

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Revision Date 13.08.2018

Version 18.15

---

**SECTION 1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

REACH Registration Number A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. 64742-49-0

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

Identified uses Pharmaceutical production

For additional information on uses please refer to the Merck Chemicals portal ([www.merckgroup.com](http://www.merckgroup.com)).

**1.3 Details of the supplier of the safety data sheet**

Company Merck KGaA \* 64271 Darmstadt \* Germany \* Phone:+49 6151 72-0

Responsible Department LS-QHC \* e-mail: [prodsafe@merckgroup.com](mailto:prodsafe@merckgroup.com)

1.4 Emergency telephone number **Please contact the regional company representation in your country.**

---

**SECTION 2. Hazards identification****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

Flammable liquid, Category 2, H225

Aspiration hazard, Category 1, H304

Skin irritation, Category 2, H315

Specific target organ toxicity - single exposure, Category 3, Central nervous system, H336

Chronic aquatic toxicity, Category 2, H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

#### *Hazard pictograms*



#### *Signal word*

Danger

#### *Hazard statements*

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.

#### *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.

P273 Avoid release to the environment.

##### Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

## Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

### Reduced labelling ( $\leq 125$ ml)

*Hazard pictograms*



*Signal word*

Danger

*Hazard statements*

H304 May be fatal if swallowed and enters airways.

*Precautionary statements*

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Contains: hydrocarbons, C5-C7, n-alkanes, isoalkanes, <5% n-hexane

CAS-No. 64742-49-0

## 2.3 Other hazards

None known.

---

## SECTION 3. Composition/information on ingredients

### 3.1 Substance

#### Hazardous components (REGULATION (EC) No 1272/2008)

*Chemical name (Concentration)*

CAS-No. Registration number Classification

hydrocarbons, C5-C7, n-alkanes, isoalkanes, <5% n-hexane ( $\geq 80\%$  -  $\leq 100\%$ )

64742-49-0 \*)

Flammable liquid, Category 2, H225

Aspiration hazard, Category 1, H304

Skin irritation, Category 2, H315

Specific target organ toxicity - single exposure, Category 3, H336

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

Chronic aquatic toxicity, Category 2, H411

\*) A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 3.2 Mixture

Not applicable

---

## SECTION 4. First aid measures

### 4.1 Description of first aid measures

After inhalation: fresh air. Consult doctor if feeling unwell.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

After eye contact: rinse out with plenty of water. Remove contact lenses.

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

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

irritant effects, somnolence, Drowsiness

It generally applies for aliphatic hydrocarbons with 6 - 18 carbon atoms that they may cause pneumonia, in some cases also pulmonary oedema, upon direct inhalation, i.e. in conditions that can occur only in very special circumstances (nebulizations, spraying, inhalation of aerosols and similar). After absorption of very large quantities: narcosis.

### 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*

Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

---

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

## *Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

## **5.2 Special hazards arising from the substance or mixture**

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air at ambient temperatures.

Pay attention to flashback.

Development of hazardous combustion gases or vapours possible in the event of fire.

## **5.3 Advice for firefighters**

### *Special protective equipment for firefighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### *Further information*

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

## **SECTION 6. Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

### **6.2 Environmental precautions**

Do not let product enter drains. Risk of explosion.

### **6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemisorb®). Dispose of properly. Clean up affected area.

### **6.4 Reference to other sections**

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

Indications about waste treatment see section 13.

---

## SECTION 7. Handling and storage

### 7.1 Precautions for safe handling

#### *Advice on safe handling*

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Observe label precautions.

#### *Advice on protection against fire and explosion*

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### *Hygiene measures*

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

### 7.2 Conditions for safe storage, including any incompatibilities

#### *Storage conditions*

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Recommended storage temperature see product label.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

---

## SECTION 8. Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

#### **Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

## Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

### *Eye/face protection*

Safety glasses

### *Hand protection*

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0,40 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 30 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 730 Camatril® -Velours (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

### *Other protective equipment*

Flame retardant antistatic protective clothing.

### *Respiratory protection*

required when vapours/aerosols are generated.

Recommended Filter type: Filter AX (EN 371)

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

properly documented.

## Environmental exposure controls

Do not let product enter drains.

Risk of explosion.

---

## SECTION 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	liquid
Colour	colourless
Odour	benzine-like
Odour Threshold	No information available.
pH	Not applicable
Melting point	< -80 °C
Boiling point/boiling range	36 - 83 °C at 1.013 hPa
Flash point	< -21 °C Method: c.c.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	1,0 %(V)
Upper explosion limit	7,4 %(V)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No.	100909
Product name	Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

Vapour pressure	370 hPa at 25 °C
Relative vapour density	No information available.
Density	0,645 - 0,665 g/cm <sup>3</sup> at 15 °C
Relative density	No information available.
Water solubility	practically insoluble
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	not auto-flammable
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

## 9.2 Other data

Ignition temperature	260 °C
Viscosity, kinematic	0,45 mm <sup>2</sup> /s at 20 °C

---

## SECTION 10. Stability and reactivity

### 10.1 Reactivity

Vapours may form explosive mixture with air.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

## 10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

## 10.4 Conditions to avoid

Warming.

