



PRODUITS CHIMIQUES DU MONT-BLANC
www.pcmb.fr

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 : FLUIDE CALOPORTEUR CONCENTRE MB111E®

Product code : PCMB-MB111.

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

Aqueous fluid treatment additive.

1.3. Details of the supplier of the safety data sheet

Registered company name : PRODUITS CHIMIQUES DU MONT-BLANC.

Address : PAE du Pays du Mont Blanc - 100 rue Georges Toussaint .74190.PASSY.France.

Telephone : +33 (0)4 50 78 00 45. Fax : +33 (0)4 50 78 00 88.

Email : contact@pcmb.fr

http://www.pcmb.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.

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).

Specific target organ toxicity (repeated exposure), Category 2 (STOT RE 2, H373).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Biocidal mixture (see section 15).

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

Hazard pictograms :



GHS07



GHS08

Signal Word :

WARNING

Product identifiers :

EC 203-473-3 ETHYLENE GLYCOL

Hazard statements :

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure (if swallowed).

Precautionary statements - Prevention :

P260 Do not breathe vapours.

P264 Wash hands thoroughly after handling.

Precautionary statements - Response :

P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor/if you feel unwell.

P314 Get medical advice/attention if you feel unwell.

P330 Rinse mouth.

Precautionary statements - Disposal :

P501 Dispose of contents/container at a disposal facility in accordance with local regulations.

FLUIDE CALOPORTEUR CONCENTRE MB111E® - PCMB-MB111**2.3. Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	Note	%
INDEX: 603_027_001H CAS: 107-21-1 EC: 203-473-3 REACH: 01-2119456816-28 ETHYLENE GLYCOL	GHS07, GHS08 Wng Acute Tox. 4, H302 Eye Irrit. 2, H319 STOT RE 2, H373	[1]	50 \leq x % < 100
INDEX: 607_196_00_2 CAS: 111-14-8 EC: 203-838-7 REACH: 01-2119463877-21 HEPTANOIC ACID	GHS07, GHS05 Dgr Skin Corr. 1B, H314 Acute Tox. 4, H332 STOT SE 3, H335		2.5 \leq x % < 10
INDEX: 019_002_008F CAS: 1310-58-3 EC: 215-181-3 REACH: 01-2119487136-33 POTASSIUM HYDROXIDE	GHS07, GHS05 Dgr Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1A, H314	[1]	0 \leq x % < 1

Information on ingredients :

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

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 splashes or contact with eyes :**

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

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, administer activated medical charcoal and consult a doctor.

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

Seek medical attention, showing the label.

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

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media**Suitable methods of extinction**

In the event of a fire, use :

- sprayed water or water mist

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

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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

No data available.

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 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.

6.3. Methods and material for containment and cleaning up

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

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 mixture 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.

Fire prevention :

Handle in well-ventilated areas.

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 exposure - obtain special instructions before use.

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 mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

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

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

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.

FLUIDE CALOPORTEUR CONCENTRE MB111E® - PCMB-MB111**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 :
107-21-1	52	20	104	40	Peau

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
107-21-1	-	-	100	-	-
1310-58-3	-	-	2 mg/m3	-	-

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

CAS	VME :	VME :	Excess	Notes
107-21-1	10 ml/m3	26 mg/m3	2(I)	DFG, H, Y

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
107-21-1	-	-	101	-	-
1310-58-3	-	2 mg/m3	-	-	-

- France (INRS - ED984 :2008) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
107-21-1	20	52	40	104	*	84 -
1310-58-3	-	-	-	2	-	-

- Switzerland (SUVA 2009) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Temps :	RSB :
107-21-1	26	10	52	20	4x15	R
1310-58-3	2i	-	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
107-21-1	10 mg/m3	-	-	-	-
1310-58-3	-	2 mg/m3	-	-	-

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

HEPTANOIC ACID (CAS: 111-14-8)

Final use:

Exposure method:

Potential health effects:

DNEL :

Exposure method:

Potential health effects:

DNEL :

Exposure method:

Potential health effects:

DNEL :

Exposure method:

Potential health effects:

DNEL :

Final use:

Exposure method:

Potential health effects:

DNEL :

Exposure method:

Potential health effects:

Workers.

Dermal contact.

Long term systemic effects.

2.9 mg/kg body weight/day

Inhalation.

Short term local effects.

73.6 mg of substance/m3

Inhalation.

Long term local effects.

185 mg of substance/m3

Inhalation.

Long term systemic effects.

20.6 mg of substance/m3

Consumers.

Ingestion.

Long term systemic effects.

