SAFETY DATA SHEET

1. Identification

Product identifier Rizatriptan Benzoate System Suitability Mixture

Other means of identification

Catalog number 1604891

Recommended use Specified quality tests and assay use only.

Recommended restrictions Not for use as a drug. Not for administration to humans or animals.

Manufacturer/Importer/Supplier/Distributor information

Company name U. S. Pharmacopeia **Address** 12601 Twinbrook Parkway

> Rockville MD 20852-1790

US

Telephone RS Technical Services 301-816-8129

Website www.usp.org E-mail RSTECH@usp.org

CHEMTREC within US & **Emergency phone number**

Canada

CHEMTREC outside US & +1 703-527-3887

Canada

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2A

OSHA hazard(s) Not classified.

Label elements



Signal word Warning

Hazard statement Causes serious eye irritation.

Precautionary statement

Prevention Wash with soap and water thoroughly after handling. Wear eye/face protection.

Response 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.

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1-800-424-9300

Storage Not available. Disposal Not available.

Hazard(s) not otherwise

classified (HNOC)

Not classified.

3. Composition/information on ingredients

Mixture

Hazardous components

Chemical name	Common name and synonyms	CAS number	%
Rizatriptan Benzoate		145202-66-0	99
Non-hazardous components			
Chemical name	Common name and synonyms	CAS number	%
Rizatriptan Impurity C		Unknown	1

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4. First-aid measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

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

Skin contact Get medical attention if irritation develops and persists. Wash off immediately with plenty of water.

Wash off with soap and water. Rinse skin with water/shower. Take off contaminated clothing and

wash before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If

Irritation of eyes and mucous membranes.

ingestion of a large amount does occur, call a poison control center immediately.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed **General information** Provide general supportive measures and treat symptomatically.

Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic)

5. Fire-fighting measures

Suitable extinguishing media Water spray, dry chemical, carbon dioxide, or foam as appropriate for surrounding fire and

reactions must receive immediate medical attention.

materials.

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

No unusual fire or explosion hazards noted.

Special protective equipment

and precautions for firefighters

Wear suitable protective equipment.

Fire-fighting

equipment/instructions

As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

Specific methods Cool containers exposed to flames with water until well after the fire is out.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Avoid inhalation of dust from the spilled material. Wear appropriate personal protective equipment.

Methods and materials for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid the generation of dusts during clean-up. For waste disposal, see section 13 of the SDS. Wash spill site.

7. Handling and storage

Precautions for safe handling

As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly.

Conditions for safe storage, including any incompatibilities

Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

8. Exposure controls/personal protection

Biological limit values **Exposure guidelines**

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

No exposure standards allocated.

Appropriate engineering controls

Airborne exposure should be controlled primarily by engineering controls such as general dilution ventilation, local exhaust ventilation, or process enclosure. Local exhaust ventilation is generally preferred to general exhaust because it can control the contaminant at its source, preventing dispersion into the work area. An industrial hygiene survey involving air monitoring may be used to determine the effectiveness of engineering controls. Effectiveness of engineering controls intended for use with highly potent materials should be assessed by use of nontoxic surrogate materials.

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Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with sideshields are recommended. Face shields or goggles may be required if

splash potential exists or if corrosive materials are present. Approved eye protection (e.g., bearing the ANSI Z87 or CSA stamp) is preferred. Maintain eyewash facilities in the work area.

Skin protection

Other

Respiratory protection

Hand protection Chemically compatible gloves. For handling solutions, ensure that the glove material is protective

against the solvent being used. Use handling practices that minimize direct hand contact.

Employees who are sensitive to natural rubber (latex) should use nitrile or other synthetic nonlatex

gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy.

For handling of laboratory scale quantities, a cloth lab coat is recommended. Where significant quantities are handled, work clothing may be necessary to prevent take-home contamination.

Where respirators are deemed necessary to reduce or control occupational exposures, use

NIOSH-approved respiratory protection and have an effective respirator program in place

(applicable U.S. regulation OSHA 29 CFR 1910.134).

Thermal hazards Not available.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance Solid. Physical state Solid. **Form** Powder Odor Not available. **Odor threshold** Not available. Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

Flammability limit - upper

(%)

Not available.

