SAFETY DATA SHEET
Aspen +

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name Aspen +

Applications Fuel for petrol engines.

Supplier
Lantmännen Aspen Petroleum AB
Iberovägen 2
SE-430 63 Hindås
Sweden
Tel: 0046(0)301-23 00 00
Fax: 0046(0)301-23 00 99
info@aspen.se
www.aspen.se

Contact person Sven Löfving +46 (0)708-235020

Emergency telephones National Poisons Information Service (NPIS), phone 0844 892 0111.
WEB: http://www.toxbase.org

2. HAZARDS IDENTIFICATION

Highly flammable.
Harmful: may cause lung damage if swallowed.
Vapours may cause drowsiness and dizziness.
Irritating to skin.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

For further information, please refer to section 11.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS No.	Content	Symbol	R-phrases
Naphtha (petroleum), full-range alkylate	265-066-7	64741-64-6	80-90 %	Xn ,F	R-11, 38, 65, 67
Naphtha (petroleum), isomerization	265-073-5	64741-70-4	1-10	Xn ,F ,N	R-12, 38, 65, 67, 51/53
tert-butyl methyl ether	216-653-1	1634-04-4	5-15 %	Xi ,F	R-11, 38
ethanol	200-578-6	64-17-5	2-5 %	F	R-11
benzene	200-753-7	71-43-2	<0,1 %	T ,F	R-46, 36/38, 45, 65, 11, 48/23/24/25

See section 16 for explanations to R-phrases

4. FIRST AID MEASURES

General Remove victim immediately from source of exposure.
General first aid, rest, warmth and fresh air.
Contact physician if discomfort continues.

Inhalation General first aid, rest, warmth and fresh air. Consult a physician for specific advice.

Ingestion DO NOT induce vomiting if swallowed chemical is dissolved in petroleum-based material. Danger of aspiration and development of chemical pneumonia. Do not give

victim anything to drink if he is unconscious.
If vomiting occurs, keep head low so that stomach content doesn´t get into the lungs.

Skin Promptly flush contaminated skin with soap or mild detergent and water. Promptly remove clothing if penetrated and flush the skin with water.
Contact physician if irritation continues.

Eyes Promptly wash eyes with plenty of water while lifting the eye lids.
Make sure to remove any contact lenses from the eyes before rinsing.
Contact physician if irritation persists.

5. FIRE-FIGHTING MEASURES

Extinguishing media Powder, foam or CO2.
Never use water.

Special fire fighting procedures Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards Solvent vapours may form explosive mixtures with air.

Hazardous combustion products Fire or high temperatures create: Carbon dioxide (CO2). Carbon monoxide (CO).

6. ACCIDENTAL RELEASE MEASURES

Environmental protection In case of a large spillage (> 50 liter) one should contact the local rescue services.

Spill cleanup methods Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.
Absorb in vermiculite, dry sand or earth and place into containers.
Collect and reclaim or dispose in sealed containers in licensed waste. Inform Authorities if large amounts are involved.

7. HANDLING AND STORAGE

Usage precautions Container must be kept tightly closed. Provide good ventilation. Storage tanks and other containers must be grounded. Eliminate all sources of ignition. Avoid a height of fall of more than 50 cm for fluids.

Storage precautions Keep in cool, dry, ventilated storage and closed containers. Protect from light, including direct sunrays.
Ground container and transfer equipment to eliminate static electric sparks.
Flammable/combustible - Keep away from oxidisers, heat and flames.
Store at temperature below 50°C.

Storage criteria Flammable liquid storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	CAS no.	Reference	LT Exp 8 Hrs	ST Exp 15 Min	Date
tert-butyl methyl ether	1634-04-4	WEL.	92 mg/m3	275 mg/m3	
ethanol	64-17-5	WEL.	1920 mg/m3		
benzene	71-43-2	WEL.	1 ppm(Sk)		

Ingredient comments WEL = Workplace Exposure Limits. S=Skin absorbance, Rep= Reproduction, Carc= Carcinogenic Senz= Sensitisers, Mut= Carcinogenic,T= Maximum exposure limit

Protective equipment

Process conditions Use engineering controls to reduce air contamination to permissible exposure level.

