

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

1.1 - Product identifier

Trade name/designationMarline Premium 4 tempsChemical nameProduct-typeMixtureProduct codeMARL 002.1UFI:1500-70XJ-D00S-GQ27

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

Relevant identified uses

- Fuel and fuel additive
- Professional Use, Consumer Use

Uses advised against

- No additional information available

1.3 - Details of the supplier of the safety data sheet MARLINE ZA SUD ESSOR - 5, rue Marcel LALOYAU 91150 BRIERES-LES-SCELLES France Telephone : +33 (0)1 69 92 90 99. Fax +33 (0)1 60 80 15 58. Website https://www.marline.fr/ SDS CONTACT: +33 (0)1 69 92 90 99. info@marline.fr

1.4 - Emergency telephone number

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

Flam. Liq. 1	Flammable liquid and vapour Category 1	
Skin Irrit. 2	Irritation, Category 2	
STOT SE 3	STOT-single exposure - Category 3 (H336)	
Asp. Tox. 1	Aspiration hazard - Category 1	
Aquatic Chronic 4	Hazardous to the aquatic environment - Aquatic Chronic 4	

2.2 - Label elements

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

Contains: ALKYLATE note P (CAS No.: 68527-27-5) | ISOMERATE note P (CAS No.: 64741-70-4) | isopentane, 2-methylbutane (CAS No.: 78-78-4)

Signal word Hazard pictograms Hazard statements	: Danger	
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

P101	If medical advice is needed, have product container or label at hand.
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 in an approved treatment center in accordance with national regulation.
EUH-phrases	: None
2.3 - Other hazards	

PBT-substance.

- The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

<u>Other hazards which do not result in classification</u> - In use, may form flammable/explosive vapour-air mixture.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No.	%	Class(es)	Specific concentration limit
ALKYLATE note P	CAS No. : 68527-27-5 Index No. : 649-282-00-2 EC No. : 271-267-0 REACH No. : 01-2119471477-29-xxxx	82 - 96	Aquatic Chronic 2 - H411 Asp. Tox. 1 - H304 Flam. Liq. 1 - H224 Skin Irrit. 2 - H315 STOT SE 3 - H336	Not applicable
ISOMERATE note P	CAS No. : 64741-70-4 Index No. : 649-277-00-5 EC No. : 265-073-5 REACH No. : 01-2119480399-24-xxxx	5 - 15	Aquatic Chronic 2 - H411 Asp. Tox. 1 - H304 Flam. Liq. 1 - H224 Skin Irrit. 2 - H315 STOT SE 3 - H336	Not applicable
isopentane, 2-methylbutane	CAS No. : 78-78-4 Index No. : 601-085-00-2 EC No. : 201-142-8	< 2,5	Aquatic Chronic 2 - H411 Asp. Tox. 1 - H304 Flam. Liq. 1 - H224 STOT SE 3 - H336	Not applicable
n-hexane	CAS No. : 110-54-3 Index No. : 601-037-00-0 EC No. : 203-777-6 REACH No. : 01-2119480412-44-xxxx	< 0,2	Aquatic Chronic 2 - H411 Asp. Tox. 1 - H304 Flam. Liq. 2 - H225 Repr. 2 - H361 Skin Irrit. 2 - H315 STOT RE 2 - H373 STOT SE 3 - H336	STOT RE 2 - H373 : 5<=%<=100

- UVCB CAS 68527-27-5 & 64741-70-4: Isopentane - n butane - n hexane - n heptane - n octane - toluene< 0.1%

SECTION 4: First aid measures



4.1 - Description of first aid measures

Following inhalation	 Provide fresh air. Medical examination necessary even merely on suspicion of intoxication. Keep at rest.
Following skin contact	 After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician. Remove contaminated, saturated clothing immediately. Take off contaminated clothing and wash it before reuse.
After eye contact	 Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.
<u>After ingestion</u>	 Do NOT induce vomiting. Seek medical advice immediately. Rinse mouth thoroughly with water. If vomiting occurs spontaneously, keep head lower than hips to prevent aspiration.
4.2 - Most important sympto	oms and effects, both acute and delayed
Symptoms and effects - Following inhalation	 May cause damage to organs through prolonged or repeated exposure. Headache. Nausea. Vomiting. May cause drowsiness or dizziness.
Symptoms and effects - Following skin contact	- Causes skin irritation.
Symptoms and effects - After eye contact	- Serious eye damage/eye irritation

<u>Symptoms and effects - After</u> - May be fatal if swallowed and enters airways.

ingestion

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

- No information available.

