

SAFETY DATA SHEET

Preparation Date: 6/01/2015

Revision Date: 6/01/2015

Revision Number: G1

Product identifier

Product code: P1455
Product Name: PYROCATECHOL, REAGENT

Other means of identification

Synonyms: Catechol
1,2-Benzenediol
1,2-Dihydroxybenzene
ortho-Dihydroxybenzene
Catechin (phenol)

CAS #: 120-80-9
RTECS # UX1050000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: antioxidant in rubber, chemical, photographic, dye, fat and oil industries; anti-fungal preservative for treating seed potato pieces.

Uses advised against No information available

Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Danger

Hazard statements

Toxic if swallowed
Toxic in contact with skin
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing genetic defects
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Toxic to aquatic life with long lasting effects
Toxic to aquatic life

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see .? on this label)
Specific treatment (see .? on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Pyrocatechol 120-80-9	120-80-9	100	*

4. FIRST AID MEASURES

First aid measures

General Advice:

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact:

Flush eye with water for 15 minutes. Get medical attention. If symptoms persist, call a physician.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Toxic if swallowed.

Most important symptoms and effects, both acute and delayed

Symptoms

Causes serious eye irritation. Eye contact may result in redness or pain. Causes skin irritation. Skin contact may result in redness, pain, inflammation, itching, scaling. May cause allergic skin reaction. May cause irritation of respiratory tract. Coughing. Burning sensation of the respiratory tract. Dyspnea (Difficulty breathing and shortness of breath). Central nervous system effects. May cause methemoglobinemia and cyanosis. May affect the blood. It may affect the kidneys. May affect the liver.

Indication of any immediate medical attention and special treatment needed

Notes to Physician:

Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:

Carbon dioxide (CO₂). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media:

No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products:

Carbon monoxide, carbon dioxide

Specific hazards:

May be combustible at high temperatures

Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials. Avoid dust formation.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Protect from light. Sensitive to light. Store in light-resistant containers. Air sensitive.

Incompatible Materials:

Strong oxidizing agents. Strong acids. Nitric acid. Strong bases. Acid chlorides. Anhydrides.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Pyrocatechol - 120-80-9	None	5 ppm TWA 20 mg/m ³ TWA	5 ppm TWA	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Pyrocatechol - 120-80-9	5 ppm TWA 23 mg/m ³ TWA	5 ppm TWA	5 ppm TWA	5 ppm TWAEV 23 mg/m ³ TWAEV

Australia and Mexico

Components	Australia	Mexico
Pyrocatechol 120-80-9	5 ppm TWA 23 mg/m ³ TWA	5 ppm TWA 20 mg/m ³ TWA

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles. Safety glasses with side-shields.
- Skin and body protection:** Chemical resistant apron. Gloves. Long sleeved clothing.
- Respiratory protection:** Wear respirator with dust filter.. Be sure to use an approved/certified respirator or equivalent..
- Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.	Appearance: Crystals. Crystalline powder.	Color: Grey. Tan.
Odor: Faint. Characteristic.	Taste Bittersweet.	Molecular/Formula weight: 110.11
Formula: C ₆ H ₆ O ₂	Flash point (°C): No data available	Flashpoint (°C/°F): No information available.
Flash Point Tested according to: Not available	Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available
Autoignition Temperature (°C/°F): No information available	pH: No information available	Melting point/range(°C/°F): 105 °C/221 °F
Boiling point/range(°C/°F): 245.5 °C/473.9 F	Decomposition temperature(°C/°F): No information available	Bulk density: No information available
Specific gravity: 1.344	Vapor pressure @ 20°C (kPa): No information available	Density (g/cm³): No information available
Evaporation rate: No information available	Vapor density: 3.79	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): 0.88	Viscosity: No information available
Miscibility: No information available	Solubility: Soluble in Chloroform Soluble in Ether Soluble in Carbon tetrachloride Soluble in Benzene Soluble in Alcohol Very soluble in pyridine Soluble in Water Solubility in Water: 461 g/L at 25 °C	

10. STABILITY AND REACTIVITY

Reactivity

Reacts vigorously with oxidizing agents

Chemical stability

Stability:

Stable under recommended storage conditions. Sensitive to air. Darkens with exposure to air and light. Sensitive to light. Exposure to light accelerates decomposition.

Possibility of Hazardous Reactions:

Hazardous polymerization does not occur

Conditions to avoid:

Heat. Exposure to light. Exposure to air. Incompatible materials.

