

1. Identification

Product identifier	Rimadyl® (Carprofen) Sterile Injectable Solution	
Other means of identification		
Synonyms	RIMADYL® INJECTABLE SOLUTION * Rimadyl® Injection * Carprofen injectable solution	
Recommended use	Veterinary product used as Non-steroidal, anti-inflammatory drug (NSAID)	
Recommended restrictions	Not for human use	
Manufacturer/Importer/Supplier/Distributor information		
Company Name (USA)	Zoetis Inc. 10 Sylvan Way Parsippany, New Jersey 07054 (USA)	
Rocky Mountain Poison and Drug Center	1-866-531-8896	
Product Support/Technical Services	1-800-366-5288	
Emergency telephone numbers	CHEMTREC (24 hours): 1-800-424-9300 International CHEMTREC (24 hours): +1-703-527-3887	
Company Name (CA)	Zoetis Canada Inc. 16740 Trans-Canada Highway Kirkland, Quebec, H9H 4M7	
Emergency telephone number	International CHEMTREC (24 hours): +1-703-527-3887	
Contact E-Mail	productsupport@zoetis.com	
Product Support	1-800-461-0917	

All Safety Data Sheets are available via our Zoetis Canada website at <https://www.zoetis.ca/sds/sds.aspx>

Supplier Not available.

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Reproductive toxicity (the unborn child)	Category 2
	Specific target organ toxicity following repeated exposure	Category 2 (digestive organs)
Environmental hazards	Not classified.	
Label elements		



Signal word	Warning	
Hazard statement	Suspected of damaging the unborn child. May cause damage to organs (digestive organs) through prolonged or repeated exposure by ingestion.	
Precautionary statement		
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapour. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	IF exposed or concerned: Get medical advice/attention.	
Storage	Store locked up.	

Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	None known.
Supplemental information	May cause an allergic skin reaction. May cause eye and skin irritation.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Carprofen		53716-49-7	5
Benzyl alcohol		100-51-6	1
Hydrogen chloride		7647-01-0	**
Sodium hydroxide		1310-73-2	**

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments ** to adjust pH

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist. For breathing difficulties, oxygen may be necessary.
Skin contact	Wash off immediately with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Call a physician or poison control centre immediately. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness, and discomfort. Mild skin irritation. Exposure may cause temporary irritation, redness, or discomfort. May cause an allergic skin reaction. Dermatitis. Rash. if swallowed: Nausea, vomiting. Abdominal pain. Chronic exposure to this material may cause serious gastrointestinal toxicity such as bleeding, ulceration, and perforation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	For personal protection, see section 8 of the SDS. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

Ensure adequate ventilation. Remove sources of ignition. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage**Precautions for safe handling**

Wear appropriate personal protective equipment. Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Avoid accidental injection. Avoid prolonged exposure. Do not taste or swallow. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a well-ventilated place. Refrigeration recommended. @ 2 - 8°C (36 - 46°F). Do not allow material to freeze. Store in a tightly closed container. Keep away from heat, sparks and open flame. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls/personal protection**Occupational exposure limits****Zoetis****Components****Type****Value**

Carprofen (CAS
53716-49-7)

TWA

1000 µg/m³

US. ACGIH Threshold Limit Values**Components****Type****Value**

Hydrogen Chloride (CAS
7647-01-0)

Ceiling

2 ppm

Sodium Hydroxide (CAS
1310-73-2)

Ceiling

2 mg/m³

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**Components****Type****Value**

Hydrogen Chloride (CAS
7647-01-0)

Ceiling

3 mg/m³

Sodium Hydroxide (CAS
1310-73-2)

Ceiling

2 ppm

2 mg/m³

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**Components****Type****Value**

Hydrogen Chloride (CAS
7647-01-0)

Ceiling

2 ppm

Sodium Hydroxide (CAS
1310-73-2)

Ceiling

2 mg/m³

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**Components****Type****Value**

Hydrogen Chloride (CAS
7647-01-0)

Ceiling

2 ppm

Sodium Hydroxide (CAS
1310-73-2)

Ceiling

2 mg/m³

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**Components****Type****Value**

Hydrogen Chloride (CAS
7647-01-0)

Ceiling

2 ppm

Sodium Hydroxide (CAS
1310-73-2)