Not available. **Explosive limit - lower (%)** Not available. Explosive limit - upper (%)

Vapor pressure Not available. Not available. Vapor density Not available. Relative density Solubility in water Not available. Partition coefficient Not available.

(n-octanol/water)

Not available. Not available.

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

10. Stability and reactivity

Reactivity No reactivity hazards known.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid None known. Incompatible materials None known.

Hazardous decomposition

products

Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions. NOx

11. Toxicological information

Information on likely routes of exposure

Ingestion Based on available data, the classification criteria are not met.

Inhalation Due to lack of data the classification is not possible.

Based on available data, the classification criteria are not met. Skin contact

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical, and toxicological characteristics

Dizziness. Nausea. Vomiting. Headache. Burning or tingling sensations. Fatigue. Drowsiness. Dry mouth. Heaviness, tightness, or pressure in chest or neck. Speech disturbances. Weakness. Pounding heartbeat. Irregular heartbeat. Difficulty breathing. Weakness or numbness of arm or

Medical conditions aggravated

by exposure

Cardiovascular disease. Hypertension. Impaired kidney function. Impaired liver function.

Acute toxicity

Test Results Components Species

Rizatriptan Benzoate (CAS 145202-66-0)

Oral

LD50 Mouse 700 mg/kg 2227 mg/kg Rat

Skin corrosion/irritation

Serious eye damage/eye

irritation

Based on available data, the classification criteria are not met.

Causes serious eye irritation.

Local effects

Rizatriptan Benzoate Bovine corneal opacity and permeability assay

> Result: Irritant Organ: Eye Severity: Moderate Irritancy

Result: Negative Species: Rabbit Organ: Skin

Respiratory sensitization

Due to lack of data the classification is not possible. Skin sensitization Due to lack of data the classification is not possible.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mutagenicity

Rizatriptan Benzoate Ames test

> Result: Negative with and without activation In vitro alkaline elution assay (rat hepatocytes)

Result: Negative

In vitro mammalian cell mutagenesis assay (V-79 Chinese

hamster lung cells) Result: Negative

In vivo chromosomal aberration assay (mouse bone marrow)

Result: Negative

Carcinogenicity Based on available data, the classification criteria are not met. This product is not considered to

be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Rizatriptan Benzoate < 125 mg/kg/day 100-Week study (oral gavage)

Result: No increase in tumors

Species: Mouse

< 125 mg/kg/day 105-Week study (oral gavage)

Result: No increase in tumors

Species: Rat

Reproductive toxicity Based on available data, the classification criteria are not met.

Reproductivity

Rizatriptan Benzoate

100 - 250 mg/kg/day Pre- and Post-natal developmental study Result: Increased pup mortality at birth, decreased weight gain persisting into adulthood, decreased learning capacity in

offspring Species: Rat

100 mg/kg/day Embryofetal development study

Result: No developmental effects; decreased maternal and

fetal weight gain Species: Rat

50 mg/kg/day Embryogetal development study

Result: No developmental effect; decreased maternal and

fetal weight gain Species: Rabbit

Specific target organ toxicity single exposure

Due to lack of data the classification is not possible.

Specific target organ toxicity -

Due to lack of data the classification is not possible.

repeated exposure

Aspiration hazard Based on available data, the classification criteria are not met.

12. Ecological information

EcotoxicityThere are no data on the ecotoxicity of this product. **Persistence and degradability**No data is available on the degradability of this product.

Bioaccumulative potential Not available.

Mobility in soil Not available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructionsThis product, in its present state, when discarded or disposed of, is not a hazardous waste

according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA

criteria for hazardous waste. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations Not available.

Hazardous waste code Not regulated.

Waste from residues / unused

products

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 packagingEmpty containers should be taken to an approved waste handling site for recycling or disposal.
Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

15. Regulatory information

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

Standard, 29 CFR 1910.1200.

CERCLA/SARA Hazardous Substances - Not applicable.

One or more components are not listed on TSCA.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

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

SARA 302 Extremely hazardous substance

No

SARA 311/312 Hazardous

chemical

No

Other federal regulations

Safe Drinking Water Act

(SDWA)

Not regulated.

Food and Drug Administration (FDA)

Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. 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 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)	No
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	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No
* A "Vaa" indicates that all sampa	neate of this are dust comply with the inventory requirements administered by the governing country (a)	

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

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

01-16-2013 Issue date

Version # 01

Further information Not available.

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