

Safety Data Sheet

Ampicillin/X-Gal Solution

CAROLINA[®]
www.carolina.com

Section 1

Product Description

Product Name: Ampicillin/X-Gal Solution
Recommended Use: Science education applications
Synonyms: None Known
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



Fatal if swallowed. May cause an allergic skin reaction. Toxic if inhaled. May damage fertility or the unborn child.

GHS Classification:

Skin Sensitisation Category 1, Reproductive Toxicity Category 1B, Acute Toxicity - Inhalation Vapor Category 3

Other Safety Precautions:

IF exposed or concerned: Get medical advice/attention.

Section 3

Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	74.25
N,N-Dimethylformamide	68-12-2	25
Ampicillin, Sodium Salt	69-52-3	0.75

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Section 5

Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Sodium Oxides, Sulfur Oxides, Nitrogen oxides

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Section 6

Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Isolate area. Keep unnecessary personnel away.

Methods for Clean-up

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container.

Section 7

Handling and Storage

Handling:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Do not ingest or take internally. Avoid contact with skin and eyes. Avoid creating and inhaling spray or mist.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep locked up and out of the reach of children.

Avoid direct sunlight and heat.

Suitable for any general chemical storage.

Storage Code:

Blue - Toxic. Store separately in a secured area.

Section 8

Protection Information

Chemical Name

N,N-Dimethylformamide

ACGIH

(TWA)

10 ppm TWA

(STEL)

N/A

OSHA PEL

(TWA)

10 ppm TWA; 30 mg/m³ TWA

(STEL)

N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Respirator Type(s):

Wear a NIOSH/MSHA-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Butyl rubber, Natural latex, Neoprene

Section 9

Physical Data

Formula: N/A

Molecular Weight: N/A

Appearance: Colorless

Odor: Moderate

Odor Threshold: No data available

pH: No data available

Melting Point: -61 C

Boiling Point: 100 C

Flash Point: 58 C

Flammable Limits in Air: N/A

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A

Specific Gravity: approx. 0.98

Solubility in Water: Soluble

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

Percent Volatile by Volume: 0%

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Section 10

Reactivity Data

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Temperatures above flash point in combination with sparks, open flames, or other sources of ignition.
Incompatible Materials:	Water-reactive materials, Strong oxidizing agents
Hazardous Decomposition Products:	Nitrogen oxides, Sulfur Oxides, Sodium Oxides, Carbon dioxide, Carbon monoxide
Hazardous Polymerization:	Will not occur

Section 11

Toxicity Data

Routes of Entry	Inhalation and skin contact.
Symptoms (Acute):	Liver disorders, , Impaired Kidney Function
Delayed Effects:	No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
N,N-Dimethylformamide	68-12-2	Oral LD50 Rabbit 5000 mg/kg	Dermal LD50 Rabbit 4720 mg/kg	Inhalation LC50 (4h) Rat = 9 - 15 MG/L
Ampicillin, Sodium Salt	69-52-3	Oral LD50 Rat > 5314 mg/kg Oral LD50 Mouse > 5314 mg/kg		

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available				

Chronic Effects:

Mutagenicity:	No evidence of a mutagenic effect.
Teratogenicity:	Evidence of a teratogenic effect (birth defect).
Sensitization:	Evidence of a sensitization effect.
Reproductive:	Evidence of negative reproductive effects.
Target Organ Effects:	
Acute:	See Section 2
Chronic:	Certain components or species of this product are considered potential carcinogens.

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Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
N,N-Dimethylformamide	68-12-2	96 HR LC50 PIMEPHALES PROMELAS 10410 MG/L [FLOW-THROUGH] 96 HR LC50 ONCORHYNCHUS MYKISS 9800 MG/L [FLOW-THROUGH] 96 HR LC50 LEPOMIS MACROCHIRUS 6300 MG/L 48 HR EC50 DAPHNIA MAGNA 6800 - 13900 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 8485 MG/L [SEMI-STATIC] 48 HR EC50 DAPHNIA MAGNA 7500 MG/L 96 HR EC50 DESMODESMUS SUBSPICATUS > 500 MG/L

Section 13

Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name: UN number: 2265 Class: 3 Packing group: III EMS-No: F-E, S-D Proper shipping name: N,N-DIMETHYLFORMAMIDE Marine pollutant: No	Air - IATA Proper Shipping Name: UN number: 2265 Class: 3 Packing group: III EMS-No: F-E, S-D Proper shipping name: N,N-DIMETHYLFORMAMIDE Marine pollutant: No
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Section 15

Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
N,N-Dimethylformamide	68-12-2	N,N-Dimethylformamide	No	100 lb final RQ; 45.4 kg final RQ	No	No

California Prop 65: No California Proposition 65 ingredients

Section 16

Additional Information

Safety Data Sheet

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health