2.9 mg/kg body weight/day

Dermal contact.

Long term systemic effects.

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DNEL : 1.5 mg/kg body weight/day

ETHYLENE GLYCOL (CAS: 107-21-1)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
106 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
35 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Dermal contact.
Long term systemic effects.
53 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term local effects.
7 mg of substance/m3

Predicted no effect concentration (PNEC):

HEPTANOIC ACID (CAS: 111-14-8)

Environmental compartment:
PNEC :

Soil.
0.14 mg/kg

Environmental compartment:
PNEC :

Fresh water.
0.092 mg/l

Environmental compartment:
PNEC :

Sea water.
0.0092 mg/l

Environmental compartment:
PNEC :

Intermittent waste water.
0.92 mg/l

Environmental compartment:
PNEC :

Fresh water sediment.
0.9752 mg/kg

Environmental compartment:
PNEC :

Marine sediment.
0.09752 mg/kg

Environmental compartment:
PNEC :

Waste water treatment plant.
1000 mg/l

ETHYLENE GLYCOL (CAS: 107-21-1)

Environmental compartment:
PNEC :

Soil.
1.53 mg/kg

Environmental compartment:
PNEC :

Fresh water.
10 mg/l

Environmental compartment:
PNEC :

Sea water.
1 mg/l

Environmental compartment:
PNEC :

Intermittent waste water.
10 mg/l

Environmental compartment:
PNEC :

Fresh water sediment.
20.9 mg/kg

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Environmental compartment:
PNEC :

Waste water treatment plant.
199.5 mg/l

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

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

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 :

- Butyl Rubber (Isobutylene-isoprene copolymer)

- Natural latex

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- PVC (polyvinyl chloride)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

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.

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

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.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state : Fluid liquid.

Colour: Yellow.

Important health, safety and environmental information

pH : Not relevant.

pH (aqueous solution) : 8.0+/-0.5 (33% H2O)

Boiling point/boiling range : 168 °C.

Flash Point Interval : PE > 100°C.

Vapour pressure (50°C) : Not relevant.

Density : 1.114 (20°C)

Water solubility : Dilutable.

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9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Avoid :

- frost

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 solvents in the mixture 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.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Harmful if swallowed.

Repeated or prolonged contact with the mixture 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

May cause severe damage to organs in the event of repeated or prolonged exposure.

11.1.1. Substances

Acute toxicity :

HEPTANOIC ACID (CAS: 111-14-8)

Inhalation route (Dusts/mist) :

LC50 > 4.6 mg/l

Species : Rat

OECD Guideline 403 (Acute Inhalation Toxicity)

POTASSIUM HYDROXIDE (CAS: 1310-58-3)

Oral route :

LD50 = 333 mg/kg

Species : Rat

11.1.2. Mixture

Skin corrosion/skin irritation :

Corrosivity :

No observed effect.

Serious damage to eyes/eye irritation :

No observed effect.

Corneal haze :

Average score < 1

Iritis :

Average score < 1

Conjunctival redness :

Average score < 2

Conjunctival oedema :

Average score < 2

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SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

HEPTANOIC ACID (CAS: 111-14-8)

Fish toxicity :

LC50 > 92 mg/l

Species : Pimephales promelas

Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity :

EC50 = 860 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity :

ECr50 = 122.7 mg/l

Duration of exposure : 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

HEPTANOIC ACID (CAS: 111-14-8)

Biodegradability :

Rapidly degradable.

ETHYLENE GLYCOL (CAS: 107-21-1)

Biodegradability :

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

12.3. Bioaccumulative potential

12.3.1. Substances

HEPTANOIC ACID (CAS: 111-14-8)

Octanol/water partition coefficient :

log K_{ow} = 2.42

ETHYLENE GLYCOL (CAS: 107-21-1)

Octanol/water partition coefficient :

log K_{ow} = -1.36

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 1 (VwVwS vom 27/07/2005, KBws) : Slightly hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture 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.

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Soiled packaging :

- Empty container completely. Keep label(s) on container.
- Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

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).

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- Container information:

No data available.

- Particular provisions :

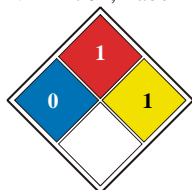
No data available.

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

WGK 1 (VwVwS vom 27/07/2005, KBws) : Slightly hazardous for water.

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :

NFPA 704, Labelling: Health=0 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

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 mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

- | | |
|------|---|
| H290 | May be corrosive to metals. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs through prolonged or repeated exposure . |

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

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IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS07 : Exclamation mark

GHS08 : Health hazard

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.