This SDS packet was issued with item:

078447425

N/A



Revision date: 02-Oct-2013 Version: 2.0 Page 1 of 11

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

Product Identifier

Material Name: Rimadyl®(Carprofen) Injectable Solution

Trade Name: Rimadyl Chemical Family: Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Intended Use: Veterinary product used as non-steroidal, anti-inflammatory drug (nsaid)

Restrictions on Use: Not for human use

Details of the Supplier of the Safety Data Sheet

Zoetis Inc.

Zoetis Belgium S.A.

100 Campus Drive, P.O. Box 651

Florham Park, New Jersey 07932 (USA)

Mercuriusstraat 20
1930 Zaventem

Rocky Mountain Poison Control Center Phone: 1-866-531-8896

Product Support/Technical Services Phone: 1-800-366-5288

Emergency telephone number: Emergency telephone number:

CHEMTREC (24 hours): 1-800-424-9300 International CHEMTREC (24 hours): +1-703-527-3887

Contact E-Mail: VMIPSrecords@zoetis.com

2. HAZARDS IDENTIFICATION

Belgium

Appearance: Clear, colorless to pale yellow liquid

Classification of the Substance or Mixture

GHS - Classification

Reproductive Toxicity: Category 2

Specific target organ systemic toxicity (repeated exposure): Category 2

US OSHA Specific - Classification

EU Classification:

EU Indication of danger: Harmful

Toxic to Reproduction: Category 3

EU Symbol: Xn

EU Risk Phrases:

R22 - Harmful if swallowed.

R63 - Possible risk of harm to the unborn child.

Label Elements

Signal Word: Warning

Hazard Statements: H361 - Suspected of damaging fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

Precautionary Statements: P201 - Obtain special instructions before use

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

Page 2 of 11

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

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

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

P405 - Store locked up



Other Hazards

There have been anecdotal reports that workers handling this material have experienced skin **Short Term:**

irritation and/or sensitivity reactions.

Long Term: Repeat-dose studies in animals have shown a potential to cause adverse effects on

gastrointestinal system, the developing fetus. Hazardous Substance. Non-Dangerous Goods.

Australian Hazard Classification

(NOHSC):

Note:

This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the product or its ingredients regardless of the

potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Glycocholic acid	475-31-0	207-494-9	Not Listed	Not Listed	*
Benzyl Alcohol	100-51-6	202-859-9	Xn; R20/22	Acute Tox. 4 (H302) Acute Tox. 4 (H332)	*
Hydrogen chloride	7647-01-0	231-595-7	T; R23 C; R35	STOT SE 3 (H335) Skin Corr. 1A (H314) Press. Gas Acute Tox. 3 (H331)	**
Sodium hydroxide	1310-73-2	215-185-5	C; R35	Skin Corr. 1A (H314)	**
Carprofen	53716-49-7	258-712-4	Repr.Cat.3;R63 T;R25 Xn;R48/22	Acute Tox 3 (H301) Repro 2 (H361d) STOT Re 2 (H373)	5

Ingredient	CAS Number	EU	EU Classification	GHS	%
		EINECS/ELINCS		Classification	
		List			

00-08174

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

Lecithin	8002-43-5	232-307-2	Not Listed	Not Listed	*
Water for injection	7732-18-5	231-791-2	Not Listed	Not Listed	*

Additional Information: * Proprietary

** to adjust pH

Ingredient(s) indicated as hazardous have been assessed under standards for workplace

Page 3 of 11

safety.

For the full text of the R phrases and CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes. If irritation occurs or persists, get

medical attention.

Skin Contact: Remove contaminated clothing and shoes. Wash skin with soap and water. If irritation occurs

or persists, get medical attention.

Ingestion: Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not

induce vomiting unless directed by medical personnel. Seek medical attention immediately.

Inhalation: Remove to fresh air and keep patient at rest. Seek medical attention immediately.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms and Effects of For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Exposure: Identification and/or Section 11 - Toxicological Information.

Medical Conditions None known

Aggravated by Exposure:

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician: None

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use carbon dioxide, dry chemical, or water spray.

Special Hazards Arising from the Substance or Mixture

Hazardous Combustion May emit toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride

Products: and other chlorine-containing compounds.

Fire / Explosion Hazards: Not applicable

Advice for Fire-Fighters

Wear approved positive pressure, self-contained breathing apparatus and full protective turn out gear. Evacuate area and fight

fire from a safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Environmental Precautions

00-08174

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

Measures for Cleaning /

Collecting:

Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill

Page 4 of 11

area thoroughly.

Additional Consideration for

Large Spills:

Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other equivalent controls.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Store in a cool, dry, well-ventilated area. Store as directed by product packaging.

Incompatible Materials: None known
Specific end use(s): No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Refer to available public information for specific member state Occupational Exposure Limits.

Benzyl Alcohol

Bulgaria OEL - TWA	5.0 mg/m ³
Czech Republic OEL - TWA	40 mg/m ³
Finland OEL - TWA	10 ppm
	45 mg/m ³
Latvia OEL - TWA	5 mg/m³
Lithuania OEL - TWA	5 mg/m ³
Poland OEL - TWA	240 mg/m ³

Hydrogen chloride

ACGIH Ceiling Threshold Limit: Australia PEAK	2 ppm 5 ppm 7.5 mg/m³
Austria OEL - MAKs	5 ppm 8 mg/m ³
Belgium OEL - TWA	5 ppm 8 mg/m³
Bulgaria OEL - TWA	8.0 mg/m ³ 5 ppm
Cyprus OEL - TWA	5 ppm 8 mg/m³
Czech Republic OEL - TWA Estonia OEL - TWA	8 mg/m³ 5 ppm 8 mg/m³
Germany - TRGS 900 - TWAs	2 ppm 3 mg/m ³
Germany (DFG) - MAK	2 ppm 3.0 mg/m ³
Greece OEL - TWA	5 ppm 7 mg/m³

00-08174

Page 5 of 11

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

of Extraodice Continues	,
Hungary OEL - TWA	8 mg/m ³
Ireland OEL - TWAs	5 ppm
	8 mg/m ³
Italy OEL - TWA	5 ppm
	8 mg/m ³
Japan - OELs - Ceilings	5 ppm
	7.5 mg/m ³
Latvia OEL - TWA	5 ppm
	8 mg/m ³
Lithuania OEL - TWA	5 ppm
	8 mg/m ³
Luxembourg OEL - TWA	5 ppm
Male OF TWA	8 mg/m ³
Malta OEL - TWA	5 ppm
Netherlands OEL - TWA	8 mg/m ³
	8 mg/m ³
Vietnam O EL - TWAs	5 mg/m ³
Poland OEL - TWA	5 mg/m ³
Romania OEL - TWA	5 ppm
Olavakia OEL TIMA	8 mg/m ³
Slovakia OEL - TWA	5 ppm
Slevenic OEL TWA	8.0 mg/m ³ 5 ppm
Slovenia OEL - TWA	8 mg/m ³
Spain OEL - TWA	5 ppm
Spani OLL - 199A	7.6 mg/m ³
Switzerland OEL -TWAs	2 ppm
OWNEEDIGING OLL - I WAS	3.0 mg/m ³
	3.3g/

Sodium hydroxide

ACGIH Ceiling Threshold Limit: 2 mg/m³ **Australia PEAK** 2 mg/m³ 2 mg/m^3 **Austria OEL - MAKs Bulgaria OEL - TWA** 2.0 mg/m³ 1 mg/m³ Czech Republic OEL - TWA 1 mg/m^3 **Estonia OEL - TWA** France OEL - TWA 2 mg/m^3 **Greece OEL - TWA** 2 mg/m^3 2 mg/m³ **Hungary OEL - TWA** Japan - OELs - Ceilings 2 mg/m^3 0.5 mg/m³ Latvia OEL - TWA **OSHA - Final PELS - TWAs:** 2 mg/m^3 Poland OEL - TWA 0.5 mg/m³ 2 mg/m^3 Slovakia OEL - TWA 2 mg/m³ Slovenia OEL - TWA 1 mg/m³ **Sweden OEL - TWAs Switzerland OEL -TWAs** 2 mg/m³

Carprofen

00-08174

Zoetis OEL TWA 8-hr 1000 μg/m³

Exposure Controls

Material Name: Rimadyl®(Carprofen) Injectable Solution Page 6 of 11
Revision date: 02-Oct-2013 Version: 2.0

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Engineering controls should be used as the primary means to control exposures. General

room ventilation is adequate unless the process generates dust, mist or fumes. Keep airborne

contamination levels below the exposure limits listed above in this section.

Personal Protective

Refer to applicable national standards and regulations in the selection and use of personal

Equipment:

protective equipment (PPE).

Hands: Impervious gloves are recommended if skin contact with drug product is possible and for bulk

processing operations.

Eyes: Wear safety glasses or goggles if eye contact is possible.

Skin: Impervious protective clothing is recommended if skin contact with drug product is possible and

for bulk processing operations.

Respiratory protection: None required under normal conditions of use. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: Clear, colorless to pale

yellow

Odor: No data available. Odor Threshold: No data available.

Molecular Formula: Mixture Molecular Weight: Mixture

Solvent Solubility: No data available Water Solubility: No data available

pH: 7.0-7.4

Melting/Freezing Point (°C):

Boiling Point (°C):

No data available.

No data available.

Partition Coefficient: (Method, pH, Endpoint, Value)

No data available

Decomposition Temperature (°C): No data available.

Evaporation Rate (Gram/s):

Vapor Pressure (kPa):

Vapor Density (g/ml):

Relative Density:

No data available

Flammablity:

Autoignition Temperature (Solid) (°C):

Flammability (Solids):

Flash Point (Liquid) (°C):

Upper Explosive Limits (Liquid) (% by Vol.):

Lower Explosive Limits (Liquid) (% by Vol.):

Polymerization:

No data available
No data available
Will not occur

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use.

Possibility of Hazardous Reactions

Oxidizing Properties: None
Conditions to Avoid: None known
Incompatible Materials: None known

00-08174

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

10. STABILITY AND REACTIVITY

Hazardous Decomposition

Products:

Thermal decomposition products may include carbon monoxide, carbon dioxide, oxides of nitrogen and hydrogen chloride.

Page 7 of 11

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

General Information:

The information included in this section describes the potential hazards of the individual ingredients.

Acute Toxicity: (Species, Route, End Point, Dose)

Carprofen

Mouse Oral LD50 282 mg/kg Rat Oral LD50 149mg/kg

Rat (M/F) SC LD50 230/190mg/kg Rat (M/F) IP LD50 140/110 mg/kg

Lecithin

Rat Oral LD50 > 8 ml/kg

Benzyl Alcohol

Rat Oral LD50 1230 mg/kg Rat Para-periosteal LD50 53mg/kg

Rat Inhalation LC50 >4.178mg/L

Sodium hydroxide

Mouse IP LD50 40 mg/kg

Hydrogen chloride

Rat Sub-tenon injection (eye) LC50 1H 3,124 ppm

Mouse Inhalation LC50 1H 1,108ppm

Mouse Oral LD50 900mg/kg

Acute Toxicity Comments:

A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

Irritation / Sensitization: (Study Type, Species, Severity)

Carprofen

Eye Irritation Rabbit Non-irritating Skin Irritation Rabbit Non-irritating

Skin Sensitization - GPMT Guinea Pig Negative

Antigenicity- Delayed skin reaction Guinea Pig No effect

Benzyl Alcohol

Eye Irritation Rabbit Severe
Skin Irritation Rabbit Moderate
Skin Irritation Guinea Pig Moderate

Sodium hydroxide

00-08174

Eye Irritation Rabbit Severe

Page 8 of 11

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

11. TOXICOLOGICAL INFORMATION

Skin Irritation Rabbit Severe

Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

Carprofen

13 Week(s) Rat Oral5 mg/kg/day NOAEL Gastrointestinal System 13 Week(s) Dog Oral 5 mg/kg/day NOAEL None identified

Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Carprofen

Reproductive & Fertility Rat 20 mg/kg/day NOAEL Fetotoxicity, Maternal toxicity

Embryo / Fetal Development Rat 20 mg/kg/day NOAEL Not Teratogenic

Prenatal & Postnatal Development Mouse 40 mg/kg/day NOAEL Not Teratogenic

Prenatal & Postnatal Development Rabbit Oral 6 mg/kg/day NOAEL Embryotoxicity, Early embryonic development

Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

Carprofen

Bacterial Mutagenicity (Ames) Salmonella Negative

In Vivo Micronucleus Mouse Negative

Carcinogenicity: (Duration, Species, Route, Dose, End Point, Effect(s))

Carprofen

2 Year(s) Rat Oral 10 mg/kg/day NOAEL Not carcinogenic, Gastrointestinal system

2 Year(s) Dog Oral 25 mg/kg/day NOAEL Not carcinogenic, No effects at maximum dose

Carcinogen Status: None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

See below

Hydrogen chloride

IARC: Group 3 (Not Classifiable)

12. ECOLOGICAL INFORMATION

Environmental Overview: The environmental characteristics of this material have not been fully evaluated. Releases to

the environment should be avoided.

Toxicity: No data available

Persistence and Degradability: No data available

Bio-accumulative Potential: No data available

Mobility in Soil: No data available

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. 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.

Page 9 of 11

14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Canada - WHMIS: Classifications
WHMIS hazard class:

Class D, Division 2, Subdivision A



Glycocholic acid

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed
207-494-9

Benzyl Alcohol

CERCLA/SARA 313 Emission reporting

California Proposition 65

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Present

EU EINECS/ELINCS List

Not Listed

Not Listed

Not Listed

Not Listed

Not Listed

Not Listed

Not Eisted

Not

Lecithin

CERCLA/SARA 313 Emission reporting

California Proposition 65

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Present

Present

Page 10 of 11

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

15. REGULATORY INFORMATION

REACH - Annex IV - Exemptions from the Present

obligations of Register:
EU EINECS/ELINCS List 232-307-2

Water for injection

CERCLA/SARA 313 Emission reporting

California Proposition 65

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

REACH - Annex IV - Exemptions from the

Present

Present

obligations of Register:

EU EINECS/ELINCS List 231-791-2

Hydrogen chloride

CERCLA/SARA 313 Emission reporting 1.0 %
CERCLA/SARA Hazardous Substances 5000 lb
and their Reportable Quantities: 2270 kg
CERCLA/SARA - Section 302 Extremely Hazardous 500 lb

TPQs

CERCLA/SARA - Section 302 Extremely Hazardous 5000 lb

Substances EPCRA RQs

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Standard for the Uniform Scheduling
for Drugs and Poisons:
Schedule 6
EU EINECS/ELINCS List
Not Listed
Present
Schedule 5
Schedule 6
231-595-7

Sodium hydroxide

CERCLA/SARA 313 Emission reporting Not Listed **CERCLA/SARA Hazardous Substances** 1000 lb and their Reportable Quantities: 454 kg **California Proposition 65** Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present Standard for the Uniform Scheduling Schedule 5 for Drugs and Poisons: Schedule 6 **EU EINECS/ELINCS List** 215-185-5

Carprofen

00-08174

CERCLA/SARA 313 Emission reporting

California Proposition 65

Australia (AICS):

Standard for the Uniform Scheduling

Not Listed

Not Listed

Present

Schedule 4

for Drugs and Poisons:

EU EINECS/ELINCS List 258-712-4

16. OTHER INFORMATION

Text of R phrases and GHS Classification abbreviations mentioned in Section 3

Material Name: Rimadyl®(Carprofen) Injectable Solution

Revision date: 02-Oct-2013 Version: 2.0

Acute toxicity, oral-Cat.3; H301 - Toxic if swallowed Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed Acute toxicity, inhalation-Cat.3; H331 - Toxic if inhaled Acute toxicity, inhalation-Cat.4; H332 - Harmful if inhaled

Reproductive toxicity-Cat.2; H361d - Suspected of damaging the unborn child

Specific target organ toxicity, repeated exposure-Cat.2; H373 - May cause damage to organs through prolonged or repeated exposure Specific target organ toxicity, single exposure; Respiratory tract irritation-Cat.3; H335 - May cause respiratory irritation

Skin corrosion/irritation-Cat.1A; H314 - Causes severe skin burns and eye damage

C - Corrosive

Toxic to Reproduction: Category 3

T - Toxic Xn - Harmful

R23 - Toxic by inhalation. R25 - Toxic if swallowed. R35 - Causes severe burns.

R63 - Possible risk of harm to the unborn child. R20/22 - Harmful by inhalation and if swallowed.

R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Data Sources: The data contained in this MSDS may have been gathered from confidential internal sources,

raw material suppliers, or from the published literature.

Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking. Reasons for Revision:

> Updated Section 2 - Hazard Identification, Updated Section 4 - First Aid Measures, Updated Section 7 - Handling and Storage. Updated Section 8 - Exposure Controls / Personal

Page 11 of 11

Protection.

Prepared by: Toxicology and Hazard Communication

Zoetis Global Risk Management

Zoetis Inc. believes that the information contained in this Material 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.

End of Safety Data Sheet



1. Identification

Product identifier Rimadyl® (Carprofen) Sterile Injectable Solution

Other means of identification

Synonyms RIMADYL® INJECTABLE SOLUTION * Rimadyl® Injection * Carprofen injectable solution

Veterinary product used as non-steroidal, anti-inflammatory drug (nsaid) Recommended use

Recommended restrictions Not for human use Manufacturer/Importer/Supplier/Distributor information

Zoetis Inc. Company Name (US)

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

Zoetis Belgium S.A. Company Name (EU)

> Mercuriusstraat 20 1930 Zaventem

Emergency telephone

number

International CHEMTREC (24 hours): +1-703-527-3887

VMIPSrecords@zoetis.com **Contact E-Mail**

2. Hazard(s) identification

Not classified. **Physical hazards**

Health hazards Reproductive toxicity (the unborn child) Category 2

> Specific target organ toxicity, repeated Category 2 (digestive system)

exposure

Environmental hazards Not classified. Not classified. **OSHA** defined hazards

Label elements

Signal word

Hazard statement Suspected of damaging the unborn child. May cause damage to organs (digestive system)

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 vapor. Wear protective gloves/protective clothing/eye

protection/face protection.

If exposed or concerned: Get medical advice/attention. Response

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Material name: Rimadyl® (Carprofen) Sterile Injectable Solution

SDS US

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
Hydrochloric Acid		7647-01-0	**
Sodium hydroxide		1310-73-2	**

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 center 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 eves may cause temporary irritation. Exposed individuals may experience eve 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

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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 vapor. 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.

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.

Environmental precautions

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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Zoetis Components	Туре	Value	
Carprofen (CAS 53716-49-7)	TWA	1000 μg/m3	
US. OSHA Table Z-1 Limit	s for Air Contaminants (29 CFR 1910.1000)		
Components	Type	Value	
Hydrochloric Acid (CAS 7647-01-0)	Ceiling	7 mg/m3	
,		5 ppm	
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3	
US. ACGIH Threshold Lim	it Values		
Components	Туре	Value	
Hydrochloric Acid (CAS 7647-01-0)	Ceiling	2 ppm	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
US. NIOSH: Pocket Guide	to Chemical Hazards		
Components	Туре	Value	
Hydrochloric Acid (CAS 7647-01-0)	Ceiling	7 mg/m3	
,		5 ppm	
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3	
US. Workplace Environme	ental Exposure Level (WEEL) Guides		
Components	Туре	Value	
Benzyl Alcohol (CAS 100-51-6)	TWA	44.2 mg/m3	
,		10 ppm	
ogical limit values	No biological exposure limits noted for the in	gredient(s).	
trol banding approach	Not available.	. , ,	
or parioling approach	not arangolo.		

SDS US

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

Wear appropriate chemical resistant gloves. Impervious gloves are recommended if skin contact Hand protection

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.

Not applicable. Thermal hazards

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.

Color Clear, colorless to pale yellow.

Odor Not available. Odor threshold Not available.

7 - 7.4 Ηg

Melting point/freezing point Not available. Not available. Initial boiling point and boiling

range

Not available. Flash point **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. Not available. Vapor pressure Vapor density Not available. Relative density Not available.

Solubility(ies)

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available. Not available. **Viscosity**

Other information

Explosive properties Not explosive.

Version #: 01 Issue date: 06-03-2017

Oxidizing properties Not oxidizing.

10. Stability and reactivity

ReactivityThe 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 oxidizing 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.

Hydrochloric Acid 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.

Hydrochloric Acid 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.

Hydrochloric Acid Severity: Severe

Carprofen Species: Rabbit

Severity: Non-irritating

Benzyl Alcohol Species: Rabbit Severity: Severe

ocventy. Ocvere

Sodium hydroxide Species: Rabbit Severity: Severe

ocventy. ocver

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

exposure.

Hydrochloric Acid 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.

Species Product 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** Rabbit 2000 mg/kg LD50 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) 10 mg/kg/day, 2 years (Not carcinogenic, Rat 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) Sodium hydroxide (CAS 1310-73-2) **Acute** Intraperitoneal LD50 Mouse 40 mg/kg Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Corrosivity Hydrochloric Acid Severity: Corrosive Carprofen Species: Rabbit Severity: Non-irritating Serious eye damage/eye Direct contact with eyes may cause temporary irritation. irritation **Eye Contact** Hydrochloric Acid Severity: Severe

Eye Contact

Carprofen Species: Rabbit

Severity: Non-irritating

Benzyl Alcohol Species: Rabbit

Severity: Severe

Sodium hydroxide Species: Rabbit

Severity: Severe

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization 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 sensitization

Carprofen GPMT

Species: Guinea Pig Severity: Negative

Germ cell mutagenicityNo 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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Hydrochloric Acid (CAS 7647-01-0) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Suspected of damaging the unborn child.

Developmental effects

Carprofen 20 mg/kg/day Embryo / Fetal Development, Not Teratogenic

Result: NOAEL Species: Rat

40 mg/kg/day Prenatal & Postnatal Development, Not

Teratogenic Result: NOAEL Species: Mouse

6 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 - Not classified. single exposure

Material name: Rimadyl® (Carprofen) Sterile Injectable Solution

4 Version #: 01 Issue date: 06-03-2017

Specific target organ toxicity repeated exposure

May cause damage to organs (digestive system) 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 10	00-51-6)		
	EC50	Daphnia magna (Water Flea)	230 mg/L, 48 Hours
			66 mg/L, 21 Day(s) 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
Hydrochloric Acid (CAS	7647-01-0)		
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	282 mg/l, 96 hours
Sodium hydroxide (CAS	3 1310-73-2)		
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/l, 48 hours
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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

Material name: Rimadyl® (Carprofen) Sterile Injectable Solution

SDS US

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Hydrochloric Acid (CAS 7647-01-0) Listed. Sodium hydroxide (CAS 1310-73-2) Listed.

SARA 304 Emergency release notification

Hydrochloric Acid (CAS 7647-01-0) 5000 LBS OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name **CAS** number Reportable **Threshold** Threshold **Threshold** quantity planning quantity planning quantity, planning quantity, (pounds) (pounds) lower value upper value (pounds) (pounds)

7647-01-0 Hydrochloric Acid 5000 500 No

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Hydrochloric Acid (CAS 7647-01-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Hydrochloric Acid (CAS 7647-01-0)

Safe Drinking Water Act Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and **Chemical Code Number**

Hydrochloric Acid (CAS 7647-01-0) 6545

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Hydrochloric Acid (CAS 7647-01-0) 20 %WV

DEA Exempt Chemical Mixtures Code Number

Hydrochloric Acid (CAS 7647-01-0) 6545

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material US state regulations is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Hydrochloric Acid (CAS 7647-01-0) Sodium hydroxide (CAS 1310-73-2)

Material name: Rimadyl® (Carprofen) Sterile Injectable Solution

SDS US

Version #: 01 Issue date: 06-03-2017

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
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (FINFCS)	Yes

Substances (EINECS)

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 No

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*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, including date of preparation or last revision

06-03-2017 Issue date

Version # 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.

This document has undergone significant changes and should be reviewed in its entirety. **Revision information**

No