Incompatible Materials:

Strong oxidizing agents. Strong acids. Nitric acid. Strong bases. Acid chlorides. Anhydrides.

Hazardous decomposition products: No information available

Other Information

Corrosivity:

No information available

Product code: P1455

Product name: PYROCATECHOL,
REAGENT

6 / 13

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Pyrocatechol - 120-80-9

LD50/oral/rat = 260 mg/kg Oral LD50 Rat

LD50/oral/mouse = 260 mg/kg

LD50/dermal/rat = No information available

LD50/dermal/rabbit = 800 mg/kg Dermal LD50Rabbit

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 260mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 260mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = 800mg/kg

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:

Causes skin irritation. It can be absorbed through the skin. Toxic in contact with skin. It may cause dermatitis.

Eye Contact:

Causes eye irritation.

Inhalation

May cause irritation of respiratory tract. Symptoms may include coughing, burning sensation in throat and lungs.

Ingestion Toxic if swallowed. May cause nausea, vomiting, headaches, difficulty breathing. May affect the liver and kidneys, behavior/central nervous system (CNS depression, tremors, muscle twitching, dizziness, convulsions), cardiovascular system (rise in blood pressure), blood (blood dyscrasias, leukopenia, anemia). May also interfere with the ability of the blood to carry oxygen (methemoglobinemia) causing headache, dizziness, and a blue color to the skin and lips.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available

Sensitization: May cause sensitization by skin contact

Mutagenic Effects: Mutagenic effects in mammalian somatic cells
Experiments with animal lymphocytes have shown mutagenic effects
Mutagenic effects on mammalian germ cells
DNA damage - hamster ovary

Carcinogenic effects: Possibly carcinogenic to humans.

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Pyrocatechol	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Group 2B - Monograph 71 [1999] Supplement 7 [1987] Monograph 15 [1977]	Not listed	Present	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans*

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available
STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.
Target Organs: Liver. Kidneys. Skin. Blood.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Pyrocatechol - 120-80-9

Freshwater Fish Species Data: 3.5 mg/L LC50 Pimephales promelas 96 h flow-through 1
8.9 mg/L LC50 Oncorhynchus mykiss 96 h flow-through 1

Water Flea Data: 1.66 mg/L EC50 Daphnia magna 48 h

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Pyrocatechol	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN2811
Proper Shipping Name: Toxic solids, organic, n.o.s.(pyrocatechol)
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: III
ERG No: 154
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Symbol(s): G

TDG (Canada)

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: III
Description: No information available

ADR

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
Classification Code: No information available

14. TRANSPORT INFORMATION

Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: III
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
EMS: F-A
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: III
Classification Code: No information available
Description: No information available

ICAO

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: III
Description: No information available

IATA

UN-No: UN2811
Proper Shipping Name: Toxic solid, organic, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: III
ERG Code: 6L
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Pyrocatechol</i>	Present TP	Present KE-02556	Present	Present (3)-543	Present	Present	Present 204-427-5

U.S. Regulations

Pyrocatechol

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0722
New Jersey (EHS) List: 0722 500 lb TPQ

Pyrocatechol

New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List Present
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances:
1 lb RQ
Louisiana Reportable Quantity List for Pollutants: 100lbfinal RQ
45.4kgfinal RQ
California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Pyrocatechol	carcinogen	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Pyrocatechol	100 lb final RQ 45.4 kg final RQ	None	None	None	0.1 % de minimis concentration

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Pyrocatechol	Not Applicable	08/04/199506/30/1998

Canada

WHMIS hazard class:

D1B Toxic materials

D2B Toxic materials

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Pyrocatechol	1 %

Inventory

Components	Canada (DSL)	Canada (NDSL)
Pyrocatechol	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Pyrocatechol	Present	Not listed

EU Classification

R-phrase(s)

R21/22 - Harmful in contact with skin and if swallowed.

R36/38 - Irritating to eyes and skin.

S -phrase(s)

S 2 - Keep out of the reach of children.

S22 - Do not breathe dust.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37 - Wear suitable gloves.

Components	Classification	Concentration Limits:	Safety Phrases
Pyrocatechol	Xn; R21/22 Xi; R36/38	No information	S2 S22 S26 S37

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xn - Harmful.

Xi - Irritant.



16. OTHER INFORMATION

16. OTHER INFORMATION

Preparation Date: 6/01/2015
Revision Date: 6/01/2015
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet