

Coomassie Electrophoresis Stain



MATERIAL SAFETY DATA SHEET (MSDS)

MSSG021 v4.2

SECTION 1 COMPANY AND PRODUCT IDENTIFICATION

Manufacturer	NuSep Ltd 324 Burns Bay Road, Lane Cove NSW 2066 Australia ABN 81 134 281 977	Phone: 61 2 8415 7300 Fax: 61 2 8415 7399 Email: sales@nusep.com Internet: www.nusep.com
Date of Issue	March 2011 Classified as hazardous according to criteria of NOHSC. Classified as dangerous goods according to the ADG Code.	
Product Name	Coomassie Electrophoresis Stain	
Other Names	Gradipure Stain	
Product Code	SG-021, SG-022	
Container Size	500 mL, 4 x 500 mL (2 litres)	
Product Use	Laboratory reagent used as a protein stain.	

SECTION 2 COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients	CAS No.	Proportion, %
Methanol	67-56-1	30 - 60
Orthophosphoric acid	7664-38-2	< 10
Ammonium sulfate	7783-20-2	< 10
Water	7732-18-5	to 100

SECTION 3 HAZARDS IDENTIFICATION

Health Hazard Classification	HAZARDOUS
UN Classification	Class 3 (FLAMMABLE LIQUID, TOXIC, N.O.S.)
UN Number	1992

EMERGENCY OVERVIEW

Product Risk Phrases	Dark blue liquid with a mild alcohol odour, packaged in plastic bottles, each containing 500 millilitres. R11, R23/24/25. Highly Flammable. Toxic by inhalation, in contact with skin, and if swallowed. S7, S16, S20, S24, S25, S45, S1/2.
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Safety Phrases	Keep container tightly closed. Keep away from sources of ignition - No smoking. When using, do not eat or drink. Avoid contact with skin. Avoid contact with eyes. In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show the label where possible). Keep locked up and out of reach of children.
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POTENTIAL HEALTH EFFECTS

Inhalation	Data suggests that this product is toxic if inhaled. Brief or minor exposure may lead to health problems. Extended or major exposure may lead to severe consequences including death.
Skin contact	Data suggests that this product may be absorbed through the skin and be harmful by skin absorption. Major skin exposure may lead to health problems.
Eye contact	This product is severely irritating to the eyes. It will cause intense discomfort such as severe pain, copious watering and redness of the eyes. Effects will last long after exposure has ceased, and in severe exposure, permanent effects such as corneal damage or blindness can occur.
Ingestion	Data suggests that this product is toxic if swallowed. Ingestion of small quantities may cause harm and larger quantities may lead to death.
Chronic Exposure Carcinogen Status	No specific data is available for the product for chronic exposure symptoms. Ingredients are not classified as human carcinogens by the International Agency for Research on Cancer (IARC).

CARCINOGEN STATUS

Ingredients are not classified as human carcinogens by the International Agency for Research on Cancer (IARC).

SECTION 4 FIRST AID MEASURES

	For advice, contact a Poisons Information Centre or a doctor. If swallowed, do NOT induce vomiting.
Inhalation	This product is flammable. Take proper precautions (e.g. remove any sources of ignition). Remove source of contamination or move victim to fresh air. If breathing is stopped, trained personnel should begin artificial respiration (AR). Obtain medical attention immediately.
Skin contact	As quickly as possible, flush with lukewarm, gently flowing water for 5 minutes, or until the chemical is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). If irritation persists, repeat flushing. Obtain medical advice immediately.
Eye contact	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes, or until the chemical is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately.

Coomassie Electrophoresis Stain



MATERIAL SAFETY DATA SHEET (MSDS)

Ingestion Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. DO NOT INDUCE VOMITING. Have victim drink 240 to 300 mL (8 to 10 oz.) of water to dilute material in stomach. If vomiting occurs naturally, rinse mouth and repeat administration of water. Obtain medical advice immediately

Advice to Doctor Treat symptomatically. Note the nature of this product.

SECTION 5 FIRE FIGHTING MEASURES

There is a moderate risk of an explosion from this product if it is involved in a fire. Fire fighters should take care and appropriate precautions.

Flashpoint 29 °C

Flammable Limits Upper Value 36%, Lower Value 7.3%

Auto-ignition Temperature Data not available.

