



SAFETY DATA SHEET

Aspen 2

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued 25.10.2017

1.1. Product identifier

Product name Aspen 2
 Synonyms Aspen 2 Full Range Technology, Aspen 2t

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

Use of the substance / preparation Fuel for gasoline engines.
 Relevant identified uses SU1 Agriculture, forestry, fishery
 PC13 Fuels
 PROC16 Using material as fuel sources, limited exposure to unburned product to be expected. Industrial or non-industrial setting;
 The chemical can be used by the general public Yes

1.3. Details of the supplier of the safety data sheet

Distributor

Company name O & J Small Motor Service
 Office address NE 30-12-06 W2
 Postal address P.O. Box 841
 Postcode S0G 2S0
 City Kipling, Saskatchewan
 Country Canada
 Telephone number +1-306-224-4513
 Fax +1-306-224-4432
 Email jarose@sasktel.net
 Website <http://smallmotorservice.ca/>

Manufacturer

Company name Lantmännen Aspen AB
 Postal address Iberovägen 2
 Postcode SE-438 54

City	Hindås
Country	Sweden
Telephone number	+46 (0)301-23 00 00
Email	info@aspen.se
Website	http://www.aspenfuels.com/
Contact person	Mats Uhrlander, +46 (0)708-23 50 09

1.4. Emergency telephone number

Emergency telephone	Telephone number: 1-800-424-9300 Description: CHEMTREC 24-hr North America
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SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 1
	Asp. tox 1
	Skin Irrit. 2
	STOT SE3
	Aquatic Chronic 4
	H224
	H304
	H315
H336	
H413	

2.2. Label elements

Hazard pictograms (CLP)



Signal word	Danger
Hazard statements	H224 Extremely flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H413 May cause long lasting harmful effects to aquatic life.
Precautionary statements	P102 Keep out of reach of children. P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P262 Do not get in eyes, on skin, or on clothing. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/ . P331 Do NOT induce vomiting. P501 Dispose of contents/container according to local regulations.
Tactile warnings	Yes
Child-protection	Yes

2.3. Other hazards

Health effect	In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
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SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Naphtha (petroleum), full-range alkylate, butane-contg.	CAS No.: 68527-27-5 EC No.: 271-267-0 REACH Reg. No.: 01-2119471477-29-XXXX	Flam. Liq. 1; H224 Asp. tox 1; H304 Skin Irrit. 2; H315 STOT SE3; H336 Aquatic Chronic 2; H411	85 – 95 %
Naphtha (petroleum), isomerization	CAS No.: 64741-70-4 EC No.: 265-073-5 Index No.: 649-277-00-5 REACH Reg. No.: 01-2119480399-24-XXXX	Flam. Liq. 1; H224 Asp. tox 1; H304 Skin Irrit. 2; H315 STOT SE3; H336 Aquatic Chronic 2; H411	5 – 15 %
Fully synthetic two stroke oil			= 2 %
Remarks, substance	Benzene level lower than 0,1 %. The classification of the components is not supported by test results on the mixture. The two stroke oil is not classified as dangerous for the health or the environment.		

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Fire and explosion: Leave the zone of danger immediately and evacuate unnecessary personnel. Bring injured persons out of the zone of danger immediately. Beware of danger of shock in seemingly not-injured persons.
Inhalation	Fresh air and rest.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Immediately rinse with water for several minutes. Make sure to remove any contact lenses from the eyes before rinsing.
Ingestion	DO NOT induce vomiting if swallowed chemical is dissolved in petroleum-based material. Danger of aspiration and development of chemical pneumonia. Get medical attention.

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

Information for health personnel	Treat Symptomatically.
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4.3. Indication of any immediate medical attention and special treatment needed

Medical monitoring for delayed effects	No recommendation given.
Specific details on antidotes	Not applicable.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide or dry powder. Do not use water jet as an extinguisher, as this will spread the fire.
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5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Highly flammable liquid and vapour.
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5.3. Advice for firefighters

Fire fighting procedures	Containers close to fire should be removed immediately or cooled with water. Avoid water in straight hose stream; will scatter and spread fire. Be aware of risk of fire re-starting, and risk of explosion.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Do not smoke, use open fire or other sources of ignition. Ventilate well. In case of inadequate ventilation, use respiratory protection. Take precautionary measures against static discharges.
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6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material. Contact local authorities in case of spillage to drain/aquatic environment.
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6.3. Methods and material for containment and cleaning up

Cleaning method	Remove sources of ignition. Beware of the explosion danger. Absorb in vermiculite, dry sand or earth and place into containers. Cover large spillages with foam.
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6.4. Reference to other sections

Other instructions	None.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Flammable/combustible – Keep away from oxidisers, heat and flames. Take precautionary measures against static discharges.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in tightly closed original container in a well-ventilated place. Store at temperature below 50°C. Flammable liquid storage.
Special risks and properties	Protect electric equipment against sparking in case of risk of explosion.
Other Information	Large amounts and storages should be stored in accordance with national regulation on storage of flammable liquids.
Conditions to avoid	Keep away from heat, sparks and open flame.

