

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

1.1. Product identifier

Product form : Mixture
Name : Aspen 2
UFI : SE49-H29X-JD96-S43E
Product code : 101001

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Professional use, Consumer use
Use of the substance/mixture : Fuel for 2-stroke motors.
Function or use category : Fuels

1.2.2. Uses advised against

Other than stated above.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Lantmännen Aspen AB
Iberovägen 2
SE-438 54 Hindås
Sweden
T +46 301 230000
aspensds@lantmannen.com - www.aspen.se

Distributor

Anglo American Oil Company Ltd
58 Holton Road, Holton Heath Trading Park
BH16 6LT Poole
United Kingdom
T +44 1929 551557 - F +44 1929 551567
info@aaoil.co.uk - www.aaoil.co.uk

1.4. Emergency telephone number

Emergency number : +46 301 230000 (08.00-16.30 CET)
For non-emergency personnel

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service NHS 111		111 08454 24 24 24 (UK only)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 1 H224
Skin corrosion/irritation, Category 2 H315
Specific target organ toxicity – Single exposure, Category 3, Narcosis H336
Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment – Chronic Hazard, Category 4 H413
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

Contains

Hazard statements (CLP)

Precautionary statements (CLP)

: Danger
: Alkylate; Isomerate; Isopentane
: 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.
: P102 - Keep out of reach of children.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P260 - Do not breathe vapours.
P262 - Do not get in eyes, on skin, or on clothing.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.
P331 - Do NOT induce vomiting.
P501 - Dispose of contents/container to approved waste recipient, in an open container.

2.3. Other hazards

Other hazards which do not result in classification : Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours. Prolonged or repeated contact may cause skin to become dry or cracked. At high concentrations, the vapours can be irritating to the respiratory system.

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Contains $\leq 2\%$ by volume Synthetic motor oil, classified as non-hazardous according to CLP (EU).

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Alkylate (Note P)	CAS-No.: 68527-27-5 EC-No.: 271-267-0 EC Index-No.: 649-282-00-2 REACH-no: 01- 2119471477-29	78 – 93	Flam. Liq. 1, H224 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isomerate (Note P)	CAS-No.: 64741-70-4 EC-No.: 265-073-5 EC Index-No.: 649-277-00-5 REACH-no: 01-2119480399-24	5 – 15	Flam. Liq. 1, H224 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Isopentane substance with a Community workplace exposure limit	CAS-No.: 78-78-4 EC-No.: 201-142-8 EC Index-No.: 601-085-00-2 REACH-no: 01-2119475602-38	< 2.5	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066
n-hexane (Impurity) substance with a Community workplace exposure limit	CAS-No.: 110-54-3 EC-No.: 203-777-6 EC Index-No.: 601-037-00-0	<0,2	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361f STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
n-hexane (Impurity)	CAS-No.: 110-54-3 EC-No.: 203-777-6 EC Index-No.: 601-037-00-0	(5 ≤C < 100) STOT RE 2, H373

Comments : Contains no other components which will influence the classification of the product
Ingredients' environmental classification is not supported by tests on the mixture.
Mixture contains <3% butane (<0,1% butadiene).
Toluene <0,1%, n-hexane <0,5%, aromatics <1%

Note P: Note P : The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262- P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply. This note applies only to certain complex oil-derived substances in Part 3.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/ attention. If possible, show the doctor this safety data sheet. Failing this, show the doctor the packaging or label.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact : Remove immediately contaminated clothing. Wash skin with plenty of water and soap. If skin irritation continues, consult a doctor.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. May result in aspiration into the lungs, causing chemical pneumonia.

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

Symptoms/effects : May cause drowsiness or dizziness.

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Symptoms/effects after inhalation	: May cause headache, nausea and irritation of respiratory tract. May result in aspiration into the lungs, causing chemical pneumonia.
Symptoms/effects after skin contact	: Irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: Risk of lung oedema. Ingestion may cause nausea and vomiting.

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

Treat symptomatically. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Water fog. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Extremely flammable liquid and vapour. The vapours are denser than air and may travel along the ground. Distance ignition possible. On heating, there is a risk of bursting due to internal pressure build-up. Cool down the containers exposed to heat with a water spray.
Explosion hazard	: May form flammable/explosive vapour-air mixture.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire	: Keep container tightly closed and away from heat, sparks and flame. In case of inadequate ventilation wear respiratory protection. Use personal protective equipment as required.
Firefighting instructions	: Move containers from fire area if it can be done without personal risk. Move away from the container and cool with water from a protected position.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours. Could be ignited by heat, sparks or flame.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing vapours. Avoid contact with skin and eyes. Clear spills immediately. Take precautionary measures against static discharge.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
----------------------	---

6.2. Environmental precautions

Avoid release to the environment. Stop leak if safe to do so. Avoid the spillage or runoff entering drains, sewers or watercourses. Prevent spillage from spreading by using sand or earth. Advise local authorities if considered necessary.

