



**Neutron**®Pharmachemical Co.  
Manufacturer of Laboratory Chemical & Pharmaceutical Materials

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Revision Date 18.01.2018

Version 5.10

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## SECTION 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph  
Eur,BP,JP,NF,FCC

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. 99-76-3

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

Identified uses Pharmaceutical production, Reagent for development and research,  
Cosmetic raw material  
For additional information on uses please refer to the Neutron  
Chemicals portal ([www.neutronpharmachemical.com](http://www.neutronpharmachemical.com)).

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

Company 98, 9th Floor, Borjsaz Building, Azadi Ave, Tehran, Iran.  
T 021-66906732-3 - F 021-66581408

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

### 1.4 Emergency telephone number 125

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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## SECTION 2. Hazards identification

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

Chronic aquatic toxicity, Category 3, H412

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 statements*

H412 Harmful to aquatic life with long lasting effects.

*Precautionary statements*

Prevention

P273 Avoid release to the environment.

**Reduced labelling (≤125 ml)**

*Hazard statements*

H412 Harmful to aquatic life with long lasting effects.

*CAS-No.* 99-76-3

### 2.3 Other hazards

None known.

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## SECTION 3. Composition/information on ingredients

### 3.1 Substance

Formula	4-(OH)C <sub>6</sub> H <sub>4</sub> (COOCH <sub>3</sub> )	C <sub>8</sub> H <sub>8</sub> O <sub>3</sub> (Hill)
EC-No.	202-785-7	
Molar mass	152,15 g/mol	

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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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

*Chemical name (Concentration)*

CAS-No.	Registration number	Classification
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methyl 4-hydroxybenzoate (<= 100 % )		
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99-76-3	*)	
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Chronic aquatic toxicity, Category 3, H412

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

### 3.2 Mixture

Not applicable

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## SECTION 4. First aid measures

### 4.1 Description of first aid measures

After inhalation: fresh air.

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: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

irritant effects

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

No information available.

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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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## SECTION 5. Firefighting measures

### 5.1 Extinguishing media

*Suitable extinguishing media*

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

*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.

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

### 5.3 Advice for firefighters

*Special protective equipment for firefighters*

In the event of fire, wear self-contained breathing apparatus.

*Further information*

Prevent fire extinguishing water from contaminating surface water or the ground water system.

Suppress (knock down) gases/vapours/mists with a water spray jet.

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## SECTION 6. Accidental release measures

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

Advice for non-emergency personnel: Avoid inhalation of dusts. 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.

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

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## 6.4 Reference to other sections

Indications about waste treatment see section 13.

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## SECTION 7. Handling and storage

### 7.1 Precautions for safe handling

#### *Advice on safe handling*

Observe label precautions.

#### *Hygiene measures*

Change contaminated clothing. Wash hands after working with substance.

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

#### *Storage conditions*

Tightly closed. Dry.

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.

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## SECTION 8. Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

#### Engineering measures

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

---

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

See section 7.1.

## 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:	0,11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 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 741 Dermatril® L (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)).

### *Respiratory protection*

required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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substances

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 properly documented.

## Environmental exposure controls

Do not let product enter drains.

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## SECTION 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	solid
Colour	white
Odour	odourless
Odour Threshold	Not applicable
pH	ca. 5,8 at 20 °C (saturated solution)
Melting point	125 °C Method: OECD Test Guideline 102
Boiling point/boiling range	Not applicable, (decomposition)
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670  
Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	0,000005 hPa at 20 °C
Relative vapour density	No information available.
Density	1,38 g/cm <sup>3</sup> at 20 °C Method: OECD Test Guideline 109
Relative density	No information available.
Water solubility	1,88 g/l at 20 °C Method: OECD Test Guideline 105
Partition coefficient: n-octanol/water	log Pow: 1,98 (22 °C) OECD Test Guideline 107 Bioaccumulation is not expected.
Auto-ignition temperature	> 403 °C Method: Relative self-ignition temperature for solids
Decomposition temperature	270 - 280 °C
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

## 9.2 Other data



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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Ignition temperature > 600 °C

Bulk density ca.300 - 400 kg/m<sup>3</sup>

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## SECTION 10. Stability and reactivity

### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 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:

Bases, Strong oxidizing agents

### 10.4 Conditions to avoid

Strong heating (decomposition).

