

Australian statement of hazardous nature : Classified as hazardous according to criteria of Safe Work Australia

## Section 1 - Identification

**Product Name** 4'-Hydroxyacetophenone

**CAS No** 99-93-4

**Synonyms** 4-Acetylphenol

**Product Code** **L03706**

**Address** ThermoFisher Scientific Australia Pty Ltd  
 5 Caribbean Drive, Scoresby  
 VICTORIA 3179, Australia

**Emergency Tel.** **CHEMTREC®**  
**03 9757 4559 or +613 9757 4559**

**Telephone / Fax Numbers** Tel: 1300 735 292  
 Fax: 1800 067 639

**E-mail address** ANZinfo@thermofisher.com

**Recommended Use** Laboratory chemicals.

**Uses advised against** This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list. This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

## Section 2 - Hazard(s) Identification

### Classification under Safe Work Australia

Classified as hazardous according to criteria of Safe Work Australia

#### Physical hazards

No hazards identified

#### Health hazards

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3

#### Environmental hazards

No hazards identified

#### Label Elements



Exclamation Mark

**Signal Word****Warning****Hazard Statements**

H335 - May cause respiratory irritation  
H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation

**Precautionary Statements**

P264 - Wash face, hands and any exposed skin thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P271 - Use only outdoors or in a well-ventilated area  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a POISON CENTER or doctor if you feel unwell  
P330 - Rinse mouth  
P362 + P364 - Take off contaminated clothing and wash it before reuse  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P501 - Dispose of contents/ container to an approved waste disposal plant

**Other information**

## Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
p-Hydroxyacetophenone	99-93-4	98

## Section 4 - First Aid Measures

<b>Inhalation</b>	Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
<b>Ingestion</b>	Clean mouth with water. 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>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Self-Protection of the First Aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

<b>First Aid Facilities</b>	Eyewash, safety shower and washroom.
<b>Most important symptoms and effects</b>	No information available.
<b>Notes to Physician</b>	Treat symptomatically.

## Section 5 - Fire Fighting Measures

### Suitable Extinguishing Media

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

### Extinguishing media which must not be used for safety reasons

No information available.

### Hazardous Decomposition Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

### Specific Hazards Arising from the Chemical

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

### Special protective equipment and precautions for fire fighters

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

## Section 6 - Accidental Release Measures

### Emergency procedures

Ensure adequate ventilation.

### Environmental Precautions

See Section 12 for additional Ecological Information.

### Methods for Containment and Clean Up

#### Clean-up methods - small spillage

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

#### Clean-up methods - large spillage

Typically only supplied in small quantities as packaged goods.

If extremely toxic or used in larger quantities ensure a spillage action plan is in place. Evacuate area. Control the source and/or contain the spill if safe and able to do so. Use temporary diking, sand bags, dry sand, earth or proprietary booms/absorbent pads if available. Obtain advice on containment, neutralisation and clean-up from local emergency responders.

### Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

### Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

### Conditions for Safe Storage, Including any Incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Store under an inert atmosphere.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

## Section 8 - Exposure Controls and Personal Protection

### Exposure limits

The product does not contain any hazardous materials with occupational exposure limits established.

### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### **Exposure Controls**

#### **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**

#### **Eye Protection**

Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications)

#### **Hand Protection**

Protective gloves

Glove material	Breakthrough time	Glove thickness	AUS/NZ Standard	Glove comments
Nitrile rubber	See manufacturers	-	AS/NZS 2161	(minimum requirement)
Neoprene	recommendations			
Natural rubber				
PVC				

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, 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.

Remove gloves with care avoiding skin contamination.

#### **Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

#### **Respiratory Protection**

Use an AS/NZS 1716 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 in line with AS/NZS 1715 on the use and maintenance of respiratory protective devices (or AUS/NZ equivalent)

### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

### **Environmental exposure controls**

No information available.

## Section 9 - Physical and Chemical Properties

### Information on basic physical and chemical properties

#### **Appearance**

Beige

#### **Physical State**

Powder Solid

#### **Odor**

Odorless

#### **Odor Threshold**

No data available

pH	No information available	
Melting Point/Range	107 - 111 °C / 224.6 - 231.8 °F	
Softening Point	No data available	
Boiling Point/Range	147 - 148 °C / 296.6 - 298.4 °F	@ 3 mmHg
Flash Point	166 °C / 330.8 °F	<b>Method -</b> No information available
Evaporation Rate	Not applicable	Solid
Flammability (solid,gas)	No information available	
Explosion Limits	No data available	
Vapor Pressure	No information available	
Vapor Density	Not applicable	Solid
Specific Gravity / Density	No data available	
Bulk Density	No data available	
Water Solubility	10 g/L (22°C)	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Autoignition Temperature	Not applicable	
Decomposition Temperature	No data available	
Viscosity	Not applicable	Solid
Explosive Properties	No information available	
Oxidizing Properties	No information available	
<b>Other information</b>		
Molecular Formula	C8 H8 O2	
Molecular Weight	136.15	

## Section 10 - Stability and Reactivity

Reactivity	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Excess heat, Incompatible products.
Incompatible Materials	Acids, Bases, Strong oxidizing agents, Acid anhydrides, Acid chlorides.
Hazardous Decomposition Products	Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).
Hazardous Polymerization	No information available.