SECTION 5: Firefighting measures

5.1 - Extinguishing media		
Suitable extinguishing media	- Carbon dioxide (CO2) - Foam - Extinguishing powder - Sand	
<u>Unsuitable extinguishing</u> media	- Full water jet - Full jet (water or foam) can cause tanks to overflow. - Water mist	
5.2 - Special hazards arising from the substance or mixture		
o		

<u>Special hazards arising from</u> - May form flammable vapour-air mixture. <u>the substance or mixture</u>



Hazardous decomposition products	- Formation of CO and CO2 in the event of combustion (carbon monoxide - carbon dioxide).
	 In case of fire hazardous decomposition products may be formed, such as:Oxides of sulfur.
	 Incomplete combustion and thermolysis produce more or less toxic gases such as CO, CO2, various hydrocarbons, aldehydes and soot.

5.3 - Advice for firefighters

- Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
- Cool exposed containers with water spray or fog. Use caution when fighting any chemical fire.
- Do not enter fire area without protective equipment, including self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 - Personal precaution	s, protective equipment and	l emergency procedures
0.1 - reisonai piecaulion	s, protective equipment and	remergency procedures

For non-emergency personnel	 Extremely flammable liquid and vapour. Remove all sources of ignition. Wear suitable protective clothing and gloves. Keep unnecessary staff away. Do not get in eyes, on skin, or on clothing. Do not breathe gas/fumes/vapour/spray.
For emergency responders	 Provide adequate ventilation. Provide adequate protection for cleanup crews. See section 8.2.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.

- Avoid release to the environment.
- 6.3 Methods and material for containment and cleaning up

Methods and material for containment	- Store away from other materials.
Methods and material for cleaning up	 Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean with detergents. Avoid solvent cleaners.
Inappropriate techniques	- No information available.

6.4 - Reference to other sections

- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe	handling
Recommendation	 Use only in well-ventilated areas. Remove all sources of ignition. Avoid:Skin contact Handle empty containers with care as residual vapors are flammable. Take precautionary measures against electrostatic discharge.



	- Do not breathe vapors, aerosols, mists.
Advices on general occupational hygiene	- When using do not eat, drink, smoke, sniff.
	 Wash hands before breaks and after work. Work in well-ventilated zones or use proper respiratory protection. Wash contaminated clothing prior to re-use. Thorough skin-cleansing after handling the product.

7.2 - Conditions for safe storage, including any incompatibilities

- All electrical installations, including lighting of premises where this product may be present, must be suitable for the hazard area, in accordance with European ATEX directives.

- The configuration of storage areas, the design of tanks, equipment and operating procedures must comply with applicable European, national or local legislation.

- Store in a dry, sheltered place to avoid contact with moisture.

- Remove all sources of ignition.
- Keep container tightly closed. Store in a well-ventilated area.
- Avoid storage with oxidizing agents.

- The configuration of storage areas, the design of tanks, equipment and operating procedures must comply with applicable European, national or local legislation.

7.3 - Specific end use(s)

- Store in a closed container.
- Stainless steel
- PP (Polypropylene)
- Dangerous reaction with oxidizing agents (chlorates, nitrates, permanganates...).

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

isopentane, 2-methylbutane (78-78-4)		
IOELV TWA mg/m ³ (UE)	3000 mg/m ³	
IOELV STEL ppm (UE)	1000 ppm	
TWA EH40 ppm (UK)	1000 ppm	
TWA EH40 mg/m³ (UK)	3000 mg/m ³	
n-hexane (110-54-3)		
IOELV TWA mg/m ³ (UE)	72 mg/m ³	
IOELV TWA ppm (UE)	20 ppm	

DNEL / PNEC

ALKYLATE note P (68527-27-5)			
Туре	Value	User	Effect
DNEL acute inhalative	1300 mg/m ³	Workers	Systemic
DNEL acute inhalative	1100 mg/m ³	Workers	Local
DNEL acute inhalative	1200 mg/m ³	Consumers	Systemic
DNEL acute inhalative	640 mg/m³	Consumers	Local
DNEL long-term inhalative	840 mg/m ³	Workers	Local
DNEL long-term inhalative	180 mg/m³	Consumers	Local

8.2 - Exposure controls



Marline Premium 4 temps		
Appropriate engineering controls	- Ensure adequate ventilation.	
Individual protection measures, such as personal protective equipment	- Respiratory protection necessary at: exceeding exposure limit values	
	- Respiratory protection	
	- Respirator with filter type A.	
	- Nitrile rubber protective clothing.	
	- Protective gloves	
	- Rubber protective gloves. NBR (Nitrile rubber). Nitrile, thickness>0.3mm Penetration time>480min EN374.	
	- In case of risk of splashes: Goggles with side-shields.	
	- Suitable eye protection: Eye glasses with side protection	
	- In the event of an emergency (accidental exposure) or for exceptional short-term work in atmospheres polluted by the product, it is necessary to wear a respiratory protective device.	
Environmental exposure controls	- Further information: see technical data sheet.	