### 10.5 Incompatible materials

no information available

### 10.6 Hazardous decomposition products

no information available

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects

#### *Acute oral toxicity*

LD50 Rat: > 5.000 mg/kg

OECD Test Guideline 401

#### *Acute inhalation toxicity*

This information is not available.

#### *Acute dermal toxicity*

This information is not available.

#### *Skin irritation*

Rabbit

Result: No irritation

(External MSDS)

#### *Eye irritation*

Rabbit

Result: slight irritation

(ECHA)

Possible damages: slight irritation

#### *Sensitisation*

Maurer optimisation test Guinea pig

Result: negative

Method: OECD Test Guideline 406

#### *Germ cell mutagenicity*

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

---

## *Genotoxicity in vivo*

dominant lethal test

Rat

male

Oral

Result: negative

Method: OECD Test Guideline 478

## *Genotoxicity in vitro*

Ames test

Result: negative

(Lit.)

## *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*

This information is not available.

## *Specific target organ toxicity - repeated exposure*

This information is not available.

## *Aspiration hazard*

This information is not available.

## 11.2 Further information

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 12. Ecological information

### 12.1 Toxicity

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The life science business of Merck operates as MilliporeSigma in the US and Canada

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

---

## *Toxicity to fish*

semi-static test LC50 *Oryzias latipes* (Orange-red killifish): 59,5 mg/l; 96 h

Analytical monitoring: yes

OECD Test Guideline 203

## *Toxicity to daphnia and other aquatic invertebrates*

static test EC50 *Daphnia magna* (Water flea): 11,2 mg/l; 48 h

(ECHA)

## *Toxicity to algae*

static test EC50 *Pseudokirchneriella subcapitata* (algae): 91 mg/l; 72 h

ISO 8692

## *Toxicity to bacteria*

EC0 *Pseudomonas fluorescens*: 500 mg/l

(External MSDS)

## *Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)*

semi-static test NOEC *Daphnia magna* (Water flea): 0,2 mg/l; 21 d

Analytical monitoring: yes

OECD Test Guideline 211

## **12.2 Persistence and degradability**

### *Biodegradability*

89 %; 28 d; aerobic

OECD Test Guideline 301B

Readily biodegradable

## **12.3 Bioaccumulative potential**

### *Partition coefficient: n-octanol/water*

log Pow: 1,98 (22 °C)

OECD Test Guideline 107

Bioaccumulation is not expected.

## **12.4 Mobility in soil**

No information available.

## **12.5 Results of PBT and vPvB assessment**

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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

## 12.6 Other adverse effects

Discharge into the environment must be avoided.

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## 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.

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## SECTION 14. Transport information

### Land transport (ADR/RID)

14.1 - 14.6 Not classified as dangerous in the meaning of transport regulations.

### Inland waterway transport (ADN)

Not relevant

### Air transport (IATA)

14.1 - 14.6 Not classified as dangerous in the meaning of transport regulations.

### Sea transport (IMDG)

14.1 - 14.6 Not classified as dangerous in the meaning of transport regulations.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

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## SECTION 15. Regulatory information

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

#### *EU regulations*

Major Accident Hazard SEVESO III

Legislation Not applicable

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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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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 10 - 13

## 15.2 Chemical safety assessment

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

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## SECTION 16. Other information

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

H412 Harmful to aquatic life with long lasting effects.

### Training advice

Provide adequate information, instruction and training for operators.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Catalogue No. 1.2670

Product name Methyl 4-hydroxybenzoate EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,FCC

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## Labelling

### *Hazard statements*

H412 Harmful to aquatic life with long lasting effects.

### *Precautionary statements*

#### Prevention

P273 Avoid release to the environment.

## 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.

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*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.*