

# SAFETY DATA SHEET

Revision Date 22-December-2025

Revision Number 4

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** 4'-Nitroacetophenone

**Cat No. :** A13877

**CAS-No** 100-19-6  
**Synonyms** 1-(4-Nitrophenyl)ethanone

**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

#### **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)

|                                   |            |
|-----------------------------------|------------|
| Acute oral toxicity               | Category 4 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Combustible Dusts                 | Category 1 |

### Label Elements

#### **Signal Word**

Warning

#### **Hazard Statements**

May form combustible dust concentrations in air  
Harmful if swallowed

Causes serious eye irritation

**Precautionary Statements****Prevention**

Keep container tightly closed

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear eye/face protection

**Response**

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Rinse mouth

If eye irritation persists: Get medical advice/attention

**Storage**

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

**Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. Composition/Information on Ingredients

| Component           | CAS-No   | Weight % |
|---------------------|----------|----------|
| 4-Nitroacetophenone | 100-19-6 | <=100    |

### 4. First-aid measures

|                                        |                                                                                                                                                                    |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye Contact</b>                     | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.                                                    |
| <b>Skin Contact</b>                    | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.                                       |
| <b>Inhalation</b>                      | Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. |
| <b>Ingestion</b>                       | Clean mouth with water. Get medical attention.                                                                                                                     |
| <b>Most important symptoms/effects</b> | No information available.                                                                                                                                          |
| <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. Chemical foam. |
| <b>Unsuitable Extinguishing Media</b> | No information available                                                     |
| <b>Flash Point</b>                    | No information available                                                     |

|                                         |                          |
|-----------------------------------------|--------------------------|
| <b>Method -</b>                         | No information available |
| <b>Autoignition Temperature</b>         | 149 °C / 300.2 °F        |
| <b>Explosion Limits</b>                 |                          |
| <b>Upper</b>                            | No data available        |
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

**Specific Hazards Arising from the Chemical**

Fine dust dispersed in air may ignite.

**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**

**Health**  
2

**Flammability**  
1

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

|                                  |                                                                             |
|----------------------------------|-----------------------------------------------------------------------------|
| <b>Personal Precautions</b>      | Ensure adequate ventilation. Use personal protective equipment as required. |
| <b>Environmental Precautions</b> | See Section 12 for additional Ecological Information.                       |

|                                             |                                                                                                            |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Methods for Containment and Clean Up</b> | Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------|

## 7. Handling and storage

|                 |                                                                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.                   |
| <b>Storage.</b> | Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents. Strong bases. |

## 8. Exposure controls / personal protection

|                            |                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure Guidelines</b> | 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. 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**

|                       |         |
|-----------------------|---------|
| <b>Eye Protection</b> | Goggles |
|-----------------------|---------|

**Hand Protection**

Protective gloves

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

No protective equipment is needed under normal use conditions.

**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**

Powder Solid

**Color**

Yellow

**Odor**

Odorless

**Odor Threshold**

No information available

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

76 - 80 °C / 168.8 - 176 °F

**Softening Point**

No data available

**Boiling Point/Range**

202 °C / 395.6 °F

**Flash Point**

No information available

**Flammability (liquid)**

Not applicable

**Flammability (solid,gas)**

No information available

**Explosion Limits**

No data available

**Autoignition Temperature**

149 °C / 300.2 °F

**Decomposition Temperature**

No data available

**pH**

No information available

**Viscosity**

Not applicable

Solid

**Water Solubility**

No information available

**Solubility in other solvents**

No information available

**Partition Coefficient (n-octanol/water)****Vapor Pressure**

No data available

**Density / Specific Gravity**

No data available

**Bulk Density**

No data available

**Vapor Density**

Not applicable

Solid

**Particle characteristics**

No data available

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

C8 H7 N O3

**Molecular Weight**

165.15

**Evaporation Rate**

Not applicable - Solid

## 10. Stability and reactivity

|                                         |                                                                                             |
|-----------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Reactive Hazard</b>                  | None known, based on information available                                                  |
| <b>Stability</b>                        | Stable under normal conditions.                                                             |
| <b>Conditions to Avoid</b>              | Incompatible products.                                                                      |
| <b>Incompatible Materials</b>           | Strong oxidizing agents, Strong bases                                                       |
| <b>Hazardous Decomposition Products</b> | Nitrogen oxides (NO <sub>x</sub> ), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ) |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.                                                    |
| <b>Hazardous Reactions</b>              | None under normal processing.                                                               |

