**Section 1 - PRODUCT AND COMPANY IDENTIFICATION**

**Material Name:** Thrombi-Pad™ (3X3 hemostatic pad)

**Manufacturer Information**
KING PHARMACEUTICALS, INC.
501 Fifth Street
Bristol, TN 37620

**Synonyms**
Product Number 60793-916-03 (reference number 0916)

**Section 2 - HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

- **Color:** off-white
- **Physical Form:** pad
- **Major Health Hazards:** respiratory tract irritation, skin irritation, eye irritation, allergic reactions, antibody formation against bovine thrombin may cause adverse hemostatic effects

**POTENTIAL HEALTH EFFECTS**

**Inhalation**

- **Short Term:** irritation, cough, antibody response, allergic reactions, nausea, vomiting, difficulty breathing, headache, blood disorders
- **Long Term:** irritation, cough, allergic reactions, antibody response, nosebleed, stomach pain, chest pain, difficulty breathing, wheezing, asthma, headache, lung damage

**Skin**

- **Short Term:** irritation, allergic reactions, antibody response, absorption may occur, itching, nausea, vomiting, headache, blood disorders
**Safety Data Sheet**

Material Name: Thrombi-Pad™ (3X3 hemostatic pad)  
MSDS ID: 00232497

**Long Term:** irritation, itching, antibody response, allergic reactions, blood disorders

**Eye**

**Short Term:** irritation, itching, tearing  
**Long Term:** irritation

**Ingestion**

**Short Term:** gastrointestinal irritation, nausea, vomiting, stomach pain, irregular heartbeat, drowsiness, convulsions  
**Long Term:** no information on significant adverse effects

* * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component</th>
<th>Percent</th>
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<tr>
<td>9004-32-4</td>
<td>SODIUM CARBOXYMETHYL CELLULOSE</td>
<td>&lt;59</td>
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<tr>
<td>10035-04-8</td>
<td>CALCIUM CHLORIDE, DIHYDRATE</td>
<td>&lt;41</td>
</tr>
<tr>
<td>9002-04-4</td>
<td>BOVINE THROMBIN</td>
<td>&lt;1</td>
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</table>

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Calcium chloride (10043-52-4).

* * *Section 4 - FIRST AID MEASURES* * *

**Inhalation**

Not a likely route of exposure. It is unlikely that emergency treatment will be required if used as directed.

**Skin**

This product is intended for topical use. It is unlikely that emergency treatment will be required if used as directed.

**Eyes**

It is unlikely that emergency treatment will be required if used as directed. If contact does occur, flush eyes with plenty of water for at least 15 minutes and then get medical attention.
Ingestion

Not a likely route of exposure. If swallowed, get medical attention.

**Section 5 - FIRE FIGHTING MEASURES**

See Section 9 for Flammability Properties

NFPA Ratings:

- Health: 2
- Fire: 1
- Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Flammable Properties**

Slight fire hazard.

**Extinguishing Media**

- carbon dioxide, regular dry chemical, regular foam, water

**Fire Fighting Measures**

Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

**Thermal Decomposition Products**

- Combustion: oxides of carbon, oxides of sodium, oxides of calcium, hydrogen chloride

**Section 6 - ACCIDENTAL RELEASE MEASURES**

**Occupational spill/release**

Move undamaged containers from spill area. Small dry spills: Sweep and scoop spilled material into clean, dedicated equipment. Keep out of water supplies and sewers.

**Section 7 - HANDLING AND STORAGE**

**Storage Procedures**

Store and handle in accordance with all current regulations and standards. Store between 2 C and 25 C. See original container for storage recommendations. Keep separated from incompatible substances.
**Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

Component Exposure Limits

ACGIH, EU and OSHA have not developed exposure limits for any of this product's components.

Ventilation

Under normal conditions of use, no special ventilation equipment is needed.

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face

Eye protection not required under normal conditions.

Protective Clothing

Wear appropriate clothing to minimize skin contact.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Respiratory Protection

No respirator is required under normal conditions of use.

**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

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<th>Solid</th>
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<tr>
<td>Odor:</td>
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<td>Density:</td>
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</table>
**Section 10 - STABILITY AND REACTIVITY**

**Chemical Stability**

Stable at normal temperatures and pressure.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

**Materials to Avoid**

oxidizing materials

**Combustion:** oxides of carbon, oxides of sodium, oxides of calcium, hydrogen chloride

**Possibility of Hazardous Reactions**

Will not polymerize.