Conditions for safe storage

Advice on storage compatibility	Keep flammable liquids away from flammable gas and highly flammable goods. Flammability class: 1. Canada: Class IB liquid.
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7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Other Information about threshold limit values	OEL Sweden. Alkylate gasoline.
Exposure guidelines	Country of origin: Sweden Limit value type: OEL, 8h, TWA (8h): 900 mg/m ³ Source: AFS 2015:7

DNEL / PNEC

DNEL	Group: Worker Route of exposure: Long term (repeated) – Inhalation – Local effect Value: 840 mg/m ³ /8h
	Group: Worker Route of exposure: Short term (acute) – Inhalation – Systemic effect Value: 1300 mg/m ³ /15 min

8.2. Exposure controls

Recommended monitoring procedures	Environmental Exposure Controls: VOC.
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Safety signs



Precautionary measures to prevent exposure

Technical measures to prevent exposure	Provide adequate general and local exhaust ventilation.
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Eye / face protection

Eye protection	Wear approved chemical safety goggles where eye exposure is reasonably probable.
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Hand protection

Hand protection	For prolonged or repeated skin contact use suitable protective gloves.
Suitable gloves type	Neoprene, nitrile, polyethylene or PVC.

Respiratory protection

Respiratory protection	No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.
Recommended type of equipment	Chemical respirator with organic vapour cartridge.
Additional respiratory protection measures	All handling to take place in well-ventilated area.

Reference to relevant standard A.

Hygiene / environmental

Specific hygiene measures Promptly remove non-impervious clothing that becomes wet.
DO NOT SMOKE IN WORK AREA!

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Clear liquid.
Colour	Tan.
Odour	Kerosene.
pH	Status: In delivery state Comments: Not applicable. Status: In aqueous solution Comments: Not applicable.
Melting point / melting range	Comments: Not applicable.
Boiling point / boiling range	Value: 35 – 205 °C Method: EN ISO 3405 Test reference: Boiling range Comments: Boiling point is 75 °C as defined by NFPA® 30.
Flash point	Value: < 0 °C
Evaporation rate	Value: > 1000 Method: BuAc=100
Lower explosion limit with unit of measurement	1 vol-%
Upper explosion limit with units of measurement	8 vol-%
Vapour pressure	Value: 55 – 65 kPa Method: EN 13016-1 Temperature: = 38 °C
Vapour density	Value: > 1 Reference gas: Air
Specific gravity	Value: 690 – 720 kg/m ³ Method: EN ISO 12185
Solubility description	Very soluble in: Hydrocarbons.
Solubility in water	1-6 mg/l at 1-10 % concentration.
Partition coefficient: n-octanol/water	Value: 4,3 – 4,8 Comments: Calculated value for mixture.
Spontaneous combustability	Value: > 300 °C
Viscosity	Value: < 1 mm ² /s Temperature: = 40 °C

9.2. Other information

Physical hazards

Flammable liquids	Yes.
Conductivity	Value: < 0,1 uS/cm Method: EN 15938 Temperature: = 20 °C
Gas group	Comments: IIA.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No recommendation given.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising substances.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Type of toxicity: Acute
	Effect tested: LD50
	Route of exposure: Oral
	Value: > 5000 mg/kg bw
	Species: Rat
	Test reference: OECD TG 401
	Comments: Data for CAS 68527-27-5.
	Type of toxicity: Acute
	Effect tested: LD50
Route of exposure: Dermal	
Value: > 2000 mg/kg bw	
Species: Rabbit	
Test reference: OECD TG 402	
Comments: Data for CAS 68527-27-5.	
Type of toxicity: Acute	
Effect tested: LD50	
Route of exposure: Dermal	

Value: > 5610 mg/m³ air
 Species: Rat
 Test reference: OECD 403
 Comments: Data for CAS 68527-27-5.