Extinguishing Media Foam is the preferred medium for large fires.

Special Fire Fighting Procedures If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and self contained breathing apparatus. All skin areas should be covered. Ensure that no spillage enters drains or watercourses.

Hazardous Combustion Products Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Oxides of phosphorus and other phosphorus compounds. Water.

Unusual Fire & Explosion Hazards Fire decomposition products from this product may form toxic and corrosive mixtures in confined spaces. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

Sensitivity to Mechanical Impact or Static Charge Data not available.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spillage can be taken up with absorbent material such as sand or vermiculite. Avoid using sawdust or other combustible material. Wear gloves and eye protection. After spills, wash area.

The container size is 500 mL, therefore a major spill is unlikely.

However, in the event of a major spill, prevent spillage from entering drains or watercourses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective chemically resistant clothing including facemask, face shield, gauntlets and self-contained breathing apparatus. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. After spills, wash area, preventing, run-off from entering drains. If a significant quantity of material enters drains, advise emergency services. Contaminated area may be neutralised by washing with weak or dilute alkali. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

SECTION 7 HANDLING AND STORAGE

Handling This material is an S6 scheduled poison and a Class 3 flammable liquid and must be stored, maintained and used in accordance with the relevant regulations. Protective gloves and glasses should be worn when using this product in the laboratory. Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Storage Keep container closed when not in use in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)
Methanol	262	328
Orthophosphoric acid	not set	not set
Ammonium sulfate	not set	not set

Engineering Controls Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Use only with adequate ventilation.

Personal Protection Protective gloves and glasses should be worn when using this product in the laboratory.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Specific Gravity	No specific data, approx. 0.95
Colour	Dark blue	Water Solubility	Completely soluble
Odour	Mild alcohol odour	pH	3.5 Mildly corrosive
Boiling Point	Initial B.P. approx. 65 °C	Volatility	Approx. 85% at 100 °C
Freezing Point	Not available	Odour Threshold	Not available
Vapour Pressure	Not available	Evaporation Rate	Not available
Vapour Density	Not available	Coefficient of Distribution	Not available

SECTION 10 STABILITY AND REACTIVITY

Stability This product is believed to be stable at normal temperatures and pressure.

Materials to avoid Strong oxidising agents.

Hazardous Decomposition Products None. Product is unlikely to spontaneously decompose.

Hazardous Polymerisation This product is unlikely to spontaneously polymerise.

Coomassie Electrophoresis Stain



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SECTION 11 TOXICOLOGICAL INFORMATION

Not available for the product, Gradipure – Electrophoresis Stain.

SECTION 12 ECOLOGICAL INFORMATION

Not available for the product, Gradipure – Electrophoresis Stain. No single ingredient (over 1%) recognised as an environmental pollutant. Care should still be taken to ensure the product does not enter the environment.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state and federal regulations. Acidic solution, neutralise before disposal if large volumes, otherwise dilute with large volumes of water.

SECTION 14 TRANSPORT INFORMATION

UN Dangerous Goods Class	Class 3 Flammable Liquids		
UN Sub Risk Class	Class 6.1 Toxic Substances		
UN Packaging Group	III	Hazchem Code	3WE
Proper Shipping Name	FLAMMABLE LIQUID, TOXIC, N.O.S.		
UN Number	1992		

SECTION 15 REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the Controlled Product Regulations (Canada) and found to be non-hazardous. Not classified as hazardous according to criteria of OSHA. Not classified as hazardous according to criteria of NOHSC. Not classified as dangerous goods according to the ADG Code.

SECTION 16 OTHER INFORMATION

Label Text	Please read all labels carefully before using this product.
Acronyms	ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail. CAS Number Chemical Abstracts Service Registry Number. IARC International Agency for Research on Cancer. NOHSC National Occupational Health and Safety Commission (Australia). OSHA Occupational Safety and Health Administration (U.S.A.). SUSDP Standard for the Uniform Scheduling of Drugs and Poisons (Australia). UN Number United Nations Number.
Preparation	This MSDS has been prepared according to international guidelines and is suitable for use in Canada, USA, Mexico, Japan, Europe, UK, Australia and other countries. This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. MSDS prepared by NuSep.

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