**Section 11 - TOXICOLOGICAL INFORMATION**

**Immediate Effects**

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

**SODIUM CARBOXYMETHYL CELLULOSE (9004-32-4)**

Inhalation LC50 Rat >5800 mg/m3 4 h; Oral LD50 Rat 27000 mg/kg; Dermal LD50 Rabbit >2 g/kg

**CALCIUM CHLORIDE, DIHYDRATE (10035-04-8)**

Oral LD50 Rat 1000 mg/kg; Dermal LD50 Rat 2630 mg/kg (related to Calcium chloride)
Acute Toxicity Level

SODIUM CARBOXYMETHYL CELLULOSE (9004-32-4)
Non Toxic: ingestion

CALCIUM CHLORIDE, DIHYDRATE (10035-04-8)
Moderately Toxic: ingestion (related to Calcium chloride)

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, or DFG.

Local Effects

CALCIUM CHLORIDE, DIHYDRATE (10035-04-8)
Irritant: inhalation, skin, eye

BOVINE THROMBIN (9002-04-4)
Irritant: inhalation, skin, eye

Target Organs

BOVINE THROMBIN (9002-04-4)
blood

Medical Conditions Aggravated by Exposure

blood system disorders, blood system disorders, known sensitivity to bovine-derived products, known sensitivity to bovine-derived products, allergic reactions

Additional Data

Individuals who are known to be sensitive to bovine-derived substances should not be exposed to this material. For topical use only. Refer to the current package insert for additional information. Not for intravenous administration. This substance may be fatal if it enters the bloodstream. Individuals who are known to be sensitive to bovine-derived substances should not be exposed to this material.

* * *Section 12 - ECOLOGICAL INFORMATION* * *

Component Analysis - Aquatic Toxicity

CALCIUM CHLORIDE, DIHYDRATE (10035-04-8)
96 Hr LC50 Lepomis macrochirus

10650 mg/L [static] related to Calcium chloride

Test & Species

48 Hr EC50 Daphnia magna

Results & Conditions

52 mg/L related to Calcium chloride

**Section 13 - DISPOSAL CONSIDERATIONS**

Disposal Methods

Dispose in accordance with all applicable regulations. Dispose in a puncture-resistant biohazard container.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

**Section 14 - TRANSPORT INFORMATION**

US DOT Information

No Classification assigned.

**Section 15 - REGULATORY INFORMATION**

U.S. Federal Regulations

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312

Acute Health: Yes  Chronic Health: No  Fire: No  Pressure: No  Reactive: No

U.S. State Regulations

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

Not regulated under California Proposition 65
Component Analysis - Inventory

<table>
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<tr>
<th>Component</th>
<th>CAS</th>
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<th>EU</th>
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<td>CALCIUM CHLORIDE, DIHYDRATE</td>
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<tr>
<td>BOVINE THROMBIN</td>
<td>9002-04-4</td>
<td>Yes</td>
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</table>

**Section 16 - OTHER INFORMATION**

Key / Legend

- ACGIH - American Conference of Governmental Industrial Hygienists
- ADR - European Road Transport
- AU - Australia
- BOD - Biochemical Oxygen Demand
- C - Celsius
- CA - Canada
- CAS - Chemical Abstracts Service
- CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
- CN - China
- CPR - Controlled Products Regulations
- DFG - Deutsche Forschungsgemeinschaft
- DOT - Department of Transportation
- DSL - Domestic Substances List
- EEC - European Economic Community
- EINECS - European Inventory of Existing Commercial Chemical Substances
- EPA - Environmental Protection Agency
- EU - European Union
- F - Fahrenheit
- IARC - International Agency for Research on Cancer
- IATA - International Air Transport Association
- ICAO - International Civil Aviation Organization
- IDL - Ingredient Disclosure List
- IDLH - Immediately Dangerous to Life and Health
- IMDG - International Maritime Dangerous Goods
- JP - Japan
- Kow - Octanol/water partition coefficient
- KR - Korea
- LEL - Lower Explosive Limit
- LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database
- MAK - Maximum Concentration Value in the Workplace
- MEL - Maximum Exposure Limits
- NFPA - National Fire Protection Agency
- NIOSH - National Institute for Occupational Safety and Health
- NJTSR - New Jersey Trade Secret Registry
- NTP - National Toxicology Program
- NZ - New Zealand
- OSHA - Occupational Safety and Health Administration
- PH - Philippines
- RCRA - Resource Conservation and Recovery Act
- RID - European Rail Transport
- RTECS - Registry of Toxic Effects of Chemical Substances®
- SARA - Superfund Amendments and Reauthorization Act
- STEL - Short-term Exposure Limit
- TDG - Transportation of Dangerous Goods
- TSCA - Toxic Substances Control Act
- TWA - Time Weighted Average
- UEL - Upper Explosive Limit
- US - United States

Other Information

This material safety data sheet is offered solely for your information, consideration, and investigation. King Pharmaceuticals provides no warranties, either expressed or implied, and assumes no responsibility for the accuracy of the data contained herein.