

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.22.2014**Resorcinol****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Resorcinol**Manufacturer/Supplier Article number:** RE4025**Recommended uses of the product and restrictions on use:** Laboratory**Manufacturer Details:**

AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331
1-717-632-1291

Emergency telephone number:**ChemTel: (24-hour)**

+1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification**Classification of the substance or mixture:****Irritant****Environmentally Damaging**

AcTox Oral 4.

Skin irrit, cat 2.

Eye irrit. cat 2.

Aquatic AcTox. 1.

Hazards Not Otherwise Classified - Combustible Dust.

Signal word: Warning**Hazard statements:**

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

Very toxic to aquatic life.

Precautionary statements:

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid release to the environment.

Do not eat, drink or smoke when using this product.

Wash skin thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing.

Collect spillage.

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

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If eye irritation persists get medical advice/attention.
 IF ON SKIN: Wash with soap and water.
 Take off contaminated clothing and wash before reuse.
 If skin irritation occurs: Get medical advice/attention.
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 Rinse mouth.
 Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None**SECTION 3: Composition/information on ingredients****Ingredients:**

Ingredients:		
CAS 108-46-3	Resorcinol	>99 %
Percentages are by weight		

SECTION 4: First aid measures**Description of first aid measures****After inhalation:**

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen. DO NOT use mouth-to-mouth resuscitation. Give artificial respiration if necessary.

After skin contact:

Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical aid immediately.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical aid immediately.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Notes to physician: treat symptomatically.

SECTION 5: Firefighting measures**Extinguishing media****Suitable extinguishing agents:**

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

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Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Advice for firefighters:**Protective equipment:**

Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Transfer to a disposal or recovery container. Avoid contact with skin, eyes, and clothing. Avoid dust formation. Use spark-proof tools and explosion-proof equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air. Clean up spills immediately observing spills in Section 8. Provide ventilation.

Reference to other sections: None**SECTION 7: Handling and storage****Precautions for safe handling:**

Minimize dust generation and accumulation. Wash hands after handling. Avoid dispersal of dust in the air. Remove contaminated clothing and wash before reuse. Avoid inhalation and ingestion. Store protected from light. Store protected from air. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only in well ventilated areas. Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Store protected from air. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly closed. Store with like hazards. Store protected from light.

SECTION 8: Exposure controls/personal protection

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Control parameters:	108-46-3, Resorcinol., ACGIH 20 ppm STEL; 10 ppm TWA. 108-46-3, Resorcinol., NIOSH 20 ppm STEL; 90 mg/m ³ STEL. 108-46-3, Resorcinol., NIOSH 10 ppm TWA; 45 mg/m ³ TWA. 108-46-3, Resorcinol., OSHA 20 ppm STEL; 90 mg/m ³ STEL.
Appropriate engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use under a fume hood. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
Respiratory protection:	Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.
Protection of skin:	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Eye protection:	Safety glasses with side shields or goggles.
General hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):		Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Pleasant odor	Vapor pressure at 20°C:	1 mm Hg @ 108.4C
Odor threshold:	Not determined	Vapor density:	3.8
pH-value:	5.2 in solution	Relative density:	1.272
Melting/Freezing point:	109 - 111 C	Solubilities:	Very soluble.; ND = Not Determined.; N/A = Not Applicable.
Boiling point/Boiling range:	276C	Partition coefficient (n-octanol/water):	Not determined
Flash point (closed cup):	127 °C (261 °F) - closed cup	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity

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Stable at normal temperatures in tightly closed containers under an inert atmosphere. Substance undergoes color change upon exposure to light and air. May undergo auto-oxidation at 25C.

Possible hazardous reactions: None**Conditions to avoid:**

Store away from oxidizing agents, strong acids or bases. Light, dust generation, exposure to air, excess heat.

Incompatible materials:

Strong oxidizing agents, bases, nitric acid, albumin, iron salts, antipyrine, acetanilide, menthol, urethane, spirit nitrous ether, camphor.

Hazardous decomposition products:

irritating and toxic fumes and gases, carbon dioxide.

SECTION 11: Toxicological information**Acute Toxicity:****Dermal:**

Dermal LD50 Rabbit 3360 mg/kg.

Chronic Toxicity: No additional information.**Skin corrosion/irritation:** No additional information.**Serious eye damage/irritation:** No additional information.**Respiratory or skin sensitization:**

Other adverse effects:

In a study of workers in a tire manufacturing plant, the presence of dermatitis has been directly correlated with exposure to the processes involving resorcinol use.

Carcinogenicity: No additional information.**Germ cell mutagenicity:**

Cytogenetic Analysis: Human, Lymphocyte = 80 mg/L.

Cytogenetic Analysis: Human Cells - not otherwise specified = 40 mg/L

DNA Damage: Rat, Liver = 10 mmol/L

Cytogenetic Analysis: Hamster, Ovary = 1600 mg/L

Reproductive Toxicity: No additional information.**STOT-single and repeated exposure:** No additional information.**Additional toxicological information:**

No additional information.

SECTION 12: Ecological information**Ecotoxicity:**

Freshwater Fish, 96 Hr LC50 Oncorhynchus mykiss: >100 mg/L [flow-through].

Freshwater Fish, 96 Hr LC50 Pimephales promelas: 53.4 mg/L.

Freshwater Fish, 96 Hr LC50 Pimephales promelas: 36 - 100 mg/L [static].

Freshwater Fish, 96 Hr LC50 Pimephales promelas: 100 mg/L [flow-through].

Water Flea., 48 Hr LC50 Daphnia magna: 78 mg/L.

Ecotoxicity , Resorcinol may react relatively rapidly in sunlit natural water with photochemically produced

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oxidants such as hydroxyl and peroxy radicals. Resorcinol is expected to leach readily in soil; however, leaching may not be important if concurrent biodegradation occurs at a rapid rate.

Persistence and degradability:

Readily degradable in the environment. Biodegradability Biotic/Aerobic Chemical oxygen demand - Exposure time 4 d Result : - Readily biodegradable.

Bioaccumulative potential:

Dangerous to aquatic life in high concentrations.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations**Waste disposal recommendations:**

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14: Transport information**US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

UN2876

Limited Quantity Exception:

None

Bulk:**RQ (if applicable):** None**Proper shipping Name:** RESORCINOL.**Hazard Class:** 6**Packing Group:** III.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**Non Bulk:****RQ (if applicable):** None**Proper shipping Name:** RESORCINOL.**Hazard Class:** 6**Packing Group:** III.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

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None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

108-46-3 Resorcinol 5000 lbs.

Proposition 65 (California):**Chemicals known to cause cancer:**

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada**Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-0-0**HMIS:** 2-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:**

IMDG	International Maritime Code for Dangerous Goods.
PNEC.	Predicted No-Effect Concentration (REACH).
CFR	Code of Federal Regulations (USA)
SARA	Superfund Amendments and Reauthorization Act (USA).
RCRA.	Resource Conservation and Recovery Act (USA).
TSCA.	Toxic Substances Control Act (USA).
NPRI	National Pollutant Release Inventory (Canada).
DOT	US Department of Transportation.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.

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- ACGIH American Conference of Governmental Industrial Hygienists
CAS Chemical Abstracts Service (division of the American Chemical Society).
NFPA National Fire Protection Association (USA).
HMIS Hazardous Materials Identification System (USA).
WHMIS Workplace Hazardous Materials Information System (Canada).
DNEL Derived No-Effect Level (REACH).