

# SAFETY DATA SHEET

Creation Date 09-November-2010

Revision Date 19-December-2025

Revision Number 6

This safety data sheet was created pursuant to the requirements of: Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR) - SOR 2022-272

## 1. Identification

**Product Name** Pyrrole

**Cat No. :** AC157710000; AC157710025; AC157710250; AC157711000; AC157715000

**CAS-No** 109-97-7  
**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

##### **Importer/Distributor**

Fisher Scientific  
112 Colonnade Road,  
Ottawa, ON K2E 7L6,  
Canada  
Tel: 1-800-234-7437

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Manufacturer**

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

#### **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

#### **WHMIS 2015 Classification**

This product is hazardous in accordance with the Canada Hazardous Products Act (HPA) and Hazardous Products Regulation (HPR), as amended (SOR/2022-272)

|                                   |            |
|-----------------------------------|------------|
| Flammable liquids                 | Category 3 |
| Acute oral toxicity               | Category 3 |
| Acute Inhalation Toxicity         | Category 4 |
| Serious Eye Damage/Eye Irritation | Category 1 |

### Label Elements

#### **Signal Word**

Danger

#### **Hazard Statements**

Flammable liquid and vapor  
Toxic if swallowed  
Harmful if inhaled  
Causes serious eye damage

**Precautionary Statements****Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Keep container tightly closed  
Ground and bond container and receiving equipment  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection  
Use explosion-proof electrical/ventilating/lighting/equipment  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use non-sparking tools  
Take action to prevent static discharges

**Response**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
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/doctor  
Rinse mouth  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

**Storage**

Store locked up  
Store in a well-ventilated place. Keep cool

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Light sensitive

### 3. Composition/Information on Ingredients

| Component  | CAS-No   | Weight % |
|------------|----------|----------|
| 1H-Pyrrole | 109-97-7 | >95      |

### 4. First-aid measures

**General Advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

|                                        |                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                      | Remove to fresh air. If not breathing, give artificial respiration. 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. |
| <b>Ingestion</b>                       | Do NOT induce vomiting. Call a physician or poison control center immediately.                                                                                                                                                                                                                                                 |
| <b>Most important symptoms/effects</b> | Difficulty in breathing. Causes eye burns. Causes severe eye damage. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting                                                                                                                                                                       |
| <b>Notes to Physician</b>              | Treat symptomatically                                                                                                                                                                                                                                                                                                          |

## 5. Fire-fighting measures

|                                         |                                                                                                                                         |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>     | Water spray, carbon dioxide (CO <sub>2</sub> ), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers. |
| <b>Unsuitable Extinguishing Media</b>   | No information available                                                                                                                |
| <b>Flash Point</b>                      | 36 °C / 96.8 °F                                                                                                                         |
| <b>Method -</b>                         | No information available                                                                                                                |
| <b>Autoignition Temperature</b>         | 550 °C / 1022 °F                                                                                                                        |
| <b>Explosion Limits</b>                 |                                                                                                                                         |
| <b>Upper</b>                            | 14.80 vol %                                                                                                                             |
| <b>Lower</b>                            | 3.10 vol %                                                                                                                              |
| <b>Sensitivity to Mechanical Impact</b> | No information available                                                                                                                |
| <b>Sensitivity to Static Discharge</b>  | No information available                                                                                                                |

### Specific Hazards Arising from the Chemical

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Vapors may form explosive mixtures with air.

### Hazardous Combustion Products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### 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. Thermal decomposition can lead to release of irritating gases and vapors.

