

Classified as hazardous in accordance with the criteria of EPA New Zealand

## Section 1 - Identification

### Product Identifier

<b>Product Name</b>	<u>Indomethacin</u>
<b>CAS No</b>	53-86-1
<b>Synonyms</b>	1-(4-Chlorobenzoyl)-5-methoxy-2-methyl-3-indoleacetic acid
<b>Molecular Formula</b>	C <sub>19</sub> H <sub>16</sub> Cl N O <sub>4</sub>
<b>Molecular Weight</b>	357.79
<b>Recommended Use</b>	Laboratory chemicals.
<b>Uses advised against</b>	No Information available

<b>Product Code</b>	458030000; 458030050; 458030250; 458031000
<b>Address</b>	Thermo Fisher Scientific New Zealand Ltd 244 Bush Road, Albany, Auckland, New Zealand
<b>Emergency Tel.</b>	CHEMTREC® 09 980 6780 or +64 9 980 6780
<b>Telephone / Fax Numbers</b>	Tel: 09 980 6700 Fax: 09 980 6788
<b>E-mail address</b>	ANZinfo@thermofisher.com

## Section 2 - Hazard(s) Identification

### Classification under Work Safe New Zealand

Classified as hazardous in accordance with the criteria of EPA New Zealand

**HSNO Approval Number**      HSR100425

### GHS Classification

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

Acute Oral Toxicity	Category 2
Skin Sensitization	Category 1
Reproductive Toxicity	Category 1B
Specific target organ toxicity - (repeated exposure)	Category 1

#### Environmental hazards

Based on available data, the classification criteria are not met

**Label Elements****Signal Word****Danger****Hazard Statements**

H300 - Fatal if swallowed

H317 - May cause an allergic skin reaction

H360 - May damage fertility or the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

**Precautionary Statements****Prevention**

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P272 - Contaminated work clothing should not be allowed out of the workplace

P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Response**

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P330 - Rinse mouth

P363 - Wash contaminated clothing before reuse

**Storage**

P405 - Store locked up

**Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

**Other hazards which do not result in classification**

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

## Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
Indomethacin	53-86-1	100

## Section 4 - First Aid Measures

**Description of first aid measures****General Advice**

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

**New Zealand Emergency Tel.**CHEMTREC®  
09 980 6780 or +64 9 980 6780**Inhalation**

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>Eye Contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician or poison control center immediately.
<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>	May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
<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, alcohol-resistant foam.

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

No information available.

### **Specific Hazards Arising from the Chemical**

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

### **Hazardous Combustion Products**

None under normal use conditions.

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

## **Section 6 - Accidental Release Measures**

### **Personal Precautions, Protective Equipment and Emergency Procedures**

#### **Emergency procedures**

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

#### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### **Methods for Containment and Clean Up**

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

#### **Precautions to prevent secondary hazards**

Clean contaminated objects and areas thoroughly observing environmental regulations

#### **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## **Section 7 - Handling and Storage**

Precautions for Safe Handling

**Advice on safe handling**  
Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

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

Conditions for Safe Storage, Including any Incompatibilities

**Storage Conditions**  
Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials**  
None known.

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

Section 8 - Exposure Controls and Personal Protection

Control parameters

**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

Appropriate engineering controls

**Engineering Measures**  
Ensure adequate ventilation, especially in confined areas. 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

Individual protection measures, such as personal protective equipment

**Eye Protection**                      Wear safety glasses with side shields (or 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, Neoprene, Natural rubber, PVC.	See manufacturers recommendations	-	AS/NZS 2161	(minimum requirement)

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 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.  
Remove gloves with care avoiding skin contamination.

**Skin and body protection**                      Long sleeved clothing

**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

**Recommended Filter type:**  
**Recommended half mask:-**

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  
 Particulates filter conforming to EN 143 (or AUS/NZ equivalent)  
 Particle filtering: EN149:2001 (or AUS/NZ equivalent)  
 When RPE is used a face piece Fit Test should be conducted

**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

<b>Physical State</b>	Solid	
<b>Appearance</b>		
<b>Odor</b>	No information available	
<b>Odor Threshold</b>	No data available	
<b>pH</b>	No information available	
<b>Melting Point/Range</b>	155 °C / 311 °F	
<b>Softening Point</b>	No data available	
<b>Boiling Point/Range</b>	No information available	
<b>Flammability (liquid)</b>	Not applicable	Solid
<b>Flammability (solid,gas)</b>	No information available	
<b>Explosion Limits</b>	No data available	
<b>Flash Point</b>	No information available	<b>Method -</b> No information available
<b>Autoignition Temperature</b>	No data available	
<b>Decomposition Temperature</b>	No data available	
<b>Viscosity</b>	Not applicable	Solid
<b>Water Solubility</b>	No information available	
<b>Solubility in other solvents</b>	No information available	
<b>Partition Coefficient (n-octanol/water)</b>		
<b>Vapor Pressure</b>	No data available	
<b>Density / Specific Gravity</b>	No data available	
<b>Bulk Density</b>	No data available	
<b>Vapor Density</b>	Not applicable	Solid
<b>Particle characteristics</b>	No data available	
<b>Other information</b>		
<b>Molecular Formula</b>	C19 H16 Cl N O4	
<b>Molecular Weight</b>	357.79	
<b>Evaporation Rate</b>	Not applicable - Solid	

