

SAFETY DATA SHEET

Creation Date 22-Sep-2009

Revision Date 29-Mar-2024

Revision Number 3

1. Identification

Product Name Pentafluorophenol
Cat No. : A15574
CAS No 771-61-9
Synonyms No information available
Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

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

| | |
|--|--------------|
| Acute oral toxicity | Category 4 |
| Acute dermal toxicity | Category 4 |
| Acute Inhalation Toxicity - Dusts and Mists | Category 4 |
| Skin Corrosion/Irritation | Category 1 B |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system. | |

Label Elements

Signal Word
Danger

Hazard Statements

Causes severe skin burns and eye damage
 Causes serious eye damage
 May cause respiratory irritation
 Harmful if swallowed, in contact with skin or if inhaled

**Precautionary Statements****Prevention**

Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Response

Call a POISON CENTER or doctor/physician if you feel unwell

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician if you feel unwell

Skin

Immediately call a POISON CENTER or doctor/physician
 Wash contaminated clothing before reuse
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Eyes

IF IN EYES: Rinse 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

Ingestion

Rinse mouth
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|----------------------|----------|----------|
| Phenol, pentafluoro- | 771-61-9 | > 99 |

4. First-aid measures

Eye Contact

Immediate medical attention is required. 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. Immediate medical attention is required.

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| Inhalation | Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration. |
| Ingestion | Do NOT induce vomiting. Call a physician or poison control center immediately. |
| Most important symptoms and effects | Difficulty in breathing. Causes burns by all exposure routes. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting; Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

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| Suitable Extinguishing Media | Carbon dioxide (CO ₂). Dry chemical. Chemical foam. Water mist may be used to cool closed containers. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | 72 °C / 161.6 °F |
| Method - | No information available |
| Autoignition Temperature | No information available |
| Explosion Limits | |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Flammable. Combustible material. Combustible material. Containers may explode when heated.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Gaseous hydrogen fluoride (HF).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

| | | | |
|---------------|---------------------|--------------------|-------------------------|
| Health | Flammability | Instability | Physical hazards |
| 3 | 2 | 0 | N/A |

6. Accidental release measures

| | |
|----------------------------------|--|
| Personal Precautions | Remove all sources of ignition. Take precautionary measures against static discharges. |
| Environmental Precautions | See Section 12 for additional Ecological Information. |

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| Methods for Containment and Clean Up | Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Remove all sources of ignition. |
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7. Handling and storage

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|-----------------|--|
| Handling | Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Handle product only in closed system or provide appropriate exhaust ventilation. Wear personal protective equipment/face protection. Do not breathe dust. Keep away from open flames, hot surfaces and sources of ignition. |
|-----------------|--|

Storage. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Bases. Strong oxidizing agents. Acid anhydrides. Acid chlorides.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Particulates filter conforming to EN 143.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|---|-----------------------------------|
| Physical State | Solid |
| Appearance | White |
| Odor | Odorless |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | 34 - 36 °C / 93.2 - 96.8 °F |
| Boiling Point/Range | 143 °C / 289.4 °F @ 760 mmHg |
| Flash Point | 72 °C / 161.6 °F |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | No data available |
| Vapor Pressure | No information available |
| Vapor Density | Not applicable |
| Specific Gravity | No information available |
| Solubility | No information available |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | No information available |
| Decomposition Temperature | No information available |
| Viscosity | Not applicable |
| Molecular Formula | C ₆ H F ₅ O |
| Molecular Weight | 184.07 |

10. Stability and reactivity

Reactive Hazard None known, based on information available

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|---|--|
| Stability | Stable. |
| Conditions to Avoid | Incompatible products. Keep away from open flames, hot surfaces and sources of ignition. |
| Incompatible Materials | Bases, Strong oxidizing agents, Acid anhydrides, Acid chlorides |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO ₂), Gaseous hydrogen fluoride (HF) |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information

| | |
|--------------------|--------------------------------------|
| Oral LD50 | Category 4. ATE = 300 - 2000 mg/kg. |
| Dermal LD50 | Category 4. ATE = 1000 - 2000 mg/kg. |
| Mist LC50 | Category 4. ATE = 1 - 5 mg/l. |

Component Information

| | |
|---|--------------------------|
| Toxicologically Synergistic Products | No information available |
|---|--------------------------|

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

| | |
|------------------------|--|
| Irritation | Causes burns by all exposure routes |
| Sensitization | No information available |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|----------------------|----------|------------|------------|------------|------------|------------|
| Phenol, pentafluoro- | 771-61-9 | Not listed | Not listed | Not listed | Not listed | Not listed |

| | |
|--------------------------|--------------------------|
| Mutagenic Effects | No information available |
|--------------------------|--------------------------|

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|-----------------------------|---------------------------|
| Reproductive Effects | No information available. |
|-----------------------------|---------------------------|

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|------------------------------|---------------------------|
| Developmental Effects | No information available. |
|------------------------------|---------------------------|

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|-----------------------|---------------------------|
| Teratogenicity | No information available. |
|-----------------------|---------------------------|

| | |
|---------------------------------|--------------------|
| STOT - single exposure | Respiratory system |
| STOT - repeated exposure | None known |

| | |
|--------------------------|--------------------------|
| Aspiration hazard | No information available |
|--------------------------|--------------------------|

| | |
|---|---|
| Symptoms / effects, both acute and delayed | Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation |
|---|---|

| | |
|--|--------------------------|
| Endocrine Disruptor Information | No information available |
|--|--------------------------|

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|------------------------------|--|
| Other Adverse Effects | The toxicological properties have not been fully investigated. |
|------------------------------|--|

12. Ecological information

Ecotoxicity

Do not empty into drains.

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|--------------------------------------|--|
| Persistence and Degradability | Soluble in water Persistence is unlikely based on information available. |
|--------------------------------------|--|

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN2923
Proper Shipping Name Corrosive solid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

TDG

UN-No UN2923
Proper Shipping Name Corrosive solid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

IATA

UN-No UN2923
Proper Shipping Name CORROSIVE SOLID, TOXIC, N.O.S.*
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

IMDG/IMO

UN-No UN2923
Proper Shipping Name Corrosive solid, toxic, n.o.s.
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

15. Regulatory information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|----------------------|----------|------|---|-----------------------------|
| Phenol, pentafluoro- | 771-61-9 | X | ACTIVE | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|-----------|--------|-----|------|--------|-------|------|------|------|-------|------|
|-----------|--------|-----|------|--------|-------|------|------|------|-------|------|

| | | | | | | | | | | |
|----------------------|----------|---|---|-----------|---|---|---|---|---|----------|
| Phenol, pentafluoro- | 771-61-9 | - | X | 212-235-8 | X | - | X | - | X | KE-27939 |
|----------------------|----------|---|---|-----------|---|---|---|---|---|----------|

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH Not applicable

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|----------------------|----------|---|---|---|
| Phenol, pentafluoro- | 771-61-9 | - | - | - |

Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component | CAS No | OECD HPV | Persistent Organic | Ozone Depletion | Restriction of |
|-----------|--------|----------|--------------------|-----------------|----------------|
|-----------|--------|----------|--------------------|-----------------|----------------|

| | | | Pollutant | Potential | Hazardous Substances (RoHS) |
|----------------------|----------|----------------|----------------|----------------|-----------------------------|
| Phenol, pentafluoro- | 771-61-9 | Not applicable | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|----------------------|----------|---|--|----------------------------|------------------------------------|
| Phenol, pentafluoro- | 771-61-9 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other information

Prepared By Health, Safety and Environmental Department
 Email: chem.techinfo@thermofisher.com
 www.thermofisher.com

Creation Date 22-Sep-2009
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Print Date 29-Mar-2024
Revision Summary New emergency telephone response service provider.

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of SDS