### NFPA

|               |                     |                    |                         |
|---------------|---------------------|--------------------|-------------------------|
| <b>Health</b> | <b>Flammability</b> | <b>Instability</b> | <b>Physical hazards</b> |
| 3             | 2                   | 1                  | N/A                     |

## 6. Accidental release measures

|                                             |                                                                                                                                                                                                                                                      |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>                 | Ensure adequate ventilation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges. |
| <b>Environmental Precautions</b>            | Should not be released into the environment. See Section 12 for additional Ecological Information.                                                                                                                                                   |
| <b>Methods for Containment and Clean Up</b> | Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.                                                                        |

## 7. Handling and storage

|                 |                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges. |
| <b>Storage.</b> | Keep away from heat, sparks and flame. Protect from direct sunlight. Do not store in aluminum containers. Refrigerator/flammables. Material darkens in color during storage. Keep under nitrogen. Keep container tightly closed in a dry and well-ventilated place. Incompatible Materials. Acids. Acid anhydrides. Acid chlorides.                                                               |

## 8. Exposure controls / personal protection

|                                   |                                                                                                                                              |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Exposure Guidelines</u></b> | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies. |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Engineering Measures</u></b> | Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.<br>Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### **Personal protective equipment**

**Eye Protection**  
**Hand Protection**

Goggles  
Protective gloves

| Glove material | Breakthrough time | Glove thickness | Glove comments         |
|----------------|-------------------|-----------------|------------------------|
| Natural rubber | See manufacturers | -               | Splash protection only |
| Nitrile rubber | recommendations   |                 |                        |
| Neoprene       |                   |                 |                        |
| PVC            |                   |                 |                        |

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

### **Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

**Recommended Filter type:** Particulates filter conforming to EN 143 Ammonia and organic ammonia derivatives filter Type K Green conforming to EN14387

When RPE is used a face piece Fit Test should be conducted

### **Environmental exposure controls**

No information available.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 9. Physical and chemical properties

**Appearance****Physical State**

Liquid

**Color**

Brown

**Odor**

pungent

**Odor Threshold**

No information available

**Property****Values****Remarks****• Method****Melting Point/Range**

-23 °C / -9.4 °F

**Softening Point**

No data available

**Boiling Point/Range**

129 - 131 °C / 264.2 - 267.8 °F

**Flash Point**

36 °C / 96.8 °F

**Flammability (liquid)**

Flammable

**Method -** No information available**Flammability (solid,gas)**

Not applicable

On basis of test data

**Explosion Limits****Lower** 3.1

Liquid

**Upper** 14.8**Autoignition Temperature**

550 °C / 1022 °F

**Decomposition Temperature**

No data available

**pH**

6

1% aq. solution

**Viscosity**

1.317 mPa.s at 20 °C

**Water Solubility**

60 g/L (20°C)

**Solubility in other solvents**

No information available

**Partition Coefficient (n-octanol/water)****Component****log Pow**

1H-Pyrrole

0.75

**Vapor Pressure**

8.7 mbar @ 20 °C

**Density / Specific Gravity**

0.960

**Bulk Density**

Not applicable

Liquid

**Vapor Density**

2.31

(Air = 1.0)

**Particle characteristics**

Not applicable (liquid)

**Other Information****Molecular Formula**

C4 H5 N

**Molecular Weight**

67.09

**Explosive Properties**

explosive air/vapour mixtures possible

## 10. Stability and reactivity

**Reactive Hazard**

None known, based on information available

**Stability**

Light sensitive. Air sensitive.

**Conditions to Avoid**

Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. Excess heat. Exposure to light. Exposure to air.

**Incompatible Materials**

Acids, Acid anhydrides, Acid chlorides

**Hazardous Decomposition Products** Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)**Hazardous Polymerization**

Polymerization can occur.

**Hazardous Reactions**

None under normal processing.

## 11. Toxicological information

### Information on expected route of exposure

|                   |                                                                                                 |
|-------------------|-------------------------------------------------------------------------------------------------|
| <b>Inhalation</b> | Not an expected route of exposure.                                                              |
| <b>Ingestion</b>  | May be harmful if swallowed.                                                                    |
| <b>Eyes</b>       | Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness. |
| <b>Skin</b>       | Avoid contact with skin. Skin Corrosion/Irritation.                                             |

