Safety Data Sheet
BIO-Strip 200

SDS Revision Date: **03/09/2022**

1.1. Product identifier

Product Identity	BIO-Strip 200
Alternate Names	BIO-Strip 200

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use	Consult your Pharmacal Representative
Application Method	Consult your Pharmacal Representative

1.3. Details of the supplier of the safety data sheet

Company Name

Pharmacal Research Labs.,Inc.
562 Captain Neville Dr.
Waterbury, CT 06705, USA

24 hour Emergency Telephone No.:

CHEMTREC (USA)	(800) 424-9300
IN CANADA CALL CANUTEC	(613) 996-6666
Customer Service: Pharmacal Research Labs.,Inc.	203-755-4908, (800)-243-5350

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Irrit. 2;H315	Causes skin irritation.
Eye Irrit. 2;H319	Causes serious eye irritation.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Warning

H315 Causes skin irritation.
H319 Causes serious eye irritation.

[Prevention]:

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+313 If eye irritation persists: Get medical advice / attention.

[Storage]:

No GHS storage statements

[Disposal]:

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

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Citric acid **CAS Number: 0000077-92-9**	**25 - 50**	**Eye Irrit. 2;H319**	**[1]**
LFQ -Proprietary Blend	**1**	**Skin Irrit. 2;H315**	**[4]**

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.
[3] PBT-substance or vPvB-substance.
[4] Chemical identity has been withheld as a trade secret.
*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation Move to fresh air.
Consult a physician if irritation of respiratory passages occur.

Eyes Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.
Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.
Call a poison control center or doctor for treatment advice.

Skin Take off contaminated clothing.
Rinse skin immediately with plenty of water for 15 - 20 minutes.
Call a poison control center or doctor for treatment advice.

Ingestion Call a poison control center or doctor for treatment advice.

Have person drink large quantities of water or fruit juice.
Do not give anything by mouth to an unconscious person.
Do not give carbonates.
Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview Contact with concentrated material may cause damage to tooth enamel. May be mild eye and skin irritant.
See section 2 for further details.

Eyes Causes serious eye irritation.

5. Fire-fighting measures

5.1. Extinguishing media

Use media appropriate for surrounding area.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: When heated, emits highly toxic and corrosive fumes of hydrogen compounds and hydrogen gas.

5.3. Advice for fire-fighters

Use full protective clothing and self-contained breathing apparatus. This product may be corrosive to human tissue. Cool drum with water.

ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Protective clothing and equipment must be worn. Contain spill or leakage in suitable container or holding area. Dilute cautiously with water. Neutralize with soda ash or lime and dispose of in accordance with federal, state, and local regulations.
"EMPTY" CONTAINER WARNINGS: Do not reuse empty container. Triple rinse with water - dispose of in conformance with federal, state, and local regulations.

7. Handling and storage

7.1. Precautions for safe handling

Keep in well ventilated area - store above 10°c (50°f). Use goggles or face shield, rubber gloves, and boots where contact is expected.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Metal, glass, stoneware, alkali and strong concentrated acids.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

Keep out of reach of children.
For professional use only.
Do not mix with any other chemicals unless compatibility has been established by the manufacturer.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000077-92-9	Citric acid	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
Proprietary	LFQ	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000077-92-9	**Citric acid**	**OSHA**	**Select Carcinogen: No**
		NTP	**Known: No; Suspected: No**
		IARC	**Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;**
Proprietary	**LFQ**	**OSHA**	**Select Carcinogen: No**
		NTP	**Known: No; Suspected: No**
		IARC	**Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;**

8.2. Exposure controls

Respiratory	Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.
Eyes	Chemical Splash goggles or faceshield
Skin	Chemical resistant clothing such as coveralls/apron and boots should be worn. Chemical impervious gloves required.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Clear Colorless Liquid
Odor	Slight chemical
Odor threshold	Not Measured
pH	1.8
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	Not Measured
Flash Point	Non Flammable
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** Not Measured **Upper Explosive Limit:** Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	1.1
Solubility in Water	Complete @ 1 ATM and 25C
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured

9.2. Other information

Physical Properties are approximate or typical vales and should not be used for precise design purposes.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Excessive heat and open flame. Avoid contact with reactive metals such as iron, zinc and aluminum.

10.5. Incompatible materials

Metal, glass, stoneware, alkali and strong concentrated acids.

10.6. Hazardous decomposition products

When heated, emits highly toxic and corrosive fumes of hydrogen compounds and hydrogen gas.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Citric acid - (77-92-9)	5,400.00, Mouse - Category: NA	>2,000.00, Rat - Category: 5	No data available	No data available	No data available
LFQ (proprietary blend)	3153 Rat Category:5	>2,000.00, Rat - Category: 5	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable

Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Citric acid - (77-92-9)	706.00, Fish (Piscis)	Not Available	Not Available
Ingredient	**96 hr LC50 fish, mg/l**	**48 hr EC50 Daphnia, mg/l**	**72 hr ErC50 algae, mg/l**
LFQ (Proprietary Blend)	77.3, Fish	194	5

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT/TDG (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Liquid Cleaning Compound	Liquid Cleaning Compound	Liquid Cleaning Compound
14.3. Transport hazard class(es)	**DOT Hazard Class:** Not Applicable **DOT Label:** ---	**IMDG:** Not Applicable **Sub Class:** Not Applicable	**Air Class:** Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification D2B E

US EPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

N.J. RTK Substances (>1%) :
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Penn RTK Substances (>1%) :
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Revision Date:03/09/2022 Supersedes: 03/03/2015 Reason: Review and update product color

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

The information and recommendations contained herein are, to the best of Pharmacal's knowledge and belief, accurate and reliable as of the date issued. Pharmacal does not warrant or guarantee their accuracy or reliability, and Pharmacal shall not be liable for any loss or damage arising out of there use thereof.
The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use.
The hazardous materials identification system (HMIS) and national fire protection association ratings have been included by Pharmacal research laboratories INC. In order to provide additional health and hazard information. The ratings recommended are based upon criteria supplied by the developers of these rating systems, together with Pharmacal's interpretation of the available data.

End of Document