Ceiling

2 mg/m³

Canada. Quebec OELs. (Ministry of Labour - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Hydrogen Chloride (CAS 7647-01-0)	Ceiling	7.5 mg/m3
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	5 ppm 2 mg/m3

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value
Hydrogen Chloride (CAS 7647-01-0)	Ceiling	2 ppm
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values	No biological exposure limits noted for the ingredient(s).
Control banding approach	Not available.
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate.
Individual protection measures, such as personal protective equipment	
Eye/face protection	If contact is likely, safety glasses with side shields are recommended.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Impervious gloves are recommended if skin contact with drug product is possible and for bulk processing operations.
Other	Wear suitable protective clothing. Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.
Respiratory protection	No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment. Whenever air contamination (mist, vapor or odor) is generated, respiratory protection is recommended as a precaution to minimize exposure. If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.
Thermal hazards	Not applicable.
General hygiene considerations	Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Physical state	Liquid.
Form	Liquid.
Colour	Clear, colorless to pale yellow.

Odour Not available.

Odour threshold Not available.

pH 7 - 7.4

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Heat, flames and sparks. High temperatures. Protect from freezing.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Hydrogen chloride	Severity: Irritant
Skin contact	Prolonged skin contact may cause temporary irritation. There have been anecdotal reports that workers handling this material have experienced skin irritation and/or sensitivity reactions.
Hydrogen chloride	Severity: Severe
Benzyl alcohol	Species: Guinea Pig Severity: Moderate
	Species: Rabbit Severity: Minimal
Carprofen	Species: Rabbit Severity: Non-irritating
Sodium hydroxide	Species: Rabbit Severity: Severe
Eye contact	Direct contact with eyes may cause temporary irritation.
Hydrogen chloride	Severity: Severe
Carprofen	Species: Rabbit Severity: Non-irritating
Benzyl alcohol	Species: Rabbit Severity: Severe

Eye contact

Sodium hydroxide

Species: Rabbit

Severity: Severe

Ingestion

Hydrogen chloride

May be harmful if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Severity: Irritant

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness, and discomfort. Mild skin irritation. Exposure may cause temporary irritation, redness, or discomfort. May cause an allergic skin reaction. Dermatitis. Rash. if swallowed: Nausea, vomiting. Abdominal pain. Chronic exposure to this material may cause serious gastrointestinal toxicity such as bleeding, ulceration, and perforation.

Information on toxicological effects**Acute toxicity** May be harmful if swallowed.

Product	Species	Test results
Rimadyl® (Carprofen) Sterile Injectable Solution		

Acute**Oral**

ATE

2860 mg/kg

Components	Species	Test results
Benzyl alcohol (CAS 100-51-6)		

Acute**Dermal**

LD50

Rabbit

2000 mg/kg

Inhalation

LC50

Rat

> 4.178 mg/l
1000 mg/l, 8 Hours

Oral

LD50

Mouse

1580 mg/kg

Rat

1230 mg/kg

Carprofen (CAS 53716-49-7)

Acute**Intraperitoneal**

LD50

Rat

140 - 110 mg/kg (M/F)

Oral

LD50

Mouse

282 mg/kg

Rat

149 mg/kg

Subcutaneous

LD50

Rat

230 - 190 mg/kg (M/F)

Chronic**Oral**

NOAEL

Dog

25 mg/kg/day, 2 years (Not carcinogenic; No effects at maximum dose)

Rat

10 mg/kg/day, 2 years (Not carcinogenic, Gastrointestinal system effects)

Subchronic**Oral**

NOAEL

Dog

5 mg/kg/day, 13 weeks (Target organs: None identified)

Rat

5 mg/kg/day, 13 weeks (Target organs: Gastrointestinal System)