### Toxicology data for the components

**Toxicologically Synergistic Products** No information available

**(b) skin corrosion/irritation;** No data available

**(c) serious eye damage/irritation;** Category 1

**(d) respiratory or skin sensitization;**  
**Respiratory** No data available  
**Skin** No data available

**(e) germ cell mutagenicity;** No data available

**(f) carcinogenicity;**

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component  | CAS-No   | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|------------|----------|------------|------------|------------|------------|------------|
| 1H-Pyrrole | 109-97-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

**(g) reproductive toxicity;** No data available

**(h) STOT-single exposure;** No data available

**(i) STOT-repeated exposure;** No data available

**Target Organs** No information available.

**(j) aspiration hazard;** No data available

**Symptoms / effects, both acute and delayed** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

## 12. Ecological information

### Ecotoxicity

| Component  | Freshwater Algae | Freshwater Fish                                              | Microtox   | Water Flea |
|------------|------------------|--------------------------------------------------------------|------------|------------|
| 1H-Pyrrole | Not listed       | LC50: 197 - 224 mg/L, 96h flow-through (Pimephales promelas) | Not listed | Not listed |

**Persistence and Degradability** Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

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

| Component  | log Pow |
|------------|---------|
| 1H-Pyrrole | 0.75    |

### 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 UN1992  
**Proper Shipping Name** Flammable liquid, toxic, n.o.s.  
**Technical Shipping Name** (PYRROLE)  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

#### TDG

UN-No UN1992  
**Proper Shipping Name** Flammable liquid, toxic, n.o.s.  
**Technical Shipping Name** (PYRROLE)  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

#### IATA

UN-No UN1992  
**Proper Shipping Name** FLAMMABLE LIQUID, TOXIC, N.O.S.\*  
**Technical Shipping Name** (PYRROLE)  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

#### IMDG/IMO

UN-No UN1992  
**Proper Shipping Name** Flammable liquid, toxic, n.o.s.  
**Technical Shipping Name** (PYRROLE)  
**Hazard Class** 3  
**Subsidiary Hazard Class** 6.1  
**Packing Group** III

### 15. Regulatory information

#### International Inventories

| Component  | CAS-No   | DSL | NDSL | TSCA | TSCA Inventory notification - Active-Inactive | EINECS    | ELINCS | NLP |
|------------|----------|-----|------|------|-----------------------------------------------|-----------|--------|-----|
| 1H-Pyrrole | 109-97-7 | X   | -    | X    | ACTIVE                                        | 203-724-7 | -      | -   |

| Component  | CAS-No   | IECSC | KECL     | ENCS | ISHL | TCSI | AICS | NZIoC | PICCS |
|------------|----------|-------|----------|------|------|------|------|-------|-------|
| 1H-Pyrrole | 109-97-7 | X     | KE-29973 | X    | X    | X    | X    | X     | X     |

**Legend:**

X - Listed '-' - Not listed

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**IECSC** - Chinese Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**ENCS** - Japanese Existing and New Chemical Substances**AICS** - Australian Inventory of Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**Canada**

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and its amendments and meets the requirements of the HPR (Paragraph 13(1)(a) of the revised Hazardous Products Act (HPA)).

**Other International Regulations****Authorisation/Restrictions according to EU REACH**

Not applicable

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

Not applicable

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

| Component  | CAS-No   | OECD HPV       | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|------------|----------|----------------|------------------------------|---------------------------|--------------------------------------------|
| 1H-Pyrrole | 109-97-7 | Not applicable | Not applicable               | Not applicable            | Not applicable                             |

| 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) |
|------------|----------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------|------------------------------------|
| 1H-Pyrrole | 109-97-7 | Not applicable                                                                            | Not applicable                                                                           | Not applicable             | Not applicable                     |

## 16. Other information

**Prepared By**

Product stewardship (Regulatory Affairs)  
Thermo Fisher Scientific  
email - [begel.sdsdesk@thermofisher.com](mailto:begel.sdsdesk@thermofisher.com)

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**Revision Summary**

This document has been updated to comply with the requirements of WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR) to align with the Globally Harmonised System (GHS) (V7/8) for the Classification and Labelling of Chemicals.

**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**