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state	Liquid	<u>Appearance</u>	Limpide
Colour	colourless	<u>Odour</u>	Hydrocarbure
Odour threshold		No data available	
рН		not applicable	
Melting point		not applicable	
Freezing point		No data available	
Boiling point		30 °C	
Flash point		-45 °C	
Evaporation rate		No data available	
flammability		No data available	
Lower explosion limit		1 %	
Upper explosion limit		8 %	



Vapour pressure	55 kPa < V < 65 kPa 35°C	
Vapour density	No data available	
Relative density	No data available	
Density	690 kg/m³ < V < 720 kg/m³	
Solubility (Water)	1 mg/l < V < 6 mg/l Insoluble	
Solubility (Ethanol)	No data available	
Solubility (Acetone)	No data available	
Solubility (Organic solvents)	No data available	
Log KOC	4,3 < V < 4,8	
Auto-ignition temperature	<= 300 °C	
Decomposition temperature	No data available	
Kinematic viscosity	< 1 mm²/s	
Dynamic viscosity	No data available	

Particle characteristics

Particle size	No data available
Dustiness	No data available
Specific surface area	No data available
Shape	No data available

9.2 - Other information

VOC content	> 95 %
Minimum ignition energy	No data available
Conductivity	No data available
Refractive index	No data available
Solids content	No data available
Surface tension	No data available
Saturation concentration	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- The product is stable under storage at normal ambient temperatures.

10.2 - Chemical stability

- The mixture is chemically stable under recommended conditions of storage, use and temperature.

- 10.3 Possibility of hazardous reactions
- Take measures against electrostatic charges.
- Heating may cause an explosion.
- Flammable liquid and vapour.
- 10.4 Conditions to avoid

- Heat

10.5 - Incompatible materials



- Strong acid
- Strong alkali
- Powder of metal (aluminum, zinc, magnesium)
- 10.6 Hazardous decomposition products

SECTION 11: Toxicological information

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

- Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

- May cause drowsiness or dizziness.

Toxicity : Substances

	ALKYLATE note P (68527-27-5)	
	LD50 oral (rat)	> 5000 mg/kg (OECD Guideline 401, Acute Oral Toxicity)
	LD50 dermal (rabbit)	> 2000 mg/kg OCDE 403
	LC50 inhalation vapours (rat)	> 5,61 mg/l OCDE 503
	ISOMERATE note P (64741-70-4)	
	LD50 oral (rat)	> 5000 mg/kg (OECD Guideline 401, Acute Oral Toxicity)
Skin corrosion/irritation	- Irritation, Category 2 - Causes skin irritation.	
	- Irritating to skin.	
Serious eye damage/eye irritation	- Not classified	
Respiratory or skin sensitisation	- Not classified	
Germ cell mutagenicity	- Not classified	
Carcinogenicity	- Not classified	
Reproductive toxicity	- Not classified	
STOT-single exposure	- STOT-single exposure - Category 3 (H336) - Ma dizziness.	y cause drowsiness or
STOT-repeated exposure	- Not classified	



- Repeated exposure may cause skin dryness or cracking.

Aspiration hazard	- Aspiration hazard - Category 1 - May be fatal if swallowed and enters airways.
	- May be fatal if aspirated. - Chemical pneumonia by aspiration.

11.2 - Information on other hazards

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	> 1000 mg/l Daphnia magna OECD TG 201
LC50 96 hr fish	> 100 mg/l (Danio rerio), OECD TG no. 203 (2004)
ErC50 algae	> 100 mg/l Raphidocelis subcapitata OECD TG 202
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

- Harmful to aquatic life with long lasting effects.

Toxicity : Substances

n-hexane (110-54-3)	
NOEC chronic crustacea	2,6 mg/l

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available	
Chemical oxygen demand (COD)	No data available	
% of biodegradation in 28 days	No data available	

- Poorly biodegradable.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	4,3 < V < 4,8

12.4 - Mobility in soil

- Considered mobile.

- The product contains volatile components.

- In the aquatic environment, the product is expected to float.