## 10.5 Incompatible materials

rubber, various plastics

## 10.6 Hazardous decomposition products

no information available

---

## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects

#### *Acute oral toxicity*

LD50 Rat: > 2.000 mg/kg

(External MSDS)

#### *Acute inhalation toxicity*

LC50 Rat: > 5 mg/l; 4 h ; vapour

(External MSDS)

#### *Acute dermal toxicity*

LD50 Rabbit: > 2.000 mg/kg

(External MSDS)

#### *Skin irritation*

Causes skin irritation.

Drying-out effect resulting in rough and chapped skin.

---

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

## *Eye irritation*

This information is not available.

## *Sensitisation*

This information is not available.

## *Germ cell mutagenicity*

This information is not available.

## *Carcinogenicity*

This information is not available.

## *Reproductive toxicity*

This information is not available.

## *Teratogenicity*

This information is not available.

## *Specific target organ toxicity - single exposure*

May cause drowsiness or dizziness.

Target Organs: Central nervous system

## *Specific target organ toxicity - repeated exposure*

This information is not available.

## *Aspiration hazard*

Aspiration hazard, Aspiration may cause pulmonary oedema and pneumonitis.

## **11.2 Further information**

It generally applies for aliphatic hydrocarbons with 6 - 18 carbon atoms that they may cause pneumonia, in some cases also pulmonary oedema, upon direct inhalation, i.e. in conditions that can occur only in very special circumstances (nebulizations, spraying, inhalation of aerosols and similar). After absorption of very large quantities: narcosis.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

---

## **SECTION 12. Ecological information**

### **12.1 Toxicity**

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

No information available.

## 12.2 Persistence and degradability

### *Biodegradability*

Not readily biodegradable.

## 12.3 Bioaccumulative potential

No information available.

## 12.4 Mobility in soil

No information available.

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

## 12.6 Other adverse effects

### *Henry constant*

Distribution preferentially in air.

### *Additional ecological information*

Discharge into the environment must be avoided.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909  
Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

---

## SECTION 13. Disposal considerations

### *Waste treatment methods*

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

---

## SECTION 14. Transport information

### Land transport (ADR/RID)

14.1 UN number	UN 1268
14.2 Proper shipping name	PETROLEUM DISTILLATES, N.O.S. (PETROLEUM SPIRIT)
14.3 Class	3
14.4 Packing group	II
14.5 Environmentally hazardous	yes
14.6 Special precautions for user	yes
Tunnel restriction code	D/E

### Inland waterway transport (ADN)

Not relevant

### Air transport (IATA)

14.1 UN number	UN 1268
14.2 Proper shipping name	PETROLEUM DISTILLATES, N.O.S.
14.3 Class	3
14.4 Packing group	II
14.5 Environmentally hazardous	yes
14.6 Special precautions for user	no

### Sea transport (IMDG)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909  
Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

**14.1 UN number** UN 1268  
**14.2 Proper shipping name** PETROLEUM DISTILLATES, N.O.S. (PETROLEUM SPIRIT)  
**14.3 Class** 3  
**14.4 Packing group** II  
**14.5 Environmentally hazardous** yes  
**14.6 Special precautions for user** yes  
**EmS** F-E S-E

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
Not relevant

---

## SECTION 15. Regulatory information

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

#### *EU regulations*

Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at work.

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC not regulated

Substances of very high concern (SVHC) This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of  $\geq 0.1\%$  (w/w).

#### *National legislation*

Storage class 3

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

---

## SECTION 16. Other information

### Full text of H-Statements referred to under sections 2 and 3.

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.

### Training advice

Provide adequate information, instruction and training for operators.

### Labelling

#### *Hazard pictograms*



#### *Signal word*

Danger

#### *Hazard statements*

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.

#### *Precautionary statements*

##### Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

---

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 100909

Product name Petroleum benzine boiling range 40-60°C EMPROVE® ESSENTIAL DAB

---

P240 Ground/bond container and receiving equipment.

P273 Avoid release to the environment.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P313 Get medical advice/ attention.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Contains: hydrocarbons, C5-C7, n-alkanes, isoalkanes, <5% n-hexane

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

## Regional representation

This information is given on the authorised Safety Data Sheet for your country.

---

*The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.*