

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

· **1.1 Product identifier**

· **Trade name:** Phenol, Ultra Pure

· **Article number:** 818048

· **CAS Number:**
108-95-2

· **EC number:**
203-632-7

· **Index number:**
604-001-00-2

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the mixture** Research use only.

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

· **Manufacturer/Supplier:**

MP Biomedicals Europe
Parc d'Innovation BP 50067
Rue Geiler de Kaysersberg
Illkirch Cedex 67402
France
tel: +33 3.88.67.54.25
www.mpbio.com

· **Further information obtainable from:** Product safety department

· **1.4 Emergency telephone number:**

:n° ORFILA" (01-45-42-59-59)
CHEMTREC: 1-800-424-9300 (1-703-527-3887)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.12.2015

Revision: 16.12.2015

Trade name: Phenol, Ultra Pure

(Contd. of page 1)

· Hazard pictograms



GHS05 GHS06 GHS08

· Signal word *Danger*

· Hazard statements

H301+H311+H331 *Toxic if swallowed, in contact with skin or if inhaled.*H314 *Causes severe skin burns and eye damage.*H341 *Suspected of causing genetic defects.*H373 *May cause damage to organs through prolonged or repeated exposure.*

· Precautionary statements

P260 *Do not breathe dust/fume/gas/mist/vapours/spray.*P301+P310 *IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*P303+P361+P353 *IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*P405 *Store locked up.*P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: *Not applicable.*· vPvB: *Not applicable.*

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterisation: Substances

· CAS No. Description

108-95-2 Phenol

· Identification number(s)

· EC number: 203-632-7

· Index number: 604-001-00-2

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

*Immediately remove any clothing soiled by the product.**Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.**Remove breathing equipment only after contaminated clothing have been completely removed.**In case of irregular breathing or respiratory arrest provide artificial respiration.*

· After inhalation:

*Supply fresh air or oxygen; call for doctor.**In case of unconsciousness place patient stably in side position for transportation.*· After skin contact: *Immediately wash with water and soap and rinse thoroughly.*· After eye contact: *Rinse opened eye for several minutes under running water. Then consult a doctor.*

· After swallowing:

*Do not induce vomiting; call for medical help immediately.**Drink plenty of water and provide fresh air. Call for a doctor immediately.*· 4.2 Most important symptoms and effects, both acute and delayed *No further relevant information available.*

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.12.2015

Revision: 16.12.2015

Trade name: Phenol, Ultra Pure

(Contd. of page 2)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
In case of seepage into the ground inform responsible authorities.
In case of gas release or seepage into the ground inform responsible authorities.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:** 2 - 8 °C
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Protect from exposure to the light.
Store in nitrogen.
Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.12.2015

Revision: 16.12.2015

Trade name: Phenol, Ultra Pure

(Contd. of page 3)

· 8.1 Control parameters**· Ingredients with limit values that require monitoring at the workplace:****108-95-2 Phenol**

IOELV	Short-term value: 16 mg/m ³ , 4 ppm Long-term value: 8 mg/m ³ , 2 ppm Skin
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· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls**· Personal protective equipment:****· General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Tightly sealed goggles

SECTION 9: Physical and chemical properties**· 9.1 Information on basic physical and chemical properties****· General Information****· Appearance:**

Form: Solid material

Colour: Colourless

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not applicable.

· Change in condition

Melting point/Melting range: 37-44 °C

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.12.2015

Revision: 16.12.2015

Trade name: Phenol, Ultra Pure

(Contd. of page 4)

Boiling point/Boiling range:	182 °C
· Flash point:	79 °C
· Flammability (solid, gaseous):	Product is not flammable.
· Ignition temperature:	715 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	1,3 Vol %
Upper:	9,5 Vol %
· Vapour pressure at 55 °C:	6,3 hPa
· Density at 20 °C:	1,071 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	-
· water at 20 °C:	84 g/l
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
Toxic if swallowed, in contact with skin or if inhaled.

· **LD/LC50 values relevant for classification:**

Oral	LD50	317 mg/kg (rat)
Dermal	LD50	630 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes severe skin burns and eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

(Contd. on page 6)

EU

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.12.2015

Revision: 16.12.2015

Trade name: Phenol, Ultra Pure

(Contd. of page 5)

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity**
Suspected of causing genetic defects.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

Oral	LC50 / 96 h	36,1 - 68,8 mg/L (Carassius auratus)
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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

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|---------------------------------------|--------------------|
| · 14.1 UN-Number | UN1671 |
| · ADR, IMDG, IATA | |
| · 14.2 UN proper shipping name | 1671 PHENOL, SOLID |
| · ADR | PHENOL, SOLID |
| · IMDG | Phenol, solid |
| · IATA | |

(Contd. on page 7)

EU

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.12.2015

Revision: 16.12.2015

Trade name: Phenol, Ultra Pure

(Contd. of page 6)

· **14.3 Transport hazard class(es)**· **ADR, IMDG, IATA**

- **Class** 6.1 Toxic substances.
- **Label** 6.1

· **14.4 Packing group**

- **ADR, IMDG, IATA** II

- **14.5 Environmental hazards:** Not applicable.

- **14.6 Special precautions for user** Warning: Toxic substances.
- **Danger code (Kemler):** 60
- **EMS Number:** 6.1-04
- **Stowage Category** A

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

· **Transport/Additional information:**· **ADR**

- **Limited quantities (LQ)** 500 g
- **Excepted quantities (EQ)** Code: E4
Maximum net quantity per inner packaging: 1 g
Maximum net quantity per outer packaging: 500 g
- **Transport category** 2
- **Tunnel restriction code** D/E

· **IMDG**

- **Limited quantities (LQ)** 500 g
- **Excepted quantities (EQ)** Code: E4
Maximum net quantity per inner packaging: 1 g
Maximum net quantity per outer packaging: 500 g

- **UN "Model Regulation":** UN 1671 PHENOL, SOLID, 6.1, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category H2 ACUTE TOXIC**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Product safety department

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.12.2015

Revision: 16.12.2015

Trade name: Phenol, Ultra Pure

(Contd. of page 7)

*IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 3: Acute toxicity, Hazard Category 3**Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B**Muta. 2: Germ cell mutagenicity, Hazard Category 2**STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2*

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