

According to Regulation (EC) No 1907/2006

# Hydroquinone monomethyl ether



Version number: 2  
Issued: 2023-11-13  
Replaces SDS: 2021-02-02

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

### 1.1. Product identifier

**Trade name**

Hydroquinone monomethyl ether

**CAS number**

150-76-5

**EC number**

205-769-8

**Synonyms**

MEHQ; 4-Methoxyphenol; Mequinol

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

**Relevant identified uses**

Research and development.

**Not suitable for use in**

Not suitable for human consumption or veterinary purposes.

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

**Supplier**

Molekula Group

Address

Molekula Ltd, Lingfield Way, Darlington,  
DL1 4XX Darlington  
United Kingdom

Telephone

+44 (0) 3302 000 333

Email

info@molekula.com

Web site

www.molekula.com

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## 1.4. Emergency telephone number

### Poison center/Additional emergency number

0344 892 0111 - National Poisons Information Service (Newcastle Centre)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

#### Classification

Skin sensitisation, hazard category 1

Eye irritation, hazard category 2

Acute toxicity, oral, hazard category 4

#### Hazard statements

H302, H317, H319

### 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

#### Hazard pictograms



#### Signal word

Warning

#### Hazard statements

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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## Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.  
 P233 Keep container tightly closed.  
 P260 Do not breathe dust/fumes/gas/mist/vapours/spray.  
 P262 Do not get in eyes, on skin, or on clothing.  
 P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P271 Use only outdoors or in a well-ventilated area.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
 P302 + P352 IF ON SKIN: Wash with plenty of water/.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P337 + P313 If eye irritation persists: Get medical advice/attention.  
 P362 + P364 Take off contaminated clothing and wash it before reuse.  
 P403 Store in a well-ventilated place.  
 P405 Store locked up.  
 P501 Dispose of contents/container to local regulations.

## 2.3. Other hazards

No data available

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether	150-76-5 205-769-8 01-2119541813-40 604-044-00-7	100%	Acute Tox. 4 - oral, Skin Sens. 1, Eye Irrit. 2	H302, H317, H319 - -	-

## Molecular weight

124.14

## Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel.

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

#### Skin contact

IF ON SKIN: Wash with plenty of water. Continue to rinse for at least 15 minutes and seek medical attention. Get medical advice/attention if you feel unwell.

#### Eye contact

Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.

#### Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

#### Information for doctors

First aiders/ medical personnel need to protect themselves.

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

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### Inhalation

Single exposure may cause the following adverse effects: Upper respiratory irritation. Difficulty in breathing.

#### Skin contact

Single exposure may cause the following adverse effects: Severe skin irritation.

#### Eye contact

Single exposure may cause the following adverse effects: Severe irritation.

#### Ingestion

Single exposure may cause the following adverse effects: Severe abdominal pain. Nausea, vomiting.

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

Treat symptomatically. No special treatment requirement.

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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

#### Unsuitable extinguishing media

No specific fire fighting procedure given.

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

Specific hazards: Combustible.

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

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

### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

Evacuate area. Avoid breathing gas, fume, vapours or spray. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

## SECTION 6: Accidental release measures

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

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. Avoid contact with skin and eyes. For personal protection, see section 8.

### 6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

### 6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Preventive handling precautions

For precautions see section 2.2. Wear protective clothing, gloves, eye and face protection. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid ingestion and inhalation.

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## General hygiene

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove contaminated clothing and laundry thoroughly before re-use. Wash skin thoroughly after handling.

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

Store at ambient temperature. Store in a dry place. Store in a closed container. Handle and store contents under inert gas.

Air sensitive. Light sensitive. Moisture Sensitive.

## 7.3. Specific end use(s)

No specific usage precautions noted.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No data available

### 8.2. Exposure controls

#### Personal Protective Equipment Symbols



#### Eye / face protection

Wear eye protection.

#### Hand protection

Wear protective gloves. Recommended gloves: Nitrile.

Glove Thickness: 0.11mm

Breakthrough time: 8 hours

Always inspect gloves before use. If signs of wear and tear are noticed then the gloves should be replaced.

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash contaminated skin thoroughly after handling.

#### Other skin protection

Wash skin thoroughly after handling.

#### Respiratory protection

Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided.

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## **Environmental exposure controls**

Avoid discharge into drains.

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

#### **Physical state**

Solid

#### **Colour**

White / off-white.

