U NOVARTIS

SAFETY DATA SHEET

1. Identification

Product identifier Onsior 20 mg tablets

Other means of identification

Item Code CA4885

Synonyms CGS 34975 20 MG TAB * A-20023 D

Recommended use Veterinary Product **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name Novartis Animal Health

Address 3200 Northline Avenue, Suite 300

Greensboro, NC 27408

Telephone 1-336-387-1000 SDS E-mail lilly_msds@lilly.com

SDS telephone 1-877-Elanco1 (1-877-352-6261)

Emergency Telephone Elanco Product Technical Support / Human or Animal Exposure Reporting:

Numbers 1-888-545-5973

Transportation Emergency Telephone: CHEMTREC 1-800-424-9300

(Outside U.S. 1-703-527-3887)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Reproductive toxicity (the unborn child) Category 2

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement

H361 Suspected of damaging the unborn child.

Precautionary statement

Prevention

P201 Obtain special instructions before use.

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

P281 Use personal protective equipment as required.

Response

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

Storage Not available.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

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3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Robenacoxib	ROBENACOXIB UNGROUND COX975 UNGROUND	220991-32-2	6.25
Other components below reportable levels			93.75

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Rinse with water. Get medical attention if irritation develops and persists. Eye contact

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Not available.

Most important

symptoms/effects, acute and

delaved

Indication of immediate medical attention and special

treatment needed

General information

Treat symptomatically.

If you feel unwell, seek medical advice (show the label where possible). 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.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

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

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

Use water spray to cool unopened containers.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. 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 Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Provide adequate ventilation. Wear appropriate personal protective equipment.

Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Storage temperature: between 2 °C and 25 °C.

Store in original tightly closed container. Protect from humidity. Protect from light. Store away from

incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Novartis Internal Exposure Limit (NPIEL): 8 hour TWA 0.7 mg/m3 (Robenacoxib)

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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.

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.

Wear suitable protective clothing. Other

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Not available.

General hygiene considerations

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. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance Tablet. Physical state Solid. **Form** Tablet.

Beige to Brown. Color

Odor Meaty.

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

range

Not available. Flash point **Evaporation rate** Not available. Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower (%)

Flammability limit - upper

Not available.

Not available.

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Vapor pressure Not available. Vapor density Not available. Not available. Relative density

Solubility(ies)

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

(n-octanol/water)

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

Other information

Explosive properties Not explosive. Not oxidizing. Oxidizing properties

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Components **Species Test Results**

Robenacoxib (CAS 220991-32-2)

Acute Oral

LD50 Rat 500 - 2000 mg/kg OECD Test Guideline

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Skin corrosion/irritation

No skin irritation.

Corrosivity

Robenacoxib OECD Test Guideline 404 Result: No skin irritation.

Species: Rabbit

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Not a respiratory sensitizer. Respiratory sensitization

Skin sensitization Not a skin sensitizer.

Skin sensitization

Robenacoxib OECD Test Guideline 406

Result: Not sensitizing. Species: Guinea pig

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Mutagenicity

Robenacoxib OECD Test Guideline 471- Ames Test

Result: Negative.

Species: Salmonella Typhimurium

OECD Test Guideline 473- Chromosome aberrations test

Human Lymphocytes Result: Negative.

OECD Test Guideline 474- Micronucleus test

Result: Negative. Species: Rat

OECD Test Guideline 476- Gene mutation test lymphoma

cells

Result: Negative.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Not available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

Suspected of damaging the unborn child. Like other inhibitors of cyclooxygenase (COX) activity. Reproductive toxicity

may produce adverse effects on the fetus or neonate when administered during the last trimester of gestation. This substance may have unwanted effects on the reproductive system of both sexes

and on pregnancy and/or unborn/offspring. (Robenacoxib)

Specific target organ toxicity -

single exposure

Not classified.

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Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
Robenacoxib (CAS 22	0991-32-2)		
Acute			
	EC10	Activated sludge	21 mg/l, 3 hours , OECD Test Guideline 209
	EC50	Activated sludge	126 mg/l, 3 hours , OECD Test Guideline 209
Aquatic			
Acute			
Algae	EbC50	Green algae (Selenastrum capricornutum)	29 mg/l, 72 hours , OECD Test Guideline 201
	ErC50	Green algae (Selenastrum capricornutum)	51 mg/l, 72 hours , OECD Test Guideline 201
	NOEC	Green algae (Selenastrum capricornutum)	18 mg/l, 72 hours , OECD Test Guideline 201
Crustacea	EC50	Daphnia	7.2 mg/l, 48 hours , OECD Test Guideline 202
	NOEC	Daphnia	5.6 mg/l, 48 hours , OECD Test Guideline 202

Persistence and degradability

The product is not readily biodegradable.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Robenacoxib 1.42 pH= 9

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 Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in

accordance with local/regional/national/international regulations.

Disposal methods

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US federal regulations**

Standard, 29 CFR 1910.1200.

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

Not regulated.

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CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

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

International Inventories

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryNo

16. Other information, including date of preparation or last revision

Issue date 12-15-2015

Version # 01

Lilly Lab Code Health: 1

Fire: 0 Reactivity: 0 Special 1: R

Material name: Onsior 20 mg tablets SDS US

^{*}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).

Disclaimer

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

For additional information contact: Elanco Animal Health 0011+1-877-352-6261 0011+1-800-428-4441