## 11. Toxicological information

### Information on expected route of exposure

|                   |                                                                |
|-------------------|----------------------------------------------------------------|
| <b>Inhalation</b> | Avoid breathing dust or spray mist. May be harmful if inhaled. |
| <b>Ingestion</b>  | May be harmful if swallowed.                                   |
| <b>Eyes</b>       | Avoid contact with eyes. Irritating to eyes.                   |
| <b>Skin</b>       | Avoid contact with skin. May cause irritation.                 |

### Toxicology data for the components

|                                             |                          |
|---------------------------------------------|--------------------------|
| <b>Toxicologically Synergistic Products</b> | No information available |
|---------------------------------------------|--------------------------|

|                                       |                   |
|---------------------------------------|-------------------|
| <b>(b) skin corrosion/irritation;</b> | No data available |
|---------------------------------------|-------------------|

|                                           |            |
|-------------------------------------------|------------|
| <b>(c) serious eye damage/irritation;</b> | Category 2 |
|-------------------------------------------|------------|

|                                               |                   |
|-----------------------------------------------|-------------------|
| <b>(d) respiratory or skin sensitization;</b> |                   |
| <b>Respiratory</b>                            | No data available |
| <b>Skin</b>                                   | No data available |

|                                    |                   |
|------------------------------------|-------------------|
| <b>(e) germ cell mutagenicity;</b> | 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     |
|---------------------|----------|------------|------------|------------|------------|------------|
| 4-Nitroacetophenone | 100-19-6 | Not listed | Not listed | Not listed | Not listed | Not listed |

|                                   |                   |
|-----------------------------------|-------------------|
| <b>(g) reproductive toxicity;</b> | No data available |
|-----------------------------------|-------------------|

|                                  |                   |
|----------------------------------|-------------------|
| <b>(h) STOT-single exposure;</b> | No data available |
|----------------------------------|-------------------|

|                                            |                                                                                                                    |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| (i) STOT-repeated exposure;                | No data available                                                                                                  |
| Target Organs                              | No information available.                                                                                          |
| (j) aspiration hazard;                     | Not applicable<br>Solid                                                                                            |
| Other Adverse Effects                      | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information  |
| Symptoms / effects, both acute and delayed | No information available.                                                                                          |
| Other Adverse Effects                      | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information. |
| Endocrine Disrupting Properties            | This product does not contain any known or suspected endocrine disruptors.                                         |

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

## 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** Not regulated  
**TDG** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated

## 15. Regulatory information

### International Inventories

| Component           | CAS-No   | DSL | NDSL | TSCA | TSCA Inventory notification - Active-Inactive | EINECS    | ELINCS | NLP |
|---------------------|----------|-----|------|------|-----------------------------------------------|-----------|--------|-----|
| 4-Nitroacetophenone | 100-19-6 | -   | -    | -    | -                                             | 202-827-4 | -      | -   |

| Component           | CAS-No   | IECSC | KECL | ENCS | ISHL | TCSI | AICS | NZIoC | PICCS |
|---------------------|----------|-------|------|------|------|------|------|-------|-------|
| 4-Nitroacetophenone | 100-19-6 | 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/NDSL** - 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) |
|---------------------|----------|----------------|------------------------------|---------------------------|--------------------------------------------|
| 4-Nitroacetophenone | 100-19-6 | 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) |
|---------------------|----------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------|------------------------------------|
| 4-Nitroacetophenone | 100-19-6 | Not applicable                                                                            | Not applicable                                                                           | Not applicable             | Not applicable                     |

## 16. Other information

#### Prepared By

Product Safety Department  
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 www.thermofisher.com

#### Revision Date

22-December-2025

#### Print Date

22-December-2025

#### 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**