

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 11/06/2014

Reviewed on 11/06/2014

* 1 Identification

· **Product identifier**

· **Trade name:** Trichrome Stain

· **Product number:**

Cat#	Description	SDL Prod ID
782	Trichrome Stain 250ml bottle each/pkg	00544
783	Trichrome Stain 250ml bottle x 6/pkg	00545

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Scientific Device Laboratory
411 Jarvis Avenue
Des Plaines, IL 60018
847-803-9495

· **Emergency telephone number:**

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

* 2 Hazard(s) identification

· **Classification of the substance or mixture**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2B H320 Causes eye irritation.

· **Label elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard statements**

Causes skin and eye irritation.

· **Precautionary statements**

Wear protective gloves.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous Components:**

64-19-7	Glacial Acetic Acid	☠ Flam. Liq. 3, H226; ☠ Skin Corr. 1A, H314
2353-45-9	Fast Green FCF	☠ Muta. 2, H341

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** In case of unconsciousness, place patient securely on side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
 Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
 As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

* 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
 Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
 Ensure adequate ventilation.
 Dispose of the collected material according to regulations.
- **Reference to other sections**
 See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**

 · **Components with occupational exposure limits:**

64-19-7 Glacial Acidic Acid

PEL	Long-term value: 25 mg/m ³ , 10 ppm
REL	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm
TLV	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 Select glove material based on penetration times, rates of diffusion and degradation.

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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- **Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

- **Eye protection:** Tightly sealed goggles

* 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquid

Color: Blue-green

- **Odor:** Acetic acid like

- **Odor threshold:** Not determined.

- **pH-value @ 20 °C (68 °F):** 2

- **Change in condition**

Melting point/Melting range: Not determined.

Boiling point/Boiling range: 100 °C (212 °F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**

Decomposition temperature: Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower: 0.0 Vol %

Upper: 0.0 Vol %

- **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)

- **Density:**

Relative density Not determined.

Vapour density Not determined.

Evaporation rate Not determined.

- **Solubility in / Miscibility with**

Water: Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

Dynamic: Not determined.

Kinematic: Not determined.

- **Solvent content:**

Organic solvents: 1.0 %

Water: 98.0 %

VOC content: 1.0 %

- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.

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- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
2353-45-9 Fast Green FCF		
Oral	LD50	>2000 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.

- **on the eye:**

- Irritating effect.

- Causes serious eye irritation.

- **Additional toxicological information:**

- The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

- Group 1 - Carcinogenic to humans

- Group 2A - Probably carcinogenic to humans

- Group 2B - Possibly carcinogenic to humans

- Group 3 - Not classifiable as to its carcinogenicity to humans

- Group 4 - Probably not carcinogenic to humans

2353-45-9	Fast Green FCF	3
5141-20-8	Light Green SF Yellowish	3

- **NTP (National Toxicology Program)**

- None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

- None of the ingredients are listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:** Not known to be hazardous to water.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

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* 13 Disposal considerations

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

* 14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

Section 355 (extremely hazardous substances):
None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.

TSCA (Toxic Substances Control Act):
64-19-7 Glacial Acetic Acid
2353-45-9 Fast Green FCF
5141-20-8 Light Green SF Yellowish
7732-18-5 water, distilled, conductivity or of similar purity

Proposition 65
<ul style="list-style-type: none"> · Chemicals known to cause cancer:
None of the ingredients are listed.
<ul style="list-style-type: none"> · Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.
<ul style="list-style-type: none"> · Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.
<ul style="list-style-type: none"> · Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

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 · **Carcinogenic categories**

 · **EPA (Environmental Protection Agency)**

None of the ingredients are listed.

 · **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients are listed.

 · **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

 · **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

 · **Hazard pictograms**


GHS07

 · **Signal word** Warning

 · **Hazard statements**

Causes skin and eye irritation.

 · **Precautionary statements**

Wear protective gloves.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

 · **National regulations:**

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

 · **State Right to Know**

64-19-7	Glacial Acetic Acid ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314
12501-23-4	Phosphotungstic Acid
41970-70-3	Chromotrope 2R ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335
2353-45-9	Fast Green FCF ⚠ Muta. 2, H341
5141-20-8	Light Green SF Yellowish
7732-18-5	water, distilled, conductivity or of similar purity
All ingredients are listed.	

 · **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and

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the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision** 11/06/2014 / -· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

Muta. 2: Germ cell mutagenicity, Hazard Category 2

· *** Data compared to the previous version altered.**SDS created by MSDS Authoring Services www.msdsauthoring.com (877) 204-9106