviation alkylates), pollution category X, carried under MARPOL 73/78 Annex I, in a gasoline tanker ship. Alkylate based petrol is classified oil under MARPOL Annex I. When transported under MARPOL 73/78 Annex I in a gasoline tanker ship it is classified under Category 8 and is labelled as Category 8 1.8. If transported in ships as a chemical it comes under Annex II.</p> <p>New Poll Cat X New Ship Type 2 Old Poll Cat C Old Ship Type 3.</p>
Modal Information:	
ADR / RID (road and rail)	
UN Number:	UN 1203
Proper shipping name:	Gasoline
Class:	3
Packing Group:	II
HIN:	33
Tunnel Restrictions:	D / E
Label:	3
Limited quantities (LQ)	LQ4
IMO (maritime)	
Proper shipping name:	MOTOR SPIRIT or Gasoline or PETROL
UN number:	UN 1203
Class:	3
Package Group:	II
Flash Point:	<-40 °C
EMS Codes:	F-E, S, E
Marine Pollutant:	Yes

Product AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL **Page:** 12 of 13
Supersedes: Version 2 Dated 22.01.2011 **Version:** 3 **Date Prepared:** 25 February 2011

ICAO/IATA (air)	
Proper shipping name:	MOTOR SPIRIT or Gasoline or PETROL
UN number:	UN 1203
Class:	3
Package Group:	II
ICAO labels:	3
ERG Code	3H
Packing Instructions	Y341, 353 (Passenger & Cargo aircraft) 364 (Cargo aircraft only)
Max. net qty/package	5 litres (1 litre non-UN packs) (Passenger aircraft) 60 litres (Cargo aircraft)

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Chemical Agents Directive 98/24/EC

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out on this mixture, but a Swedish safety report has been made.

SECTION 16. OTHER INFORMATION

Inventories - All ingredients listed in EINECS.

Sources of data used in this SDS

In-house data files
Literature such as Sax's Dangerous Properties of Industrial Materials, the RSC Dictionary of Substances and their Effects, RTECS
CLP Annex VI Tables 3.1 & 3.2

Version number	1
Date prepared	25 February 2011
Supersedes Version	None
Revisions marked with in the left margin.	Not applicable, first issue.
Nature of revision	Not applicable, first issue.

Safety assessment and classification carried out according to CLP (Regulation 1272/2008/EC and Regulation 453/2010/EC, Annex I) and KIFS 2005:7 by calculation based on ingredient information.

R-phrases used in document

R10 - Flammable.

R11 - Highly flammable.

R12 - Extremely flammable.

R20 - Harmful by inhalation.

R20/21 - Harmful by inhalation and in contact with skin.

R36/38 - Irritating to eyes and skin.

R38 - Irritating to skin.

R45 - May cause cancer.

R46 - May cause heritable genetic damage.

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R48/23/24/25 - Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R50/53 - Very toxic to aquatic organisms, may cause adverse effects in the aquatic environment.

Product AVGAS 91/96 UL, /AVGAS 91/98 UL, /HJELMCO 91/96 UL, /HJELMCO 91/98 UL Page: 13 of 13
Supersedes: Version 2 Dated 22.01.2011 Version: 3 Date Prepared: 25 February 2011

R51/53 - Toxic to aquatic organisms, may cause adverse effects in the aquatic environment.
R62 - Possible risk of impaired fertility.
R63 - Possible risk of harm to the unborn child.
R65 - Harmful: may cause lung damage if swallowed.
R66 - Repeated exposure may cause skin dryness or cracking.
R67 - Vapours may cause drowsiness and dizziness.

H-statements used in document

H224 - Extremely flammable liquid and vapour.
H225 - Highly flammable liquid and vapour.
H226 - Flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H312 - Harmful in contact with skin.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H336 - May cause drowsiness or dizziness.
H340 - May cause genetic defects.
H350 - May cause cancer.
H361d - Suspected of damaging the unborn child.
H361f - Suspected of damaging fertility.
H372 - Causes damage to organs through prolonged or repeated exposure.
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.
H411 - Toxic to aquatic life with long lasting effects.

EUH-statements used in document

EUH066 - Repeated exposure may cause skin dryness or cracking.

Based on EU Regulation 1907/2006 as amended by Regulation 453/2010

This information is a supplement to other information. The user must decide whether there is sufficient information. Responsibility for product safety resides with Hjelmco Oil.

End of document

Number of pages = 13