



SAFETY DATA SHEET

Revision Date **14-May-2012**

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name Aquaphenol
Recommended Use For research use only
Registration Number No information available

1.1 Product Identifier

Catalog Number: AQUAPH02
Supplier: MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency Telephone Number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

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

2. HAZARDS IDENTIFICATION

GHS - Classification

Acute Oral Toxicity	Category 4
Acute Dermal Toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 2
Skin Corrosion/Irritation	Category 1
Skin Corrosion / Irritation (Subcategory)	Subcategory 1B
Serious Eye Damage/Eye Irritation	Category 1
Germ Cell Mutagenicity	Category 2
Specific Target Organ Toxicity (Single Exposure)	Category 2
Specific Target Organ Toxicity (Repeated Exposure)	Category 2

GHS Label elements, including precautionary statements

Physical Hazards None

Risk Combination Phrases

R36/38 - Irritating to eyes and skin.



Signal Word

Danger

Precautionary Statements

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

P330 - Rinse mouth

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

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

P321 - Specific treatment (see supplemental first aid instructions on this label)

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

P312 - Call a POISON CENTER/doctor/physician if you feel unwell

P322 - Specific measures (see .? on this label)

P361 - Remove/Take off immediately all contaminated clothing

P363 - Wash contaminated clothing before reuse

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical attention/advice

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P309 + P311 - If exposed or you feel unwell: Call a POISON CENTRE or doctor/physician

P314 - Get medical attention/advice if you feel unwell

P273 - Avoid release to the environment

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

P284 - Wear respiratory protection

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P310 - Immediately call a POISON CENTRE or doctor/physician

P320 - Specific treatment is urgent (see .? on this label)

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

P405 - Store locked up

P501 - Dispose of contents/container to an approved waste disposal plant

NFPA rating:

NFPA Health: 3

NFPA Flammability: 0

NFPA Reactivity: 0

NFPA Special Note: -

Precautionary Statements

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. Avoid release to the environment.

General advice

Specific measures (see supplemental first aid instructions on this label). Specific treatment is urgent (see supplemental instructions on the administration of antidotes on this label). Immediately call a POISON CENTER or doctor/physician. Specific treatment (see supplemental instructions on the administration of antidotes on this label).

Eyes	IF IN EYES: Inse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor / Physician
Skin	Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Ingestion	Rinse mouth IF SWALLOWED: Rinse mouth. DO NOT induce vomiting DO NOT induce vomiting
Storage	Store locked up Store in a well-ventilated place. Keep container tightly closed
Disposal	Dispose of contents of container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms: Not Available

Chemical Name	EEC No.	CAS Number	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
PHENOL	EEC No. 203-632-7	108-95-2	75	T; R23/24/25 C; R34 Xn; R48/20/21/22 Muta.Cat.3; R68	Acute Tox. 3 (H311) GHS06 GHS08 GHS05 (Dgr) H341 H331 H311 H301 H373 H314 STOT RE 2 (H373) Acute Tox. 3 (H331)	No data available
Water, Ultra-pure	EEC No. 231-791-2	7732-18-5	25	-		No data available

For the full text of the R phrases and H statements mentioned in this section, see Section 2

4. FIRST AID MEASURES

4.1 Description of first-aid measures

General Advice	Consult a physician Show this safety data sheet to the doctor in attendance. Move victim to a safe isolated area
Eye Contact	Call a physician immediately. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Call a physician immediately.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Immediate medical attention is not required. Drink plenty of water. Do NOT induce vomiting.
Protection of First-aiders	Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed

Main Symptoms No information available

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Water. Water spray. Carbon dioxide (CO₂). Dry powder. Foam.

Standard procedure for chemical fires Water mist may be used to cool closed containers

Extinguishing media which must not be used for safety reasons

No information available

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

See Section 12 for additional information.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.

6.4 Reference to other sections

See Section 12 for additional information

7. HANDLING AND STORAGE

Storage

+4°C

STORE UNDER NITROGEN

PROTECT FROM LIGHT

7.1 Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment. Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place

7.3 Specific end uses

Exposure Scenario

No information available

Other Guidelines

No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits

Chemical Name	European Union	The United Kingdom	France	Spain	Germany
PHENOL	4 ppm Indicative 16 mg/m ³ Indicative 2 ppm Indicative 8 mg/m ³ Indicative	TWA: 2 ppm TWA: 7.8 mg/m ³ STEL: 6 ppm STEL: 23.4 mg/m ³	TWA: 2 ppm TWA: 8 mg/m ³	TWA: 2 ppm TWA: 8 mg/m ³ S*	TWA: 2 ppm TWA: 8 mg/m ³

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
PHENOL	TWA: 2 ppm TWA: 7.8 mg/m ³ : skin - potential for cutaneous absorption	TWA: 5 ppm VLE-MP	TWA: 8 mg/m ³ Skin	TWA: 2 ppm TWA: 8 mg/m ³ STEL: 5 ppm STEL: 20 mg/m ³	TWA: 1 ppm TWA: 4 mg/m ³

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
PHENOL	Skin TWA: 2 ppm TWA: 7.8 mg/m ³ 5	Skin TWA: 5 ppm TWA: 19 mg/m ³ STEL: 5 ppm STEL: 19 mg/m ³	TWA: 7.8 mg/m ³ NDS	Skin notation	TWA: 2 ppm TWA: 8 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2 Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas..

Personal Protective Equipment

Eye Protection Tightly fitting safety goggles

Skin and Body Protection Long sleeved clothing. Impervious butyl rubber gloves. Hydrofluoric acid-resistant and solvent-resistant gloves (gloves made of viton*).. Solvent-resistant gloves (butylrubber).

Hand Protection Protective gloves

Respiratory Protection Wear a positive-pressure supplied-air respirator with full facepiece..

