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Catechol

SECTION 1 : Identification of the substance/mixture and of the supplier		
Product name :	Catechol	
Manufacturer/Supplier Trade name:		
Manufacturer/Supplier Article number:	S25680	
Recommended uses of the product and uses restricti	ons on use:	
Manufacturer Details:		
AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331		
Supplier Details:		
Fisher Science Education		
15 Jet View Drive, Rochester, NY 14624		
Emergency telephone number:		
Fisher Science Education Emergency Telephone No.: 800-535-5053		
SECTION 2 : Hazards identification		

Classification of the substance or mixture:



Irritant Skin irritation, category 2 Eye irritation, category 2A Specific target organ toxicity following single exposure, category 3

Hazards Not Otherwise Classified - Combustible Dust Skin Irrit. 2 Eye Irrit. 2 STOT SE 3

Signal word :Warning

Hazard statements:

Causes skin irritation Causes serious eye irritation May cause respiratory irritation **Precautionary statements:** If medical advice is needed, have product container or label at hand Keep out of reach of children Read label before use Avoid breathing dust/fume/gas/mist/vapours/spray Use only outdoors or in a well-ventilated area Wash skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing Specific treatment (see supplemental first aid instructions on this label) Remove/Take off immediately all contaminated clothing IF ON SKIN: Wash with soap and water If skin irritation occurs: Get medical advice/attention

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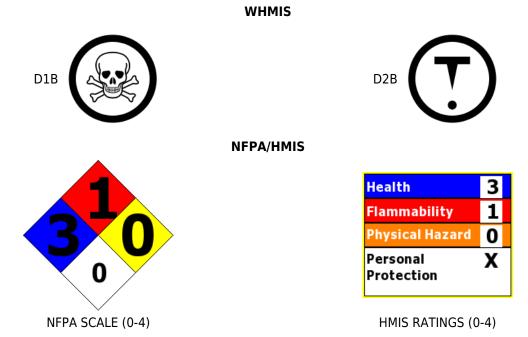
Catechol

If eye irritation persists get medical advice/attention Store in a well ventilated place. Keep container tightly closed Store locked up Dispose of contents and container to an approved waste disposal plant

Combustible Dust Hazard: :

May form combustible dust concentrations in air (during processing).

Other Non-GHS Classification:



SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 225937-10-0	Catechol	100 %
		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.

After skin contact: 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 attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation, Nausea, Headache, Shortness of breath.;

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Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water spray . Alcohol-resistant foam . Dry chemical . Carbon dioxide. If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic 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: Wear self contained breathing apparatus for fire fighting if necessary.Use NIOSHapproved 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:

Use personal protective equipment.Ensure adequate ventilation.Keep away from ignition sources. Transfer to a disposal or recovery container. Avoid dust formation. Use spark-proof tools and explosion-proof equipment.Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions:

Do not let product enter drains.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.Place into properly labeled containers for recovery or disposal. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect solids in powder form using vacuum with (HEPA filter)

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Avoid contact with skin and eyes. Use only in well ventilated areas. Avoid generation of dust or fine particulate. Avoid contact with eyes, skin, and clothing. Wash hands after handling. Minimize dust generation and accumulation. 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.

Conditions for safe storage, including any incompatibilities:

Store in cool place. Store with like hazards. Provide ventilation for containers. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers.

SECTION 8 : Exposure controls/personal protection

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Control Parameters:	, , OSHA PEL TWA (Total Dust) 15 mg/m3 (50 mppcf*) , , ACGIH TLV TWA (inhalable particles) 10 mg/m3
Appropriate Engineering controls:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.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):	Almost white to brown solid.	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	Phenol - like	Vapor pressure:	0.01 mm Hg @ 25 C
Odor threshold:	Not Determined	Vapor density:	3.8
pH-value:	Not Determined	Relative density:	1.344
Melting/Freezing point:	103 - 106 C	Solubilities:	Material is water soluble.
Boiling point/Boiling range:	245 C	Partition coefficient (n- octanol/water):	Not Determined
Flash point (closed cup):	127 C	Auto/Self-ignition temperature:	Not Determined

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Evaporation rate:	Not Determined	Decomposition temperature:	Not Determined
Flammability (solid,gaseous):	Not Determined	Viscosity:	a. Kinematic:Not Determined b. Dynamic: Not Determined
Density: Not Determined Catechol:Molecular Weight: 110.11			

SECTION 10 : Stability and reactivity

Reactivity:

Chemical stability:Substance undergoes color change upon exposure to light and air. Substance sublimes. **Possible hazardous reactions:**None under normal processing.

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

Incompatible materials: Strong oxidizers, aluminum.

Hazardous decomposition products:Carbon oxides (CO, CO2).

SECTION 11 : Toxicological information

Acute Toxicity:			
Oral:	26 0 mg/kg	LD50 orl - rat	
Chronic Toxicity: No	Chronic Toxicity: No additional information.		
Corrosion Irritation: No additional information.			
Sensitization: N		No additional information.	
Single Target Organ (STOT):		No additional information.	
Numerical Measures:		No additional information.	
Carcinogenicity:		Catechol: ACGIH: A3 – Confirmed animal carcinogen with unknown relevance to humans, IARC: Group 2	
Mutagenicity:		No additional information.	
Reproductive Toxicity:		No additional information.	

SECTION 12 : Ecological information

Ecotoxicity Persistence and degradability: Readily degradable in the environment. Bioaccumulative potential: Mobility in soil: Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to

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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

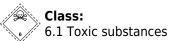
UN-Number

2811

UN proper shipping name

Toxic solids , Organic , N.O.S .

Transport hazard class(es)



Packing group:||| Environmental hazard: Transport in bulk: Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 313 (Specific toxic chemical listings):

225937-10-0 Catechol

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

225937-10-0 Catechol 100 lb

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

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None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is 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.

GHS Full Text Phrases:

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 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)

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