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**1. Identification****1.1 GHS Product identifier**

Product name pyrogallol

**1.2 Other means of identification**

Product number AO105

Other names PYROGALL

**1.3 Recommended use of the chemical and restrictions on use**

Identified uses For industry use only.

Uses advised against no data available

**1.4 Supplier's details**

Company Acros PharmaTech Limited

Address HongKong: Unit 3A-8,12/F,Kaiser Centre,No.18 Centre Street,Sai Ying Pun,HongKong  
Mainland: Suite 920,Changwu Road 888,Changzhou,Jiangsu,China

Telephone 86(519)85265509

**2. Hazard identification****2.1 Classification of the substance or mixture**

Acute toxicity - Oral, Category 4

Acute toxicity - Dermal, Category 4

Acute toxicity - Inhalation, Category 4

Germ cell mutagenicity, Category 2

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 3

**2.2 GHS label elements, including precautionary statements**

Pictogram(s)



Signal word

Warning

H302 Harmful if swallowed

H312 Harmful in contact with skin

Hazard statement(s)

H332 Harmful if inhaled

H341 Suspected of causing genetic defects

H412 Harmful to aquatic life with long lasting effects

Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.

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

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P201 Obtain special instructions before use.

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

P273 Avoid release to the environment.

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

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P312 Call a POISON CENTER/doctor/...if you feel unwell.

P321 Specific treatment (see ... on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P405 Store locked up.

P501 Dispose of contents/container to ...

**Response****Storage****Disposal****2.3 Other hazards which do not result in classification**

none

**3.Composition/information on ingredients****3.1 Substances****Chemical name Common names and synonyms CAS number EC number Concentration**

pyrogallol	pyrogallol	87-66-1	none	≥98%
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**4.First-aid measures****4.1 Description of necessary first-aid measures****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

Fresh air, rest. Seek medical attention if you feel unwell.

**In case of skin contact**

Remove contaminated clothes. Rinse skin with plenty of water or shower.

**In case of eye contact**

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First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

**If swallowed**

Rinse mouth. Refer for medical attention .

**4.2 Most important symptoms/effects, acute and delayed**

Inhalation of dust causes irritation of nose and throat. Ingestion may cause severe gastrointestinal irritation, convulsions, circulatory collapse, and death. Contact with eyes causes irritation. Skin contact can cause local discoloration, irritation, eczema, and death; repeated contact can cause sensitization. (USCG, 1999)

**4.3 Indication of immediate medical attention and special treatment needed, if necessary**

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand-valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR as necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. /Phenols and related compounds/

**5.Fire-fighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Water. Foam. Dry powder. Carbon dioxide.

**5.2 Specific hazards arising from the chemical**

This compound is probably combustible.

**5.3 Special protective actions for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**6.Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**6.2 Environmental precautions**

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

**6.3 Methods and materials for containment and cleaning up**

Do NOT let this chemical enter the environment. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.

**7.Handling and storage****7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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**7.2 Conditions for safe storage, including any incompatibilities**

Separated from strong oxidants and strong bases./Store/ separated from strong oxidants, strong bases.

**8.Exposure controls/personal protection****8.1 Control parameters****Occupational Exposure limit values**

no data available

**Biological limit values**

no data available

**8.2 Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**8.3 Individual protection measures, such as personal protective equipment (PPE)****Eye/face protection**

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Respiratory protection**

Wear dust mask when handling large quantities.

**Thermal hazards**

no data available

**9.Physical and chemical properties**

<b>Physical state</b>	odorless white to gray solid
<b>Colour</b>	White, lustrous crystals or plates
<b>Odour</b>	Odorless
<b>Melting point/ freezing point</b>	247°C(dec.)(lit.)
<b>Boiling point or initial boiling point and boiling range</b>	309°C(lit.)
<b>Flammability</b>	Combustible.
<b>Lower and upper explosion limit / flammability limit</b>	no data available
<b>Flash point</b>	63°C(lit.)
<b>Auto-ignition temperature</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available

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<b>Solubility</b>	In water:400 g/L (25 °C)
<b>Partition coefficient n-octanol/water (log value)</b>	log Kow = 0.97 (est)
<b>Vapour pressure</b>	10 mm Hg ( 167.7 °C)
<b>Density and/or relative density</b>	1.453
<b>Relative vapour density</b>	4.4 (vs air)
<b>Particle characteristics</b>	no data available

## 10.Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

BECOMES GRAYISH ON EXPOSURE TO AIR & LIGHT; AQ SOLN DARKENS ON EXPOSURE TO AIR, QUITE RAPIDLY WHEN ALKALINE

### 10.3 Possibility of hazardous reactions

CombustiblePYROGALLIC ACID is a strong reducing agent. Reacts with alkalis, NH<sub>3</sub>, antipyrine, camphor, phenol, iron and lead salts, iodine, lime water, menthol and KMnO<sub>4</sub>.

