

Safety Data Sheet

Maneval's Modified Stain

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Maneval's Modified Stain
Recommended Use: Science education applications
Synonyms: Maneval's Stain, Modified
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



Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. Suspected of causing genetic defects. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

GHS Classification:

Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Germ Cell Mutagenicity Category 2, Acute Toxicity - Inhalation Vapor Category 3, Hazardous to the aquatic environment - Acute Category 3, Hazardous to the aquatic environment - Chronic Category 3

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Acute Toxicity Dermal Contains 0 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains 7 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains 3 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	89.26
Acetic Acid	64-19-7	4.68
Phenol	108-95-2	3.21
Iron (III) Chloride, 6-Hydrate	10025-77-1	2.8
Acid Fuchsin	3244-88-0	0.05

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: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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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

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. Ventilate the contaminated area. Clean up spills immediately using Protective Equipment recommended in Section 8 at a minimum. 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.
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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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep container tightly closed in a cool, well-ventilated place.
Storage Code:	Green - general chemical storage

Section 8

Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Acetic Acid	10 ppm TWA	15 ppm STEL	10 ppm TWA; 25 mg/m3 TWA	N/A
Phenol	5 ppm TWA	N/A	5 ppm TWA; 19 mg/m3 TWA	N/A
Iron (III) Chloride, 6-Hydrate	1 mg/m3 TWA (as Fe)	N/A	N/A	N/A

Control Parameters

Engineering Measures:	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.
Personal Protective Equipment (PPE):	Lab coat, apron, eye wash, safety shower.
Respiratory Protection:	Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.
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:	No information available

Section 9

Physical Data

Formula: N/A	Vapor Pressure: No data available
Molecular Weight: No data available	Evaporation Rate (BuAc=1): No data available
Appearance: Purple Liquid	Vapor Density (Air=1): No data available
Odor: Mild Vinegar	Specific Gravity: No data available
Odor Threshold: No data available	Solubility in Water: Soluble

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pH: No data available
Melting Point: No data available
Boiling Point: No data available
Flash Point: No data available
Flammable Limits in Air: No data available

Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: No data available

Section 10

Reactivity Data

Reactivity: Not generally reactive under normal conditions.
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: No data available.
Incompatible Materials: Water-reactive materials, Acetic anhydride, Acetaldehydes, Caustics (bases), Oxidizing materials, Halogens, Carbonates, Mineral acids, Metals
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: Inhalation, Ingestion, and Skin contact.
Symptoms (Acute): Impaired Kidney Function, Respiratory Irritation, Lachrymation, Central Nervous System Disorders, Cardiovascular system, Respiratory disorders, Numbness, Allergies, Tachycardia, Hypoxemia (low blood oxygen), Metabolic Acidosis
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		
Acetic Acid	64-19-7			INHALATION LC50 MAMMAL 11.4 GM/M3 INHALATION LC50 Mouse 5620 ppm
Phenol	108-95-2	Oral LD50 Rat 512 mg/kg	Dermal LD50 Rabbit 630 mg/kg	INHALATION LC50 Rat 316 MG/M3
Iron (III) Chloride, 6-Hydrate	10025-77-1	Oral LD50 Rat 317 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	
Acid Fuchsin	3244-88-0			

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Acetic Acid	64-19-7	Not listed	Not listed	Not listed
Phenol	108-95-2	Not listed	Not listed	Not listed

Chronic Effects:

Mutagenicity: Evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

Acute: No information available, Kidneys, Central Nervous System, Cardiovascular system, Lungs, Skin, Blood
Chronic: Teeth, Kidneys, Liver, Blood

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: Biodegradation, Photodegradation, Dissolved into water
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

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Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Acetic Acid	64-19-7	Aquatic LC50 (96h) Fathead Minnow 79 MG/L Aquatic EC50 (24h) Daphnia 47 MG/L
Phenol	108-95-2	96 HR LC50 BRACHYDANIO RERIO 27.8 MG/L 96 HR LC50 LEPOMIS MACROCHIRUS 13.5 MG/L [STATIC] 96 HR LC50 ONCORHYNCHUS MYKISS 5 - 12 MG/L 96 HR LC50 PIMEPHALES PROMELAS 32 MG/L 48 HR EC50 DAPHNIA MAGNA 10.2 - 15.5 MG/L 96 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 46.42 MG/L
Iron (III) Chloride, 6-Hydrate	10025-77-1	Aquatic LC50 (96h) Fathead Minnow 21.84 MG/L Aquatic EC50 (48h) Daphnia 9.6 MG/L
Acid Fuchsin	3244-88-0	

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: Not regulated for transport by US DOT.

Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

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
Acetic Acid	64-19-7	No	5000 lb RQ	5000 lb final RQ; 2270 kg final RQ	No	No
Phenol	108-95-2	Phenol	1000 lb RQ	1000 lb final RQ; 454 kg final RQ	500 lb lower TPQ; 10000 lb upper TPQ	No
Iron (III) Chloride, 6-Hydrate	10025-77-1	No	No	No	No	No
Acid Fuchsin	3244-88-0	No	No	No	No	No

Section 16 Additional Information

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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

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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