Ventilation All handling to take place in well-ventilated area.

Respirators If ventilation is insufficient, suitable respiratory protection must be provided. Gas cartridge (organic substances).

Protective gloves	Protective gloves must be used if there is a risk of direct contact or splash. For exposure of 4 to 8 hours use gloves made of: Nitrile. Polyvinyl chloride (PVC). Protection for more than 8 hours needs special consideration.
Eye protection	Wear approved chemical safety goggles where eye exposure is reasonably probable.
Other Protection	Wear appropriate clothing to prevent reasonably probable skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Fluid. Very volatile.		
Colour	Clear.		
Odour	Characteristic.		
Solubility description	Very soluble in: Organic solvents (most). Slightly soluble in water. Slightly soluble in:		
Boiling point (°C, interval)	40 - 190	**Pressure**	
Density (g/cm3)	0,70 - 0,72	**Temperature (°C)**	
Vapour density (air=1)	> 1		
Vapour pressure	50 65 kPa	**Temperature (°C)**	38
Evaporation rate	> 1000 BuAc=100	**Reference**	
Viscosity (interval)	< 1 mm2/s	**Temperature (°C)**	40
Flash point (°C)	< 0	**Method**	
Auto ignition temp. (°C)	> 300		
Flammability limit (%)	0,6 - 8,0 vol-%		

10. STABILITY AND REACTIVITY

Stability	Chemically stable, but inflammable. Avoid: Heat, sparks, flames.
Conditions to avoid	Avoid contact with strong oxidisers.
Hazardous polymerisation	Will not polymerise.
Materials to avoid	No incompatible groups noted.
Hazardous decomp. products	No specific hazardous decomposition products noted.

11. TOXICOLOGICAL INFORMATION

Sensitization	No allergic reaction is known.
Genotoxicity	No known heritable or mutagenic effects.
Carcinogenicity	No cancer hazard.
Reproduction toxicity	No known reproductive effects.
Inhalation	Vapour may affect central nervous system and cause headache, discomfort, vomiting or intoxication.
Ingestion	Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs. May cause stomach pain or vomiting. Central nervous system depression.
Skin	Irritating to skin. Can be absorbed through the skin and then result in symptoms similar to those that apply for inhalation.
Eyes	Spray and vapour in the eyes may cause irritation and smarting.
Route of entry	Ingestion. Skin and/or eye contact. Skin absorption. Inhalation.
Medical symptoms	High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. May cause discomfort if swallowed. Central nervous system depression. If swallowed, especially in large quantities: Severe pulmonary irritation. Pulmonary oedema, frothy sputum.
Medical considerations	Avoid vomiting and normal rinse of stomach because of risk of aspiration.

Risk of chemical pneumonia after aspiration.
Keep under close surveillance for symptoms of pneumonia or pulmonary oedema.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Dangerous for the environment if discharged into watercourses.
Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.
The product contains a component(s) classified as harmful to the environment.
The toxicity values are for individual components, not the product.

Mobility
The product is volatile and will evaporate quickly.
The influence on water and land is considerably reduced because of high volatility and because it is easily soluble in water.
The product can pollute land and ground water.

Bioaccumulative potential
Bioaccumulation is possible

Persistence and degradability
The main components are expected to be biodegradable, but the product does contain components that could be a persistent organic pollutant for the environment.
Not easily biodegradable, but photo chemically easily degradable in nature.

