



SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: ProtoStain Blue

Product Number: EC-727

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer

National Diagnostics
305 Patton Drive
Atlanta, GA 30036
(404) 699-2121
(800) 526-3867
info@nationaldiagnostics.com

1.4 Emergency Telephone Number

ChemTel Inc.

Contract number MIS8894340
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)
01-800-099-0731 (Mexico)
400-120-0751 (China)
000-800-100-4086 (India)
1-300-954-583 (Australia)
0-800-591-6042 (Brazil)
+1-813-255-3924 (All other regions)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

2.2 Label Elements

This product has no labeling elements associated with EC directives or respective national laws.

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Chemical Names/Description

Colloidal suspension of Coomassie G-250 powdered stain (<1%) with citric acid and propylene carbonate.

Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Citric acid monohydrate	5	5949-29-1	201-069-1	H319
Propylene carbonate	2.5	108-32-7	203-572-1	H315, H319

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

Skin

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Citric acid monohydrate:
No information available.

Propylene carbonate:
No information available.

Ingestion

Citric acid monohydrate:
No information available.

Propylene carbonate:
No information available.

Skin

Citric acid monohydrate:
No information available.

Propylene carbonate:
No information available.

Eyes

Citric acid monohydrate:
No information available.

Propylene carbonate:
No information available.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Water spray, dry chemical, alcohol-resistant foam, or carbon dioxide.

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products

N.A.

Hazardous Decomposition Products

No dangerous decomposition products known.

Hazardous Polymerization

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Use absorbent material to collect and contain for salvage or disposal.

6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage. Isolate from incompatible materials (section 10).

Incompatibles

Citric acid monohydrate:
No information available.

Propylene carbonate:
No information available.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

Component: Citric acid monohydrate

ACGIH Threshold Limit Value (TLV): N.A.

OSHA Permissible Exposure Limit (PEL): N.A.

Component: Propylene carbonate

ACGIH Threshold Limit Value (TLV): N.A.

OSHA Permissible Exposure Limit (PEL): N.A.

8.2 Exposure Controls

Engineering Controls

Not expected to require any special ventilation.

Respiratory Protection

Not expected to require personal respirator usage.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear protective gloves and clean body covering clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Colorless solution	b. Odor	Odorless
c. Odor Threshold	N.A.	d. pH	No Data
e. Melting/Freezing Point (°C)	0	f. Boiling point (°C)	100
g. Flash Point (°C)	N.A.	h. Evaporation Rate	No Data
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	23 hPa @ 20 C	l. Vapor Density (Air = 1)	0.994 g/cm ³ @ 20 C
m. Relative Density	No Data	n. Water Solubility	Fully miscible
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature (°C)	N.A.	r. Viscosity	No data available.
s. Explosive Properties	N.A.	t. Oxidizing Properties	N.A.

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Non reactive under recommended conditions of use and storage.

10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

10.4 Conditions to Avoid

No dangerous reactions known.

10.5 Incompatible Materials

Citric acid monohydrate:
No information available.

Propylene carbonate:
No information available.

10.6 Hazardous Decomposition Products

No dangerous decomposition products known.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

5900

Dermal Rabbit LD50 (mg/kg)

0

Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Citric acid monohydrate	N.A.	N.A.	N.A.
Propylene carbonate	N.A.	N.A.	N.A.

Potential Health Effects

Inhalation

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

Ingestion

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

Skin

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

Eyes

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

Carcinogenicity

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

Mutagenicity

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

Reproductive Toxicity

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

Teratogenic Effects

Citric acid monohydrate

No information available.

Propylene carbonate
No information available.

Routes of Entry

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

Target Organ Statement

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

COMPONENT: Citric acid monohydrate

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No information available.	No information available.	No information available.	No information available.

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No information available.	No information available.	No information available.	No information available.

COMPONENT: Propylene carbonate

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No information available.	No information available.	No information available.	No information available.

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No information available.	No information available.	No information available.	No information available.

12.2 Persistence and Degradability

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

12.3 Bioaccumulative Potential

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

12.4 Mobility in Soil

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

12.5 Results of PBT and vPvB Assessment

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

12.6 Other Adverse Effects

Citric acid monohydrate
No information available.

Propylene carbonate
No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	Not Regulated	Not Regulated	Not Regulated	Not Regulated
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION

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

United States

TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Citric acid monohydrate	No	No	No	No	No
Propylene carbonate	No	No	No	No	No

Europe

EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION

Revisional Updates

4/26/2019 - Updated Section 1.4

5/29/2015 - Updated Sections 2.1 and 3.2

5/7/2015 - Released Version 1.0

NFPA Codes

Health 1 Flammability 0 Reactivity 0

Dangers

Citric acid monohydrate

H319 - Causes serious eye irritation.

Propylene carbonate

H315 - Causes eye irritation.

H319 - Causes serious eye irritation.

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