## Section 11 - Toxicological Information

### Information on Toxicological Effects

#### Product Information

##### (a) acute toxicity;

Oral	Category 4
Dermal	No data available
Inhalation	No data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
p-Hydroxyacetophenone		LD50 > 2000 mg/kg ( Rabbit )	

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

**(d) respiratory or skin sensitization;**

<b>Respiratory</b>	No data available
<b>Skin</b>	No data available

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

There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity;** No data available**(h) STOT-single exposure;** Category 3**Results / Target organs** Respiratory system**(i) STOT-repeated exposure;** No data available**Target Organs** No information available.**(j) aspiration hazard;** Not applicable  
Solid**Other Adverse Effects** The toxicological properties have not been fully investigated.**Symptoms / effects, both acute and delayed** No information available

## Section 12 - Ecological Information

**Ecotoxicity effects**

Do not empty into drains. .

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
p-Hydroxyacetophenone	LC50: = 25 mg/L, 96h static (Oncorhynchus mykiss)			

**Persistence and Degradability****Persistence**

Soluble in water, Persistence is unlikely, based on information available.

**Bioaccumulative Potential**

Bioaccumulation is unlikely

**Mobility**

The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility Highly mobile in soils

**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

**Persistent Organic Pollutant**

This product does not contain any known or suspected substance

**Ozone Depletion Potential**

This product does not contain any known or suspected substance

## Section 13 - Disposal Considerations

**Waste from Residues/Unused Products**

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.

**Contaminated Packaging**

Dispose of this container to hazardous or special waste collection point.

**Other Information**

Chemical wastes should be disposed through a licensed commercial waste collection service. Waste codes should be assigned by the user based on the application for which

the product was used. Do not empty into drains.

## Section 14 - Transport Information

**IMDG/IMO** Not regulated

**ADG** Not regulated

**IATA** Not regulated

**Environmental hazards** No hazards identified

**Special Precautions** No special precautions required

**Additional information** None known

## Section 15 - Regulatory Information

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

**National Regulations** **Australia**

See section 8 for national exposure control parameters.

**Standard for the Uniform Scheduling of Medicines and Poisons**

No poison schedule number allocated.

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
p-Hydroxyacetophenone - 99-93-4	Present	-

**Australian - Illicit Drug Precursors/Reagents Substance List**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**Chemicals of Security Concern**

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

**National pollutant inventory** Not applicable

**Prohibition or notification/licensing requirements**

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

**International Inventories**

Component	AICS	NZIoC	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	ENCS	ISHL	IECSC	KECL
p-Hydroxyacetophenone	X	X	202-802-8	-	X	-	X	X	X	X	X	2015-3-6897

**Legend:** X - Listed. '-' - Not Listed. **KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**International Regulations**

**Ozone Depletion Potential** This product does not contain any known or suspected substance

**Persistent Organic Pollutant** This product does not contain any known or suspected substance

**Rotterdam Convention (PIC)** Not applicable

**Basel convention on the control of transboundary movements of hazardous wastes and their disposal**  
Not applicable.

Component	CAS No	OECD HPV	Restriction of Hazardous Substances (RoHS)	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
p-Hydroxyacetophenone	99-93-4	Not applicable	Not applicable	Not applicable	Not applicable

**Authorisation/Restrictions according to EU REACH** Not applicable

**Section 16 - Other Information****Legend**

**AICS** - Australian Inventory of Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**IECSC** - Chinese Inventory of Existing Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**NZS 5433:2012** - Transport of Dangerous Goods on Land

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**WEL** - Workplace Exposure Limit

**DNEL** - Derived No Effect Level

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**VOC** - (Volatile Organic Compound)

**NZIoC** - New Zealand Inventory of Chemicals

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**CAS** - Chemical Abstracts Service

**ACGIH** - American Conference of Governmental Industrial Hygienists  
Predicted No Effect Concentration (PNEC)

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**ADG** Australian Code for the Transport of Dangerous Goods by Road and Rail

**OECD** - Organisation for Economic Co-operation and Development

**LC50** - Lethal Concentration 50%

**ATE** - Acute Toxicity Estimate

**RPE** - Respiratory Protective Equipment

**NOEC** - No Observed Effect Concentration

**BCF** - Bioconcentration factor

**PBT** - Persistent, Bioaccumulative, Toxic



**Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

**Revision Date**

18-Nov-2022

**Revision Summary**

Not applicable.

**This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).**

**Disclaimer**

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**End of Safety Data Sheet**