

Print Date: 5/29/08 Revision Date: 5/29/2008 Version: 1

Material Safety Data Sheet Fast Green Stain Solution

Section 1 - Chemical Product and Company Identification

MSDS Name:

Fast Green Stain Solution

Catalog Numbers:

88003, 88024

Synonyms:

None Known.

Company Identification:

Richard Allan Scientific 4481 Campus Drive Kalamazoo, MI 49008

Company Phone Number:

800-522-7270

Emergency Phone Number:

800-424-9300

CHEMTREC Phone Number, US:

(800) 424-9300

CHEMTREC Phone Number, Europe:

(202) 483-7616

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent	EINECS/ ELINCS	Hazard Symbols	Risk Phrases
7732-18-5	Water	>99	231-791-2		
78491-02-8	Diazolidinyl urea	<1.0	278-928-2		
2353-45-9	Fast green fcf	<0.1	219-091-5		
64-19-7	Acetic acid	<0.1	200-580-7		

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: Green liquid

Caution! May cause eye, skin, and respiratory tract irritation. The toxicological

properties of this material have not been fully investigated.

Target Organs: No data found

Potential Health Effects



Print Date: 5/29/08 Revision Date: 5/29/2008 Version: 1

Material Safety Data Sheet Fast Green Stain Solution

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

Inhalation:

May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

Chronic:

No information found.

Section 4 - First Aid Measures

Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire.

Autoignition Temperature:

Not available

Explosion Limits:

Lower: Not available Upper: No

Upper: Not available

Flash Point:

Not available

NFPA Rating:

(estimated) Health: 1; Flammability: 0; Instability: 0



Print Date: 5/29/08 Revision Date: 5/29/2008 Version: 1

Material Safety Data Sheet Fast Green Stain Solution

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None listed	None listed	None listed
Diazolidinyl urea	None listed	None listed	None listed
Fast green fcf	None listed	None listed	None listed
Acetic acid	10 ppm TWA;15 ppm STEL	10 ppm TWA; 25 mg/m3 TWA 50 ppm	10 ppm TWA; 25 mg/m3 TWA;
		IDÍ H	

OSHA Vacated PELs

Acetic acid: 10 ppm TWA; 25 mg/m3 TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.



Print Date: 5/29/08 Revision Date: 5/29/2008 Version: 1

Material Safety Data Sheet Fast Green Stain Solution

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: Green

Odor: No information found

pH: No information found

Vapor Pressure: No information found
Vapor Density: No information found
Evaporation Rate: No information found

Evaporation Rate: No information found Viscosity: No information found

Boiling Point: No information found

Freezing/Melting Point: No information found Decomposition Temperature: No information found

Solubility in water: Soluble.

Specific Gravity/Density: No information found

Molecular Formula: Solution

Molecular Weight: No information found

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Excess heat

Incompatibilities with Other Materials

Strong oxidizing agents

Hazardous Decomposition Products

None

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000 CAS# 78491-02-8: YS2717000 CAS# 2353-45-9: BQ4425000 CAS# 64-19-7: AF1225000



Print Date: 5/29/08 Revision Date: 5/29/2008 Version: 1

Material Safety Data Sheet Fast Green Stain Solution

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 78491-02-8:

Oral, mouse: LD50 = 3573 mg/kg Oral, rat: LD50 = 2600 mg/kg Skin, rabbit: LD50 = >2 gm/kg.

CAS# 2353-45-9:

Oral, rat: LD50 = >2 gm/kg.

CAS# 64-19-7:

Draize test, rabbit, skin: 50 mg/24H Mild Inhalation, mouse: LC50 = 5620 ppm/1H

Oral, rat: LD50 = 3310 mg/kg Skin, rabbit: LD50 = 1060 uL/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. CAS# 78491-02-8: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. CAS# 2353-45-9: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. CAS# 64-19-7: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

No information found

Neurotoxicity:

No information found

Other:

The toxicological properties have not been fully investigated.

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P Series Wastes

None of the components are on this list.

RCRA U Series Wastes

None of the components are on this list.



Print Date: 5/29/08 Revision Date: 5/29/2008 Version: 1

Material Safety Data Sheet Fast Green Stain Solution

Section 14 - Transport Information

US DOT Canadian TDG

Proper Shipping Not regulated.

Not regulated.

Name:

(8)(9.2)

Hazard Class:

UN Number: Packing Group:

USA RQ: CAS# 64-19-7: 5000 lb final RQ; 2270 kg final RQ

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 7732-18-5 is listed on the TSCA Inventory. CAS# 78491-02-8 is listed on the TSCA Inventory. CAS# 2353-45-9 is listed on the TSCA Inventory. CAS# 64-19-7 is listed on the TSCA Inventory.

Health and Safety Reporting List

None of the components are on this list.

Chemical Test Rules

None of the components are on this list.

TSCA Section 12b

None of the components are on this list.

TSCA Significant New Use Rule (SNUR)

None of the components are on this list.

CERCLA Hazardous Substances and corresponding RQs

CAS# 64-19-7: 5000 lb final RQ; 2270 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the components are on this list.

SARA Hazard Categories

CAS# 2353-45-9: delayed. CAS# 64-19-7: immediate, delayed, fire.

SARA Section 313

None of the components are on this list.

Clean Air Act - Hazardous Air Pollutants (HAPs)

None of the components are on this list.

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

AVANTIK

ACC# 93626

Print Date: 5/29/08 Revision Date: 5/29/2008 Version: 1

Material Safety Data Sheet Fast Green Stain Solution

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

CAS# 64-19-7 is listed as a Hazardous Substance under the CWA.

Clean Water Act - Priority Pollutants

None of the components are on this list.

Clean Water Act - Toxic Pollutants

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

OSHA - Specifically Regulated Chemicals

None of the components are on this list.

US State

State Right to Know

Fast green fcf can be found on the following state Right-to-Know lists: California.

Acetic acid can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

None of the components are on this list.

California No Significant Risk Level

None of the components are on this list.

European/International Regulations

European Labelling in Accordance with EC Directives:

Hazard Symbols: None listed Risk Phrases: None listed

Safety Phrases: S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

No information found

United Kingdom Occupational Exposure Limits

No information found

United Kingdom Maximum Exposure Limits

No information found

Canadian DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 78491-02-8 is listed on Canada's DSL List.

CAS# 2353-45-9 is listed on Canada's DSL List.

CAS# 64-19-7 is listed on Canada's DSL List.

Canadian WHMIS Classifications

No information found

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.



Print Date: 5/29/08 Revision Date: 5/29/2008 Version: 1

Material Safety Data Sheet Fast Green Stain Solution

Canadian Ingredient Disclosure List

CAS# 64-19-7 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Other Information

Color information has been MSDS Creation Date: July 27, 2005 Revision Date: May 29, 2008

This MSDS is intended for review and guidance in the receipt, storage, handling, use and disposal of product purchased from us, and for no other purpose. Use this product only as directed and in accordance with applicable instructions and warnings provided with the product. Please consult your institution's policies regarding use of this product. If you have obtained this MSDS other than in connection with the supply of this product from us, this MSDS should be consulted for general information only, and should not be relied upon for any purpose. As with the use of all hazardous materials, you should in all instances follow the guidance of the MSDS provided or available with the specific product purchased.