## Section 10 - Stability and Reactivity

<b>Reactivity</b>	None known, based on information available
<b>Stability</b>	Stable under normal conditions.
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

**Conditions to Avoid** Incompatible products, Excess heat.

**Incompatible Materials** None known.

**Hazardous Decomposition Products** None under normal use conditions.

## Section 11 - Toxicological Information

### Acute Effects

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Not an expected route of exposure.
<b>Eyes</b>	Avoid contact with eyes.
<b>Skin</b>	Avoid contact with skin.
<b>Ingestion</b>	May be harmful if swallowed.

### Numerical measures of toxicity

#### (a) acute toxicity;

<b>Oral</b>	Category 2
<b>Dermal</b>	No data available
<b>Inhalation</b>	No data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Indomethacin	23 mg/kg		

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

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

<b>Respiratory</b>	No data available
<b>Skin</b>	Category 1

**Sensitization** No information 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; Category 1B

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

**Target Organs** None known.

(j) aspiration hazard; Not applicable

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Solid**Symptoms / effects, both acute and delayed**

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

## Section 12 - Ecological Information

**Ecotoxicity****Aquatic ecotoxicity**

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**Terrestrial ecotoxicity**

There is no data for this product

**Persistence and Degradability**

No information available

**Bioaccumulative Potential**

No information available

**Mobility**

No information available.

**Other adverse effects****Endocrine Disruptor Information  
Persistent Organic Pollutant  
Ozone Depletion Potential**

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance

This product does not contain any known or suspected substance

## Section 13 - Disposal Considerations

**Waste treatment methods****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**

Disposal agencies or waste contractors must comply with the New Zealand Hazardous Substances (Disposal) Regulations. 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

**NZS 5433:2020****UN-No**

UN2811

**Proper Shipping Name**

Toxic solid, organic, n.o.s.

**Technical Shipping Name**

Indomethacin

**Hazard Class**

6.1

**Packing Group**

II

**IATA**

**UN-No** UN2811  
**Proper Shipping Name** Toxic solid, organic, n.o.s.  
**Technical Shipping Name** Indomethacin  
**Hazard Class** 6.1  
**Packing Group** II

**IMDG/IMO**

**UN-No** UN2811  
**Proper Shipping Name** Toxic solid, organic, n.o.s.  
**Technical Shipping Name** Indomethacin  
**Hazard Class** 6.1  
**Packing Group** II

**Environmental hazards** No hazards identified

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable, packaged goods

**Special Precautions** No special precautions required. Please refer to the applicable dangerous goods regulations for additional information.

**Additional information** None known

## Section 15 - Regulatory Information

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

<b>HSNO Approval Number</b>	HSR100425
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**National Regulations**

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

**Certified handlers, tracking and controlled substance license requirements**

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information. Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.

**Prohibition or notification/licensing requirements**

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

**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

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

**International Inventories**



New Zealand (NZIoC), Australia (AICS), Europe (EINECS/ELINCS/NLP), Korea (KECL), China (IECSC), Taiwan (TCSI), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	NZIoC	AICS	EINECS	ELINCS	NLP	KECL	IECSC	TCSI
Indomethacin	53-86-1	X	-	200-186-5	-	-	KE-05544	-	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	PICCS	ISHL	ENCS
Indomethacin	53-86-1	X	ACTIVE	X	-	X	X	X

**Legend:** X - Listed '-' - Not Listed

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

## Section 16 - Other Information

**This safety data sheet complies with the requirements of the EPA Hazardous Substances (Hazard Classification) Notice 2020 and WorkSafe New Zealand Regulations**

### Legend

**NZIoC** - New Zealand Inventory of Chemicals

**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

**NZS 5433:2020** - Transport of Dangerous Goods on Land

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

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

**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)

**AICS** - Australian Inventory of Chemical Substances

**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

**PNEC** - Predicted No Effect Concentration

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

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

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

**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

HSNO classifications provided in the New Zealand Chemical Classification Information Database (CCID).

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

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

EPA Guide to classifying hazardous substances in New Zealand

EPA - Assigning a product to an existing HSNO approval guide

### 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

13-Feb-2024

### Revision Summary

SDS sections updated

### 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**

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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 Safety Data Sheet**