Components	Species	Test results
Sodium hydroxide (CAS 1310-73-2)		
Acute		
Intraperitoneal		
LD50	Mouse	40 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Corrosivity		
Hydrogen chloride		Severity: Corrosive
Carprofen		Species: Rabbit Severity: Non-irritating
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Eye contact		
Hydrogen chloride		Severity: Severe
Carprofen		Species: Rabbit Severity: Non-irritating
Benzyl alcohol		Species: Rabbit Severity: Severe
Sodium hydroxide		Species: Rabbit Severity: Severe
Respiratory or skin sensitisation		
Canada - Alberta OELs: Irritant		
Hydrogen chloride (CAS 7647-01-0)		Irritant
Sodium hydroxide (CAS 1310-73-2)		Irritant
Respiratory sensitisation	Not a respiratory sensitizer.	
Skin sensitisation	Due to partial or complete lack of data the classification is not possible. Not a skin sensitizer in experimental animals. However, workers handling Rimadyl tablets have developed red and blotchy patches on their hands and faces.	
Skin sensitisation		
Carprofen		GPMT Species: Guinea Pig Severity: negative
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Mutagenicity		
Carprofen		Bacterial Mutagenicity (Ames) Result: negative Species: Salmonella In Vivo Micronucleus Result: negative Species: Mouse
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
ACGIH Carcinogens		
Hydrogen chloride (CAS 7647-01-0)		A4 Not classifiable as a human carcinogen.
Canada - Manitoba OELs: carcinogenicity		
Hydrogen chloride (CAS 7647-01-0)		Not classifiable as a human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity		
Hydrogen chloride (CAS 7647-01-0)		3 Not classifiable as to carcinogenicity to humans.
Reproductive toxicity	Suspected of damaging the unborn child.	

Developmental effects

Carprofen

20 mg/kg/day Embryo / Fetal Development, Not Teratogenic
Result: NOAEL
Species: Rat40 mg/kg/day Prenatal & Postnatal Development, Not Teratogenic
Result: NOAEL
Species: Mouse6 mg/kg/day Prenatal & Postnatal Development, Embryotoxicity, Early embryonic development
Result: NOAEL
Species: Rabbit
Organ: Oral**Reproductivity**

Carprofen

20 mg/kg/day Reproductive & Fertility, Fetotoxicity, Maternal toxicity
Result: NOAEL
Species: Rat**Specific target organ toxicity - single exposure** Not classified.**Specific target organ toxicity - repeated exposure** May cause damage to organs (digestive organs) through prolonged or repeated exposure by ingestion.**Aspiration hazard** Not an aspiration hazard.**Further information** Anecdotal reports from facilities handling RIMADYL caplets have indicated a potential for workers to develop rashes upon exposure to dusts of the material.**12. Ecological information****Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Avoid release to the environment.

Components		Species	Test results
Benzyl alcohol (CAS 100-51-6)	EC50	Daphnia magna (Water Flea)	230 mg/l, 48 Hours
			66 mg/l, 21 day(s) Toxicity for reproduction
		Pseudokirchneriella subcapitata (Green Alga)	500 mg/l, 72 Hours
	LC50	Pimephales promelas (Fathead Minnow)	460 mg/l, 96 Hours
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	10 mg/l, 96 hours
Hydrogen chloride (CAS 7647-01-0)			
	Aquatic		
Fish	LC50	Western mosquitofish (Gambusia affinis)	282 mg/l, 96 hours
Sodium hydroxide (CAS 1310-73-2)			
	Aquatic		
	Crustacea	EC50	Water flea (Ceriodaphnia dubia)
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.**Bioaccumulative potential** No data available for this product. Not expected to bioaccumulate.**Mobility in soil** No data available.**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Do not contaminate ponds, waterways or ditches with chemical or used container. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	None known.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

TDG	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

15. Regulatory information

Canadian regulations	This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.	
Controlled Drugs and Substances Act	Not regulated.	
Export Control List (CEPA 1999, Schedule 3)	Not listed.	
Greenhouse Gases	Not listed.	
Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)	Hydrogen chloride (CAS 7647-01-0)	
Precursor Control Regulations	Hydrogen chloride (CAS 7647-01-0)	Class B
International regulations		
Stockholm Convention	Not applicable.	
Rotterdam Convention	Not applicable.	
Kyoto protocol	Not applicable.	
Montreal Protocol	Not applicable.	
Basel Convention	Not applicable.	

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 03-June-2017

Version No. 01

List of abbreviations ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

Disclaimer Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information Product and Company Identification: Synonyms
Hazards Identification: US Hazard Categories
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Toxicological Information: Toxicological Data
Transport Information: Material Transportation Information
GHS: Qualifiers