



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name : MARLINE PREMIUM 4 TEMPS
Product code : MARL 002.1.

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

Fuel.

1.3. Details of the supplier of the safety data sheet

Registered company name : MARLINE.
Address : 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.
Email : info@marline.fr
http://www.marline.fr

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable liquid, Category 1 (Flam. Liq. 1, H224).
Skin irritation, Category 2 (Skin Irrit. 2, H315).
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).
Aspiration hazard, Category 1 (Asp. Tox. 1, H304).
Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS07



GHS09



GHS08



GHS02

Signal Word :

DANGER

Product identifiers :

EC 271-267-0

NAPHTHA (PETROLEUM), FULL-RANGE ALKYLATE, BUTANE-CONTA.

EC 201-142-8

2-METHYLBUTANE

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.

H411

Toxic to aquatic life with long lasting effects.

Precautionary statements - General :

P101

If medical advice is needed, have product container or label at hand.

P102

Keep out of reach of children.

Precautionary statements - Prevention :

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

	smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor/if you feel unwell.
P331	Do NOT induce vomiting.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
Precautionary statements - Storage :	
P403 + P235	Store in a well-ventilated place. Keep cool.
Precautionary statements - Disposal :	
P501	Dispose of contents/container to an authorized treatment facility for waste management.

2.3. Other hazards

The substance does not satisfy the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 68527-27-5 EC: 271-267-0 REACH: 01-2119471477-29 NAPHTHA (PETROLEUM), FULL-RANGE ALKYLATE, BUTANE-CONTA.	GHS07, GHS09, GHS08, GHS02 Dgr Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411	P	50 <= x % < 100
CAS: 78-78-4 EC: 201-142-8 REACH: 01-2119475602-38 2-METHYLBUTANE	GHS09, GHS07, GHS08, GHS02 Dgr Flam. Liq. 1, H224 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411 EUH:066	C [1]	10 <= x % < 25
INDEX: 601-006-00-1 CAS: 109-66-0 EC: 203-692-4 REACH: 01-2119475602-38 PENTANE	GHS02, GHS08, GHS07, GHS09 Dgr Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411 EUH:066	C [1]	0 <= x % < 1

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

Note P: The carcinogen or mutagen classification does not apply because the substance contains less than 0.1 % w/w of benzene (EINECS 200-753-7).

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

If swallowed accidentally, do not allow to drink, do not induce vomiting and transfer to hospital immediately by ambulance. Show the label to the doctor.

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

No data available.

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

Treat symptomatically.

SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Do not use compressed air during filling, emptying or handling.

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the substance is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Never inhale this substance.

Prevent the accumulation of electrostatic charges with connections to earth.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the substance is used.

Never open the packages under pressure.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from food and drink, including those for animals.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits :**

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
78-78-4	3000	1000	-	-	-
109-66-0	3000	1000	-	-	-

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-78-4	600 ppm	-	-	-	-
109-66-0	600 ppm	-	-	-	-

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	Excess	Notes
78-78-4	1000 ml/m3	3000 mg/m3	2(II)	DFG
109-66-0	1000 ml/m3	3000 mg/m3	2(II)	DFG

- Belgium (Order of 19/05/2009, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
78-78-4	600 ppm	750 ppm	-	-	-
109-66-0	600 ppm	750 ppm	-	-	-

- France (INRS - ED984 :2008) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
78-78-4	1000	3000	-	-	-	84
109-66-0	1000	3000	-	-	-	84

- Switzerland (SUVA 2009) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Temps :	RSB :
78-78-4	1800	600	3600	1200	4x15	-
109-66-0	1800	600	3600	1200	4x15	-

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

2-METHYLBUTANE (CAS: 78-78-4)

Final use:Exposure method:
Potential health effects:
DNEL :**Workers.**Dermal contact.
Long term systemic effects.
432 mg/kg body weight/dayExposure method:
Potential health effects:
DNEL :Inhalation.
Long term systemic effects.
3000 mg of substance/m3**Final use:**Exposure method:
Potential health effects:
DNEL :**Consumers.**Ingestion.
Long term systemic effects.
214 mg/kg body weight/dayExposure method:
Potential health effects:
DNEL :Dermal contact.
Long term systemic effects.
214 mg/kg body weight/dayExposure method:
Potential health effects:
DNEL :Inhalation.
Long term systemic effects.
643 mg of substance/m3