#### **Odour**

phenol-like

#### **Melting point / freezing point**

55 - 57 °C

#### **Boiling point or initial boiling point and boiling range**

243 °C

#### **Flammability**

No data available

#### **Lower and upper explosion limit**

No data available

#### **Flash point**

No data available

#### **Auto-ignition temperature**

421 °C

#### **Decomposition temperature**

No data available

#### **pH**

No data available

#### **Kinematic viscosity**

No data available

#### **Solubility**

No data available

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

No data available

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## Vapour pressure

No data available

## Density and/or relative density

1.55 g/cm<sup>3</sup>

## Relative vapour density

No data available

## Particle characteristics

No data available

## 9.2. Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under the prescribed storage conditions.

### 10.3. Possibility of hazardous reactions

Violent reactions possible with:

oxidising agents

Metals.

Acid anhydrides.

Bases.

Acid chlorides

### 10.4. Conditions to avoid

No data available

### 10.5. Incompatible materials

Strong oxidising agents. Bases. Acid chlorides Acid anhydrides.

### 10.6. Hazardous decomposition products

See section 5.

## SECTION 11: Toxicological information

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

#### Acute toxicity



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Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Test animals
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	LD50	1600 mg/kg	Oral	Rat
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	LD50	>2000 mg/kg	Dermal	Rat

## Skin corrosion/irritation

Product / Substance name CAS / EC no.	Result	Species
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	No skin irritation.	Rabbit

## Serious eye damage/irritation

Product / Substance name CAS / EC no.	Result
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	Causes serious eye irritation.

## Respiratory or skin sensitisation

Product / Substance name CAS / EC no.	Result
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	May cause an allergic skin reaction.

## Germ cell mutagenicity

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Product / Substance name CAS / EC no.	Result	Exposure route	Metabolic activation / Exposure	Species	Method / Guideline
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	Negative.	-	with and without metabolic activation	Salmonella typhimurium	Ames test
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	Negative.	-	with and without metabolic activation	Chinese hamster lung cells	In vitro mammalian cell gene mutation test.
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	Negative.	-	with and without metabolic activation	Human lymphocytes	Mutagenicity (mammal cell test): Chromosome aberration:
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	Negative.	Oral	-	Rat bone marrow	-

### Aspiration hazard

Based on available data, the classification criteria are not met.

## 11.2. Information on other hazards

No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute fish toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
mequinol; 4-methoxyphenol;	LC50	28.5 mg/l	96 hours	Onchorhynchus mykiss (Rainbow trout)

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Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
hydroquinone mono-methyl ether 150-76-5 / 205-769-8				

## Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
mequinol; 4-methoxyphenol; hydroquinone mono-methyl ether 150-76-5 / 205-769-8	EC50	54.7 mg/l	72 hours	Pseudokirchneriella subcapitata

## Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
mequinol; 4-methoxyphenol; hydroquinone mono-methyl ether 150-76-5 / 205-769-8	EC50	3 mg/l	48 hours	Daphnia magna
mequinol; 4-methoxyphenol; hydroquinone mono-methyl ether 150-76-5 / 205-769-8	NOEC	0.68 mg/l	21 days	Daphnia magna

## 12.2. Persistence and degradability

### Persistence and degradability

Product / Substance name CAS / EC no.	Type of test	Duration	Result	Degradation
mequinol; 4-methoxyphenol;	aerobic	28 days	86%	The product is readily biodegradable.

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Product / Substance name CAS / EC no.	Type of test	Duration	Result	Degradation
hydroquinone mono-methyl ether 150-76-5 / 205-769-8				

## 12.3. Bioaccumulative potential

### Bioaccumulative potential

Product / Substance name CAS / EC no.	Result
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether 150-76-5 / 205-769-8	unlikely

## 12.4. Mobility in soil

No data available

## 12.5. Results of PBT and vPvB assessment

No data available

## 12.6. Endocrine disrupting properties

This product does not contain any known or suspected endocrine disruptors.

## 12.7. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal considerations

Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport information

### 14.1. UN number

Not applicable

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

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## 14.4. Packing group

Not applicable

## 14.5. Environmental hazards

Not applicable

## 14.6. Special precautions for user

Not applicable

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### EU regulations

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### National regulations

No data available

### 15.2. Chemical safety assessment

No data available

## SECTION 16: Other information

### Phrase meaning

Skin Sens. 1 - Skin sensitisation, hazard category 1

Eye Irrit. 2 - Eye irritation, hazard category 2

Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.