Environmental Exposure Controls Do not allow material to contaminate ground water system..

Hygiene Measures When using, do not eat, drink or smoke.. Remove and wash contaminated clothing before re-use..

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical State Liquid.

Physical Property Data

pH Value	No data available
Flash Point	No information available
Autoignition Temperature	No data available
Melting/Freezing Point	
Boiling Point (°C)	No information available.
Vapor Pressure	No data available
Vapor Density	No information available
Water Solubility	No data available
Evaporation Rate	No data available.
Flammability (solid, gas)	No data available
Flammability Limits in Air	
upper flammability limit	No data available
lower flammability limit	No data available
Density	No data available
Specific Gravity	No data available.
Decomposition Temperature	No data available
Viscosity, Kinematic	No data available.
Viscosity, Dynamic	No data available.
Explosive Properties	No information available.
Oxidizing Properties	No information available
VOC Content (%)	No information available

9.2 Other Safety Information

Other Safety Information

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3

Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

None in particular

10.5 Incompatible Materials

None in particular

10.6 Hazardous Decomposition Products

Carbon oxides

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	Toxic by inhalation.

Eye Irritation Causes burns.
Skin Irritation Severe skin irritation.
Ingestion Harmful if swallowed.

Acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
PHENOL 108-95-2	317 mg/kg (Rat)	525 mg/kg (Rat) 630 mg/kg (Rabbit)	316 mg/m ³ (Rat) 4 h
Water, Ultra-pure 7732-18-5	90 mL/kg (Rat)		

Mutagenic Effects In vitro tests have shown mutagenic effects
Carcinogenic Effects None known.
Reproductive Toxicity None known
Developmental Toxicity None known.
Specific target organ systemic toxicity (single exposure) May cause damage to organs.
Specific target organ systemic toxicity (repeated exposure) May cause damage to organs.
Aspiration hazard None known

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Chemical Name	Ecotoxicity - Freshwater Algae - Acute Toxicity Data	Ecotoxicity - Freshwater Fish - Acute Toxicity Data	Ecotoxicity - Water Flea - Acute Toxicity Data
PHENOL 108-95-2	EC50 (96 h) 0.0188 - 0.1044 mg/L (Pseudokirchneriella subcapitata) EC50 (72 h) 187 - 279 mg/L (Desmodesmus subspicatus) EC50 (96 h) 46.42 mg/L (Pseudokirchneriella subcapitata)	LC50 (96 h) 20.5 - 25.6mg/L (Pimephales promelas) static LC50 (96 h) 33.9 - 43.3mg/L (Oryzias latipes) flow-through LC50 (96 h) 7.5 - 14mg/L (Oncorhynchus mykiss) static LC50 (96 h) 0.00175mg/L (Cyprinus carpio) semi-static LC50 (96 h) 27.8mg/L (Brachydanio rerio) LC50 (96 h) 5.0 - 12.0mg/L (Oncorhynchus mykiss) LC50 (96 h) 31mg/L (Poecilia reticulata) semi-static LC50 (96 h) 32mg/L (Pimephales promelas) LC50 (96 h) 11.9 - 50.5mg/L (Pimephales promelas) flow-through LC50 (96 h) 23.4 - 36.6mg/L (Oryzias latipes) static LC50 (96 h) 4.23 - 7.49mg/L (Oncorhynchus mykiss) semi-static LC50 (96 h) 5.449 - 6.789mg/L (Oncorhynchus mykiss) flow-through LC50 (96 h) 13.5mg/L (Lepomis macrochirus) static LC50 (96 h) 11.9 - 25.3mg/L (Lepomis macrochirus) flow-through LC50 (96 h) 34.09 - 47.64mg/L (Poecilia reticulata) static LC50 (96 h) 11.5mg/L (Lepomis macrochirus) semi-static	EC50 (48 h) 10.2-15.5 mg/L EC50 (48 h) 4.24-10.7 mg/L

12.2 Persistence and degradability

No data is available on the product itself

12.3 Bioaccumulative potential

No information available

Chemical Name	Log Pow
PHENOL 108-95-2	1.47

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products Dispose of in accordance with local regulations

Contaminated Packaging

Clean container with water Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

IMDG/IMO

Proper Shipping Name Phenol solution
Hazard Class 6.1
UN/ID No UN2821
Packing Group II

ICAO

Hazard class 6.1
UNID No. UN2821
Proper Shipping Name Phenol solution
Packing Group II

ICAO/IATA

Hazard Class 6.1
UN/ID No. UN2821
Proper Shipping Name Phenol solution
Packing Group II
EGR Code 153

DOT

Proper shipping name Phenol solution
Hazard class 6.1
UN/ID No UN2821
Packing Group II

TDG

Proper Shipping Name Phenol solution
Hazard Class 6.1
UN/ID No UN2821
Packing Group II
WHMIS Classifications D1A, E

MEX

Proper Shipping Name Phenol solution
Hazard Class 6.1
UN/ID No UN2821
Packaging Group II

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	EINECS / ELINCS	DSL / NDSL	PICCS	ENCS	IECSC	AICS	KECL

15. REGULATORY INFORMATION

PHENOL	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed
Water, Ultra-pure	Listed	Listed	Listed	Listed		Listed	Listed	Listed

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances / EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippine Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

Chemical Name	ISHA - Harmful substances prohibited for manufacturing, Importing, Transferring, or Supplying	Korea - Harmful substances Requiring Permission	Korea Toxic Chemical Classification Lis	Toxic Release Inventory Chemicals - Group 1	Toxic Release Inventory Chemicals - Group 2
PHENOL			Listed		

16. OTHER INFORMATION

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Material Safety Data Sheet

Key literature references and sources for data

www.ChemADVISOR.com/