NAPHTHA (PETROLEUM), FULL-RANGE ALKYLATE, BUTANE-CONTA. (CAS: 68527-27-5)

Final use:Exposure method:
Potential health effects:
DNEL :**Workers.**Inhalation.
Short term systemic effects.
1300 mg of substance/m3Exposure method:
Potential health effects:
DNEL :Inhalation.
Short term local effects.
1100 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 840 mg of substance/m3

Final use: **Consumers.**
Exposure method: Inhalation.
Potential health effects: Short term systemic effects.
DNEL : 1200 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Short term local effects.
DNEL : 640 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 180 mg of substance/m3

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- PVA (Polyvinyl alcohol)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

- AX (Brown)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties****General information :**

Physical state :	Fluid liquid.
Colour:	Colourless.
Odour:	Characteristic.

Important health, safety and environmental information

pH :	Not relevant.
Boiling point/boiling range :	35 °C.
	Method for determining the boiling point : ISO 3405 (Petroleum products - Determination of distillation characteristics at atmospheric pressure).
Flash Point Interval :	PE < 23°C
	Method for determining the flash point: ISO 2719 (Determination of flash point - Pensky-Martens closed cup method).
Vapour pressure (50°C) :	Below 110 kPa (1.10 bar).
Vapour density :	> 1 (Air=1)
Density :	0.695 (15°C)
Water solubility :	Insoluble.
Viscosity:	v < 7 mm ² /s (40°C)

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

10.2. Chemical stability

This substance is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the substance can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces

10.5. Incompatible materials

Keep away from :

- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Exposure to vapours from this solvent in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

Repeated or prolonged contact with the substance may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Splashes in the eyes may cause irritation and reversible damage

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.
Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

11.1.1. Substances

Acute toxicity :

2-METHYLBUTANE (CAS: 78-78-4)

Oral route :	LD50 > 2000 mg/kg Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Inhalation route (n/a) :	LC50 = 25.3 mg/l Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity)
NAPHTHA (PETROLEUM), FULL-RANGE ALKYLATE, BUTANE-CONTA. (CAS: 68527-27-5)	
Oral route :	LD50 > 5000 mg/kg Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 2000 mg/kg Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (n/a) :	LC50 > 5610 mg/l Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity)

Aspiration hazard :

May be fatal if swallowed and enters airways.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

SECTION 12 : ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

2-METHYLBUTANE (CAS: 78-78-4)

Fish toxicity :	LC50 = 4.26 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 2.3 mg/l Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 = 10.7 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h
NAPHTHA (PETROLEUM), FULL-RANGE ALKYLATE, BUTANE-CONTA. (CAS: 68527-27-5)	
Fish toxicity :	LC50 > 8.2 mg/l Species : Pimephales promelas Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 > 4.5 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 > 3.1 mg/l Species : Selenastrum capricornutum

Duration of exposure : 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

12.2.1. Substances

2-METHYLBUTANE (CAS: 78-78-4)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

NAPHTHA (PETROLEUM), FULL-RANGE ALKYLATE, BUTANE-CONTA. (CAS: 68527-27-5)

Biodegradability : Non-rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

2-METHYLBUTANE (CAS: 78-78-4)

Octanol/water partition coefficient : log K_{ow} = 3.3

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

14.1. UN number

1203

14.2. UN proper shipping name

UN1203=MOTOR SPIRIT or GASOLINE or PETROL

14.3. Transport hazard class(es)

- Classification :



3

14.4. Packing group

II

14.5. Environmental hazards

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.
The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

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.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations :

- DNEL : Derived No-Effect Level
- ADR : European agreement concerning the international carriage of dangerous goods by Road.
- IMDG : International Maritime Dangerous Goods.
- IATA : International Air Transport Association.
- ICAO : International Civil Aviation Organisation
- RID : Regulations concerning the International carriage of Dangerous goods by rail.
- WGK : Wassergefahrdungsklasse (Water Hazard Class).
- GHS02 : Flame
- GHS07 : Exclamation mark
- GHS08 : Health hazard
- GHS09 : Environment
- PBT: Persistent, bioaccumulable and toxic.
- vPvB : Very persistent, very bioaccumulable.
- SVHC : Substances of very high concern.