6.3. Methods and material for containment and cleaning up

For containment	: Cover spill with non combustible material, e.g.: sand, earth, vermiculite.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Use only outdoors or in a well-ventilated area. Avoid breathing vapours. Avoid contact with skin and eyes.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment. Comply with applicable regulations. Use appropriate container to avoid environmental contamination.
- Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Opened containers must be carefully closed and kept upright to avoid leakage.
- Incompatible products : Oxidizing agent.
- Storage temperature : Store at maximum temperature of 30°C / 86°F.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Isopentane (78-78-4)

United Kingdom - Occupational Exposure Limits

Local name	Isopentane
WEL TWA (OEL TWA) [1]	1800 mg/m ³
WEL TWA (OEL TWA) [2]	600 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

n-hexane (110-54-3)

United Kingdom - Occupational Exposure Limits

Local name	n-Hexane
WEL TWA (OEL TWA) [1]	72 mg/m ³
WEL TWA (OEL TWA) [2]	20 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Exposure limit values for the other components

n-Butane (106-97-8)

United Kingdom - Occupational Exposure Limits

Local name	Butane	
WEL TWA (OEL TWA) [1]	1450 mg/m ³	
WEL TWA (OEL TWA) [2]	600 ppm	
WEL STEL (OEL STEL)	1810 mg/m ³	

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

n-Butane (106-97-8)		
WEL STEL (OEL STEL) [ppm]	750 ppm	
Remark	Carc (Capable of causing cancer and/or heritable genetic damage, only applies if Butane contains more than 0.1% of buta-1,3-diene)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

Isomerase as heptane (142-82-5)		
United Kingdom - Occupational Exposure Limits		
Local name	n-Heptane	
WEL TWA (OEL TWA) [1]	2085 mg/m ³	
WEL TWA (OEL TWA) [2]	500 ppm	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Alkylate (68527-27-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	1300 mg/m ³ 15 minutes
Acute - local effects, inhalation	1100 mg/m ³ 15 minutes
Long-term - local effects, inhalation	840 mg/m ³ 8 hours
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	1200 mg/m ³ 15 minutes
Acute - local effects, inhalation	640 mg/m ³ 15 minutes
Long-term - local effects, inhalation	180 mg/m ³ 24 hours

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Use spark-/explosionproof appliances and lighting system. Wear recommended personal protective equipment. Handle in accordance with good industrial hygiene and safety procedures.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves.

Personal protective equipment symbol(s):



Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

If there is a risk of liquid being splashed : Wear tight fitting safety glasses or facial screen

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR), Viton® II	6 (> 480 minutes)	>0,4 mm		EN 374-2, EN 374-3

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
Reusable half mask	Filter AX (brown)		EN 140

8.2.2.4. Thermal hazards

Thermal hazard protection:

No additional information available.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid the spillage or runoff entering drains, sewers or watercourses. Professional and Consumer product use leading to emission of volatiles to air. Volatile compounds subject to air emission controls. See Section 7 for information on safe handling.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light yellow.
Appearance	: clear.
Odour	: Gasoline-like odour.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: 30 – 200 °C EN ISO 3405
Flammability	: Extremely flammable liquid and vapour.
Explosive limits	: See below
Lower explosion limit	: 1 vol %
Upper explosion limit	: 8 vol %
Flash point	: -45 °C
Auto-ignition temperature	: > 300 °C
Decomposition temperature	: Not relevant
pH	: ≤ Not relevant
Viscosity, kinematic	: < 1 mm²/s (40°C)

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Solubility	: Soluble in hydrocarbons. Water: 1 – 6 mg/l
Partition coefficient n-octanol/water (Log Kow)	: 4.3 – 4.8 Calculated value
Vapour pressure	: 55 – 65 kPa EN 13016-1 (37,8°C)
Vapour pressure at 50°C	: Not available
Density	: 690 – 720 kg/m³ EN ISO 12185 (15°C)
Relative density	: Not available
Relative vapour density at 20°C	: > 1 air = 1
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1)	: > 10
Specific conductivity	: 50 – 1000 pS/m EN 15938 (20°C)
Other properties	: Pour point

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Avoid contact with hot surfaces. Direct sunlight. Heat. No flames, no sparks. Eliminate all sources of ignition. Avoid contact with : All heat sources, including direct sunlight.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Alkylate (68527-27-5)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402 method)
LC50, Inhalation, rat	> 5610 mg/m³ ((OECD 403 method))