Other information regarding health hazards

General	Risk of chemical pneumonia after aspiration. Prolonged or repeated contact leads to drying of skin. Solvent vapours are hazardous and may cause nausea, sickness and headaches.
Inhalation	In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.
Skin contact	Product has a defatting effect on skin.
Eye contact	Not Irritating.
Ingestion	Harmful: may cause lung damage if swallowed.
Irritation	Causes skin irritation.
Sensitisation	None.
Mutagenicity	No known chronic or acute health risks.
Carcinogenicity, other information	No known chronic or acute health risks.
Teratogenic properties	No known chronic or acute health risks.
Reproductive toxicity	No known chronic or acute health risks.

Symptoms of exposure

Symptoms of overexposure Mild intoxication (incl. fatigue, lassitude, irritability, headache, nausea).

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic, fish	Value: > 100 mg/l Test duration: 96h Species: Danio rerio Method: OECD TG no. 203 (2004) Test reference: Test report 046/13. Comments: LL50. Data for mixture.
Acute aquatic, algae	Value: > 100 mg/l Test duration: 72h Species: Raphidoceles subcapitata Method: OECD TG no. 202 Test reference: Test report 182/06. Comments: EL50. Data for mixture.
Acute aquatic, Daphnia	Value: > 1000 mg/l Test duration: 48h Species: Daphnia Magna Method: OECD Tg no. 201 Test reference: Test report 31/04. Comments: EL50. Data for mixture.

12.2. Persistence and degradability

Chemical oxygen demand (COD)	Comments: Not known.
Biological oxygen demand (BOD)	Comments: Not known.
Persistence and degradability, comments	Volatile substances are degraded in the atmosphere within a few days. The product is degraded completely by photochemical oxidation. The product has not proven to be degradable under anaerobic conditions.

12.3. Bioaccumulative potential

Bioaccumulative potential	Bioaccumulation is unlikely to be significant because of the low water solubility of this product.
Bioconcentration factor (BCF)	Value: 4,3 – 4,8 Method: Log Kow Comments: Calculated value for mixture.

12.4. Mobility in soil

Mobility	The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. The product is insoluble in water and will spread on the water surface.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
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12.6. Other adverse effects

Other adverse effects, comments	WATER HAZARD CLASSIFICATION : 2 (WGK).
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Make sure containers are empty before discarding (explosion risk). Vent to atmosphere.
Relevant waste regulation	SFS 2011:927
Product classified as hazardous waste	Yes
Packaging classified as hazardous waste	No
EWC waste code	EWC: 130702 petrol EWC: 150102 plasticpackaging EWC: 150104 metallicpackaging

SECTION 14: Transport information

14.1. UN number

ADR / RID / ADN	1203
IMDG	1203
ICAO / IATA	1203

14.2. UN proper shipping name

ADR / RID / ADN	GASOLINE
IMDG	GASOLINE
ICAO / IATA	GASOLINE

14.3. Transport hazard class(es)

ADR / RID / ADN	3
IMDG	3
ICAO / IATA	3

14.4. Packing group

ADR / RID / ADN	II
IMDG	II
ICAO / IATA	II

14.5. Environmental hazards

IMDG Marine pollutant	No
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14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

ADR / RID - Other information

ADR additional information	(D/E)
Hazard No.	33
RID other applicable information	(D/E)

IMDG / ICAO / IATA Other information

IMDG Additional information	-18 C, c.c.
EmS	F-E, S-E

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

References (laws/regulations)	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Dangerous Preparations Directive 1999/45/EC.
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15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

Supplier's notes	The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.
List of relevant H-phrases (Section 2 and 3)	H413 May cause long lasting harmful effects to aquatic life. H304 May be fatal if swallowed and enters airways. H336 May cause drowsiness or dizziness. H315 Causes skin irritation. H224 Extremely flammable liquid and vapour. H411 Toxic to aquatic life with long lasting effects.
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	; H224; ; H304; ; H315; ; H336; ; H413;
Key literature references and sources for data	Test report 31/04. Aspen 4T, Daphnia magna immobilisation test. Toxicon AB (2004). Test report 182/06. Toxicity testing of Aspen 4T, Algae growth inhibition test. Toxicon AB (2007). Test report 07-25. Evaluation of the aerobic biodegradability of organic compounds 182/06 (Aspen 4T). AnoxKaldnes AB (2007). Examination essay. Diffusion of alkylate petrol during discharge in the environment. Gunilla Henriksson, Annalena Tåmt (2004). Test report 046/13. Aspen 4. Fish, acute toxicity test. Toxicon AB (2013). Kemiska Ämnen. Prevent AB (2013).
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