

73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name (±)-Flurbiprofen

Other means of identification

Catalog Number 73922 73924

UN/ID no. UN2811

Document Number DX21623

Synonyms Ansaid;

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemical

Details of the supplier of the safety data sheet

Manufacturer/Supplier

STEMCELL Technologies Canada Inc. Suite 500 - 1618 Station Street Vancouver, British Columbia V6A 1B6 Canada

Emergency telephone number

Emergency Telephone 1-800-667-0322

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3

Hazards not otherwise classified (HNOC)

Not applicable



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

Label elements

Danger

Hazard statements

Toxic if swallowed

Causes skin irritation

Causes serious eve irritation

Suspected of damaging fertility or the unborn child

May cause respiratory irritation



Appearance Crystalline

Physical state Solid

Odor No data available

Precautionary Statements - Prevention

Obtain special instructions before use

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

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

Do not eat, drink or smoke when using this product

Wash face, hands and any exposed skin thoroughly after handling

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

Use only outdoors or in a well-ventilated area

Precautionary statements - Response

IF exposed or concerned: Get medical advice/attention

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

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of water and soap

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor

Rinse mouth

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

Other Information

Not applicable

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Synonyms Ansaid;.

Chemical name	CAS No.	Weight-%
2-(3-fluoro-4-phenylphenyl)propanoic acid	5104-49-4	100

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if

symptoms occur. Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. Get medical attention.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

Symptoms Burning sensation.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin,

eyes or clothing. Use personal protective equipment as required.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Remove contaminated clothing and shoes. Take off contaminated clothing and wash before

reuse. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid breathing vapors or mists. In case of insufficient ventilation,

wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep out of the reach of children. Store locked up. Store in accordance with information

listed on the Product Information Sheet (PIS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure LimitsThe following ingredients are the only ingredients of the product above the cut-off level (or

level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure

limits from the sources listed here.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection Impervious gloves. Wear suitable gloves.

Skin and body protectionLong sleeved clothing. Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

General hygiene considerations

Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid

Appearance Crystalline

ColorNo information availableOdorNo data availableOdor thresholdNo data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pHNo data availableNone knownMelting point / freezing pointNo data availableNone knownBoiling point / boiling rangeNo data availableNone knownFlash pointNo data availableNone knownEvaporation rateNo data availableNone known

Flammability (solid, gas) Product is not flammable.

Flammability Limit in Air None known

Upper flammability limit:

Lower flammability limit:

No data available

No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone knownWater solubilityNo data availableNone knownSolubility in other solventsDMF: 25 mg/mL; DMSO: 10 mg/mL;None known

Ethanol: 25 mg/mL; PBS pH 7.2: .9

mg/mL;

Partition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Explosive propertiesNo data available

Oxidizing properties No information available

Other Information

Softening point No information available

Molecular weight 244.3

Molecular formula C15H13FO2

VOC Content (%)
Liquid Density
No information available
No information available
No information available



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under recommended transport or storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products Carbon dioxide (CO2). Carbon monoxide. Hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract.

Eye contact Irritating to eyes. Specific test data for the substance or mixture is not available. Causes

serious eye irritation. (based on components).

Skin contact Causes skin irritation. (based on components). Specific test data for the substance or

mixture is not available.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Specific test

data for the substance or mixture is not available. Toxic if swallowed. (based on

components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 117.00 mg/kg

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
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- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist) Product Information

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-(3-fluoro-4-phenylphenyl)prop	= 117 mg/kg (Rat)	-	-
anoic acid			
5104-49-4			

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Irritating to skin.	
Product Information		
Serious eye damage/eye irritation Product Information	Classification based on data available for ingredients. Irritating to eyes.	
Respiratory or skin sensitization Product Information	No information available.	
Germ cell mutagenicity Product Information	No information available.	
Carcinogenicity	No information available.	
Reproductive toxicity	Classification based on data available for ingredients.	
	Product Information	
STOT - single exposure	May cause respiratory irritation. Product Information	
STOT - repeated exposure	No information available. Product Information	
	1 Toddot Information	
Aspiration hazard RTECS #	No information available. DU8341000	

12. ECOLOGICAL INFORMATION	
Ecotoxicity	The environmental impact of this product has not been fully investigated.
Product Information	



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

Note: When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity

Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted

Quantity.

DOT

UN/ID no. UN2811

Proper shipping name Toxic solids, organic, n.o.s. (Flurbiprofen)

Hazard class 6.1 Toxic substances

Packing Group ||

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

<u>IATA</u>

UN Number UN2811

UN proper shipping name Toxic solid, organic, n.o.s. (Flurbiprofen)

Transport hazard class(es) 6.1 Toxic substances

Packing Group III

IMDG



73922 73924 - (±)-Flurbiprofen

Revision Date 14-Nov-2022 Revision Number 2

UN Number UN2811

UN proper shipping name TOXIC SOLID, ORGANIC, N.O.S. (Flurbiprofen)

Transport hazard class(es) 6.1 Toxic substances

Packing Group III

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies Does not comply **ENCS IECSC** Does not comply Complies **KECL PICCS** Does not comply **AICS** Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

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

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard Yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40



Revision Date 14-Nov-2022 **Revision Number** 2

73922 73924 - (±)-Flurbiprofen

CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
2-(3-fluoro-4-phenylphenyl)propanoic acid - 5104-49-4	Developmental
	Female Reproductive

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations **US State Regulations**

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Quality Control. STEMCELL Technologies Canada Inc. Prepared By,

14-Nov-2022 **Revision Date**

Revision Note No information available.

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. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.

End of Safety Data Sheet