12.5 - Results of PBT and vPvB assessment

- The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



12.6 - Endocrine disrupting properties

12.7 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods	 Dispose of waste according to applicable legislation. Empty containers may contain flammable or explosive vapors. Do not cut, weld, puncture, burn or incinerate materials empty containers, unless they have been properly cleaned and declared safe.
Sewage disposal	- Do not allow to enter into surface water or drains.
Special precautions for waste treatment	 Send to a hazardous waste incinerator facility under observation of official regulations. Waste requires monitoring. Packaging empty can contain flammable or explosive vapours.
Community or national or regional provisions	- No information available.
Waste codes / waste designations according to Regulation 2014/955/UE	13 07 02* - Petrol
	15 01 04 - metallic packaging
	15 01 10* - packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 - UN number or ID number

<u>UN number (ADR)</u>	:	UN1203
<u>UN number (RID)</u>	:	UN1203
<u>UN number (IMDG)</u>	:	UN1203
<u>UN number (IATA)</u>	:	UN1203

14.2 - UN proper shipping name

<u>UN proper shipping name</u> (ADR)	:	MOTOR SPIRIT or GASOLINE or PETROL
UN proper shipping name (RID)	:	MOTOR SPIRIT or GASOLINE or PETROL
<u>UN proper shipping name</u> (IMDG)	:	MOTOR SPIRIT or GASOLINE or PETROL
<u>UN proper shipping name</u> (IATA)	:	GASOLINE
14.3 - Transport hazard class(es)		
ADR Transport hazard	:	3

class(es)



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		Marline F	Premium 4 temps	
ADR Classification code: Pictograms	:	F1		
<u>Transport hazard class(es)</u> (<u>RID)</u> <u>Pictograms</u>	:	3		
<u>Transport hazard class(es)</u> (IMDG) <u>Pictograms</u>	:	3		
<u>Transport hazard class(es)</u> (IATA) <u>Pictograms</u>	:	3		
14.4 - Packing group				
Packing group Packing group (RID) Packing group (IMDG) Packing group (IATA)	:	 		
14.5 - Environmental hazards				
Environmental hazards Marine pollutant	:	No No		

14.6 - Special precautions for user



ADR		
ADR Classification code:	:	F1
ADR Special provisions	:	243+534+664
ADR Limited quantity (LQ)	:	1L
ADR Excepted quantities	:	E2
ADR Packing instructions	:	P001 IBC02 R001
ADR Special packing provisions	:	BB2
ADR Mixed packing provisions	:	MP19
Instructions for portable tanks and bulk containers	:	T4
Special provisions for portable tanks and bulk containers	:	TP1
ADR tank code	:	LGBF
ADR tanks special provisions	:	TU9
Vehicle for tank carriage	:	FL
ADR Transport category	:	2
ADR Tunnel restriction code	:	D/E
ADR Special provisions loading, unloading and handling	:	
Special provisions - Packages	:	
Special provisions - Bulk	:	
Special provisions - Operation	:	S2 S20
ADR Hazard identification number (Kemler No.)	:	33
RID		
Special provisions		
Limited quantity (LQ)		
Excepted quantities	÷	
IMDG		
Special provisions	:	243
Limited quantity (LQ)	:	1L
Excepted quantities	:	E2
Packing instructions	:	P001
Special packing provisions	:	
IBC instruction(s)	:	IBC02
IBC provisions	:	
Instructions for portable tanks and bulk containers	:	T4
Special provisions for portable tanks and bulk containers	:	TP1
EmS codes	:	F-E, S-E
Stowage and handling	:	Category E
Segregation	:	
Properties and observations	:	Immiscible with water.



IATA		
PCA - Excepted quantities	:	E2
PCA - Limited Quantity - Packing Instructions	:	Y341
PCA - Limited Quantity - Maximum Net Quantity per Package	:	1L
PCA - Packing Instructions	:	353
PCA - Maximum Net Quantity per Package	:	5L
CAO - Packing Instructions	:	364
CAO - Maximum Net Quantity per Package	:	60L
Special Provisions	:	A100
ERG Code	:	ЗH

14.7 - Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

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

Substances REACH candidates	None
Substances Annex XIV	None
Substances Annex XVII	isopentane, 2-methylbutane (Index No.: 601-085-00-2 - EC No.: 201-142-8 - CAS No.: 78-78-4) n-hexane (Index No.: 601-037-00-0 - EC No.: 203-777-6 - CAS No.: 110-54-3)
VOC content	> 95 %

15.2 - Chemical Safety Assessment

<u>Chemical safety assessment carried</u> - No information available. <u>out for the product</u>

SECTION 16: Other information

SDS versions

Version	Issue date	Author	Description of the amendments
15,1	10/10/2024		Section 2: Addition P101 Sections: Minor changes to section sentences
15	14/09/2023		

Texts of the regulatory sentences

Aquatic Chronic 2	Hazardous to the aquatic environment - Aquatic Chronic 2
Aquatic Chronic 4	Hazardous to the aquatic environment - Aquatic Chronic 4
Asp. Tox. 1	Aspiration hazard - Category 1
Flam. Liq. 1	Flammable liquid and vapour Category 1
Flam. Liq. 2	Flammable liquid and vapour 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.
H340	May cause genetic defects .



H350	May cause cancer.
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	Irritation, Category 2
STOT RE 2	STOT-repeated exposure - Category 2
STOT SE 3	STOT-single exposure - Category 3 (H336)

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