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

The solution in water is a weak acid. Reacts with oxidants and bases.

### 10.6 Hazardous decomposition products

When heated to decomposition it emits acrid smoke and irritating fumes.

## 11.Toxicological information

### Acute toxicity

- Oral: LD50 Mouse oral 300 mg/kg
- Inhalation: no data available
- Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

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no data available

**Reproductive toxicity**

no data available

**STOT-single exposure**

no data available

**STOT-repeated exposure**

no data available

**Aspiration hazard**

no data available

**12. Ecological information****12.1 Toxicity**

- Toxicity to fish: LC50; Species: Brachydanio rerio (zebra fish); Concentration: 41.8 mg/L for 96 hr /Conditions of bioassay not specified
- Toxicity to daphnia and other aquatic invertebrates: EC50; Species: Daphnia magna (water flea, age <72 hr); Conditions: freshwater, static, 22°C, pH 7-7.8, conductivity 160-180 umhos/cm; Concentration: >100000 ug/L for 2 hr; Effect: intoxication, immobilization /active ingredient
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

**12.2 Persistence and degradability**

AEROBIC: An aerobic biodegradation study of pyrogalllic acid at an initial concentration of 500 ppm, based on BOD measurements, and using an activated sludge inoculum of 5230, 3310, and 6640 ppm, indicated 24, 16, and 23% theoretical BOD, respectively, over a period of 0.5 days(1). An aerobic biodegradation study of pyrogalllic acid, based on BOD measurements, using a sewage inoculum at 20°C and an unknown pyrogalllic acid initial concentration, indicated 2% BODT, over a period of 5 days(2). An aerobic biodegradation study of pyrogalllic acid, based on COD measurements, using an activated sludge inoculum of 100 mg/L and an initial pyrogalllic acid concentration of 200 ppm, indicated 40% COD removal over a period of 5 days at pH 7.2 and 20°C(3). An aerobic biodegradation study of pyrogalllic acid, based on COD measurements, using an activated sludge inoculum and an initial pyrogalllic acid concentration of 200 ppm, indicated 0, 23, 35, 45, 57, 70, 70, 70, and 69 percent COD removal after 0, 2.5, 5, 10, 20, 30, 40, 50, 60, 63 days, respectively(4).

**12.3 Bioaccumulative potential**

An estimated BCF of 3.2 was calculated for pyrogalllic acid(SRC), using an estimated log Kow of 0.97(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

**12.4 Mobility in soil**

Using a structure estimation method based on molecular connectivity indices(1), the Koc of pyrogalllic acid can be estimated to be 320(SRC). According to a classification scheme(2), this estimated Koc value suggests that pyrogalllic acid is expected to have moderate mobility in soil. The pKa of pyrogalllic acid is 9.01(3), indicating that this compound will partially exist in the anion form in the environment and anions do not adsorb more strongly to soils containing organic carbon and clay than their neutral counterparts(4).

**12.5 Other adverse effects**

no data available

**13. Disposal considerations**

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**13.1 Disposal methods****Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

**Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

**14. Transport information****14.1 UN Number**

ADR/RID: UN2811 IMDG: UN2811 IATA: UN2811

**14.2 UN Proper Shipping Name**

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S.

IMDG: TOXIC SOLID, ORGANIC, N.O.S.

IATA: TOXIC SOLID, ORGANIC, N.O.S.

**14.3 Transport hazard class(es)**

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

**14.4 Packing group, if applicable**

ADR/RID: III IMDG: III IATA: III

**14.5 Environmental hazards**

ADR/RID: no IMDG: no IATA: no

**14.6 Special precautions for user**

no data available

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

no data available

**15. Regulatory information****15.1 Safety, health and environmental regulations specific for the product in question**

Chemical name	Common names and synonyms	CAS number	EC number
pyrogallol	pyrogallol	87-66-1	none
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Listed.
<b>EC Inventory</b>			Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Listed.

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Vietnam National Chemical Inventory Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC) Listed.

## 16. Other information

### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

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**Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.**