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Isomerate (64741-70-4)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
Isopentane (78-78-4)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral))
LC50 Inhalation - Rat	> 25.3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Skin corrosion/irritation	: Causes skin irritation. pH: ≤ Not relevant
Serious eye damage/irritation	: Not classified pH: ≤ Not relevant
Additional information	: Slightly irritant but not relevant for classification
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Isopentane (78-78-4)	
NOAEC (inhalation, rat, vapour, 90 days)	30 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Guideline: other: U.S. EPA/FIFRA Guidelines §82-4, Guideline: EPA OTS 798.2450 (90-Day Inhalation Toxicity), Guideline: other:U.S. EPA/TSCA Guidelines 40 CFR §798.6059, and §798.6059, 798.6200, 798.6400, Guideline: other:EU Guideline 87/302/EEC
Aspiration hazard	: May be fatal if swallowed and enters airways.
Aspen 2	
Viscosity, kinematic	< 1 mm²/s (40°C)
11.2. Information on other hazards	
No additional information available	
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms. May cause long lasting harmful effects to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: May cause long lasting harmful effects to aquatic life.
Not rapidly degradable	
Aspen 2	
LC50 - Fish [1]	> 100 mg/l LL50 (Danio rerio), OECD TG no. 203 (2004)
EC50 - Crustacea [1]	> 1000 mg/l EL50 (Daphnia magna), OECD TG no. 201
EC50 72h - Algae [1]	> 100 mg/l EL50 (Raphidocoeles subcapitata), OECD TG No. 202
Alkylate (68527-27-5)	
EC50 - Crustacea [1]	> 100 mg/l

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.2. Persistence and degradability

Aspen 2

Persistence and degradability	Not readily biodegradable. Inherently biodegradable. Contains volatile component(s), may spread in atmosphere. Can be degraded by photochemical processes.
-------------------------------	--

12.3. Bioaccumulative potential

Aspen 2

Partition coefficient n-octanol/water (Log Kow)	4.3 – 4.8 Calculated value
Bioaccumulative potential	Contains bioaccumulative component(s).

12.4. Mobility in soil

Aspen 2

Ecology - soil	Highly volatile liquid. The product evaporates readily. Floats on water. Product adsorbs onto the soil.
----------------	---

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects	: The product evaporates readily. In case of large spillages: Forms thin oil film on surface of water. May be harmful to aquatic organisms, to flora, to soil organisms.
Additional information	: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Product and packaging containing residues of or contaminated by dangerous substances; To be disposed of as hazardous waste. When totally empty, containers are recyclable like any other packing.
Additional information	: Flammable vapours may accumulate in the container. Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 13 07 02* - petrol 15 01 10* - packaging containing residues of or contaminated by dangerous substances 15 01 02 - plastic packaging 15 01 04 - metallic packaging

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

14.1. UN number or ID number

UN-No. (ADR)	: UN 1203
UN-No. (IMDG)	: UN 1203
UN-No. (IATA)	: UN 1203
UN-No. (RID)	: UN 1203

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.2. UN proper shipping name

Proper Shipping Name (ADR) : PETROL
Proper Shipping Name (IMDG) : PETROL
Proper Shipping Name (IATA) : Petrol
Proper Shipping Name (RID) : PETROL

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3



RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Orange plates : 

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Tunnel restriction code (ADR) : D/E
EAC code : 3YE
APP code : A(fl)

Transport by sea

EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E

Air transport

No data available

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

IBC code : Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(a)	Aspen 2 ; Isopentane ; n-hexane
3(b)	Aspen 2 ; Isopentane ; n-hexane
3(c)	Aspen 2 ; Isopentane ; n-hexane
40.	Isopentane ; n-hexane

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Seveso Directive (Disaster Risk Reduction)

Seveso Additional information : Petroleum products and alternative fuels

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

15.1.2. National regulations

United Kingdom

British National Regulations : UK REACH
The GB CLP Regulation
The Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits.

Other information : Observe restrictions according Act on the Protection of Young People in Employment.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Revision: 11/08/2022 due to change of SDS program and introduction of (EU) 2020/878.

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Data sources

: Supplier's safety documents. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Test report 046/13. Aspen 4, Fish, Acute Toxicity Test. Toxicon AB (2013). OECD No. 203. Test report 31/04. Aspen 4t, Daphnia magna Immobilisation test. Toxicon AB (2004). OECD No. 202. Test report 182/06. Toxicity testing of Aspen 4t, Algae Growth Inhibition Test. Toxicon AB (2007). OECD No. 201. Test report 07-25. Evaluation of the Aerobic Biodegradability of Organic Compounds 182/06 (Aspen 4t), AnoxKaldnes AB (2007). OECD No 301 F. Examination essay. Diffusion of alkylate petrol during discharge in the environment. Gunilla Henriksson, Annalena Tåmt (2004).

Training advice

: See Section 7 for information on safe handling.

Other information

: Relevant information from component Exposure Scenarios has been incorporated into Sections 4 - 13 of this SDS.

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
Flam. Liq. 1	Flammable liquids, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
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, Narcosis

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Flam. Liq. 1	H224	On basis of test data
Skin Irrit. 2	H315	Calculation method
STOT SE 3	H336	Calculation method
Asp. Tox. 1	H304	Calculation method
Aquatic Chronic 4	H413	Expert judgment

The classification complies with

: ATP 12

Safety Data Sheet (SDS), EU

Aspen 2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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.