COMPONENT: **Naphtha (petroleum), full-range alkylate**

Ecotoxicology data
Acute toxicity. IC50 72 hours algae 13 mg/l Selenastrum capricornutum

Acute toxicity. EL50 48 hours Daphnia >1000 mg/l Daphnia Magna, OECD TG no. 202

COMPONENT: **tert-butyl methyl ether**

Ecotoxicology data
Acute toxicity. IC50 72 hours algae >800 mg/l Scenedesmus subspicatus

LC 50, 96 Hrs, Fish mg/l:
110 (Pimephales promelas)

EC 50, 48 Hrs, Daphnia, mg/l:
340 (Ceriodaphnia sp)

Bioaccumulative potential
BCF: 1,5
Log Pow: 2,9

Persistence and degradability
1,8% deg., 28d, Method: OECD 301D

13. DISPOSAL CONSIDERATIONS

Disposal methods
Absorb in vermiculite or dry sand, dispose in licensed special waste.
Collect in marked containers and deliver to approved depot. Make sure containers are empty before discarding (explosion risk). Please note the danger of containers that have contained inflammable fluids. Empty containers must not be burned because of explosion hazard. The container should not be punctured, cut or welded. To minimise danger for an explosion, the container should be purged of air with the opening down.
Do not allow runoff to sewer, waterway or ground.

Waste class
European Waste Catalogue (EWC):
13 07 02.
15 01 02.
15 01 04.

14. TRANSPORT INFORMATION

Label for conveyance

Proper shipping name (international) PETROL

ROAD TRANSPORT (ADR):

UN no. road 1203

ADR class no. 3

ADR class	Class 3: Flammable liquids.
ADR Hazard labels	3
Classification code	F1
ADR packing group	II
Hazard no. (ADR)	33 Highly flammable liquid (flash point below 23°C).
RAIL TRANSPORT (RID):	
RID class no.	3
RID Hazard labels	3
RID packing group	II
SEA TRANSPORT (IMDG):	
UN no. sea	1203
IMDG class	3
IMDG packing group	II
EmS no.	F-E, S-E
Marine pollutant	Yes.
AIR TRANSPORT (IATA-DGR / ICAO-TI):	
UN no., air	1203
IATA/ICAO class	3
IATA/ICAO packing group	II

15. REGULATORY INFORMATION

Symbol(s)

Contains	Naphtha (petroleum), full-range alkylate Naphtha (petroleum), isomerization tert-butyl methyl ether ethanol benzene
Risk phrases	R-11 Highly flammable. R-38 Irritating to skin. R-65 Harmful: may cause lung damage if swallowed. R-67 Vapours may cause drowsiness and dizziness. R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	S-2 Keep out of reach of children. S-23 Do not breathe gas/vapour. S-24 Avoid contact with skin. S-62 If swallowed, do not induce vomiting: seek medical advice immediately and show the container or label. S-61 Avoid release to the environment. Refer to special instructions/ Safety Data Sheets. S-16 Keep away from sources of ignition - No Smoking. S-43 In case of fire, use carbon dioxide (CO_2) or dry chemical extinguisher. Do not use water.
EU directives	67/548/EEC, 1999/45/EC, 2001/58/EC, 2008/58/EC (REACH), 1272/2008/EC (30ATP).

16. OTHER INFORMATION

Explanations to R-phrases in section 3	R-11 Highly flammable. R-12 Extremely flammable. R-36/38 Irritating to eyes and skin.

	R-38 Irritating to skin. R-45 May cause cancer. R-46 May cause heritable genetic damage. R-48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R-65 Harmful: may cause lung damage if swallowed. R-67 Vapours may cause drowsiness and dizziness.

*** Information revised since the previous version of the SDS**

Issued by	Essenticon AS, Leif Weldingsvei 14, N-3208 Sandefjord, Norway. Phone: +47 33 42 34 50 Fax: +47 33 42 34 59 www.essenticon.com The information in this data sheet is considered to be correct according to present knowledge and experience, but there is no guarantee that it is complete. It is therefore in the user's interest to ensure that the information is sufficient for the area it is intended for.
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