

SAFETY DATA SHEET

Creation Date 19-May-2010

Revision Date 18-December-2025

Revision Number 8

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 Acetophenone

Cat No. : AC102410000; AC102410010; AC102410025; AC102410050;
AC102410100; AC102412500

CAS-No 98-86-2
Synonyms Methyl phenyl ketone; Phenyl methyl ketone.

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 4
Acute oral toxicity	Category 4
Serious Eye Damage/Eye Irritation	Category 2

Label Elements

Signal Word

Warning

Hazard Statements

Combustible liquid
Harmful if swallowed
Causes serious eye irritation

**Precautionary Statements****Prevention**

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 protective gloves/protective clothing/eye protection/face protection

Response

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

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Storage

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Acetophenone	98-86-2	>95

4. First-aid measures

General Advice

If symptoms persist, call a physician.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms/effects

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Notes to Physician

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media

Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam. Water mist may

be used to cool closed containers.

Unsuitable Extinguishing Media No information available

Flash Point 77 °C / 170.6 °F

Method - No information available

Autoignition Temperature 535 °C / 995 °F

Explosion Limits

Upper 6.7 vol %

Lower 1.1 vol %

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Combustible material. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

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
2

Flammability
2

Instability
0

Physical hazards
N/A

6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Up Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition.

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Incompatible Materials. Strong oxidizing agents.

8. Exposure controls / personal protection

Exposure Guidelines

Component	Alberta	British Columbia	Ontario TWA/EV	Quebec
Acetophenone	TWA: 10 ppm TWA: 49 mg/m ³	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm TWA: 49 mg/m ³

Component	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Acetophenone	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 ppm

Component	Nunavut	Prince Edward Island	Saskatchewan	Yukon
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Acetophenone	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm	TWA: 10 ppm STEL: 15 ppm	
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Component	ACGIH TLV	OSHA PEL	NIOSH
Acetophenone 98-86-2 (>95)	TWA: 10 ppm		

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

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

Hand Protection

Protective gloves

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

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: Organic gases and vapours filter Type A Brown 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.

9. Physical and chemical properties**Appearance****Physical State**

Liquid

Color

Light yellow

Odor

aromatic

Odor Threshold

No information available

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

19.6 °C / 67.3 °F

Softening Point

No data available

Boiling Point/Range

202 °C / 395.6 °F

@ 760 mmHg

Flash Point	77 °C / 170.6 °F	Method - No information available
Flammability (liquid)	Combustible liquid	On basis of test data
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	Lower 1.4 vol% Upper 5.2 vol%	
Autoignition Temperature	535 °C / 995 °F	
Decomposition Temperature	No data available	
pH	No information available	
Viscosity	1.8 mPa.s at 20 °C	
Water Solubility	5.5 g/L (20°C)	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Component	log Pow	
Acetophenone	1.65	
Vapor Pressure	1.3 mbar @ 20°C	
Density / Specific Gravity	1.028	
Bulk Density	Not applicable	Liquid
Vapor Density	No data available	(Air = 1.0)
Particle characteristics	Not applicable (liquid)	
Other Information		
Molecular Formula	C8 H8 O	
Molecular Weight	120.15	
Explosive Properties	explosive air/vapour mixtures possible	

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Information on expected route of exposure

Inhalation	May be harmful if inhaled. May cause irritation of respiratory tract.
Ingestion	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may cause irritation to mucous membranes.
Eyes	Irritating to eyes. Moderately irritating to the eyes. Contact with eyes may cause irritation.
Skin	May be harmful in contact with skin. May cause irritation. May cause eye/skin irritation.

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetophenone	900 mg/kg (Rat) 815 mg/kg (Rat)	3300 mg/kg (Rat)	LC50 > 2.130 mg/L (Rat) 8 h

Toxicologically Synergistic	No information available
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Products

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory

Based on available data, the classification criteria are not met

Skin

Based on available data, the classification criteria are not met

(e) germ cell mutagenicity;

Based on available data, the classification criteria are not met

Not mutagenic in AMES Test

(f) carcinogenicity;

Based on available data, the classification criteria are not met

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Acetophenone	98-86-2	Not listed	Not listed	Not listed	Not listed	Not listed

(g) reproductive toxicity;

Based on available data, the classification criteria are not met

(h) STOT-single exposure;

Based on available data, the classification criteria are not met

(i) STOT-repeated exposure;

Based on available data, the classification criteria are not met

Target Organs

None known.

(j) aspiration hazard;

Based on available data, the classification criteria are not met

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
Acetophenone	Not listed	Brachydanio rerio: LC50 = 155 mg/L 96h	EC50 = 15.5 mg/L 15 min	EC50 = 162 mg/L 48h

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
Acetophenone	1.65

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.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Acetophenone - 98-86-2	U004	-

14. Transport information

DOT

COMBUSTIBLE LIQUID, NOT REGULATED FOR TRANSPORT IN THIS QUANTITY
According to 49 CFR §173.150(f)(1), this material should be reclassified as NA1993, Combustible Liquid, NOS if it is shipped in bulk.

UN-No

NA1993

Proper Shipping Name

Combustible liquid, n.o.s.

Packing Group

III

TDG

Not regulated

IATA

Not regulated

IMDG/IMO

Not regulated

15. Regulatory information

All of the components in the product are on the following inventory lists: China X = listed Australia U.S.A. (TSCA) Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) Korea (KECL) China (IECSC) Japan (ENCS) Philippines (PICCS)

International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Acetophenone	98-86-2	X	-	X	ACTIVE	202-708-7	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Acetophenone	98-86-2	X	KE-28355	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)).

Component	Canada - National Pollutant Release Inventory (NPRI)	Canadian Environmental Protection Agency (CEPA) - List of Toxic Substances	Canada's Chemicals Management Plan (CEPA)
Acetophenone	Part 1, Group A Substance Part 4 Substance		

Legend

NPRI - National Pollutant Release Inventory

Other International Regulations

Authorisation/Restrictions according to EU REACH

Component	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)
Acetophenone	-	Use restricted. See entry 75. (see link for restriction details)	-

REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

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)
Acetophenone	98-86-2	Listed	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)
Acetophenone	98-86-2	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By

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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