

## Safety Data Sheet (SDS)

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

Printing date 08/01/2016

Reviewed on 08/01/2016

### \* 1 Identification

• **Product identifier**

• **Trade name: AFB/Kinyoun Stain**

• **Product number:**

Cat# Description SDL Prod ID  
353 AFB/Kinyoun Stain Set 250ml bottle each/pkg 00160  
353-A AFB/Kinyoun Stain 250ml bottle x 3 of each/pkg 00161

• **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**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1B H350 May cause cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

• **Label elements**

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

• **Hazard pictograms**



GHS02



GHS05



GHS08

• **Signal word** Danger

• **Hazard-determining components of labeling:**

phenol  
Basic fuchsin  
Ethyl alcohol

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**Trade name: AFB/Kinyoun Stain**

### · **Hazard statements**

Highly flammable liquid and vapor.  
 Causes severe skin burns and eye damage.  
 Suspected of causing genetic defects.  
 May cause cancer.  
 May cause damage to organs through prolonged or repeated exposure.

### · **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Use explosion-proof electrical/ventilating/lighting/equipment.  
 Do not breathe dusts or mists.  
 Wear protective gloves / eye protection / face protection.  
 Ground/bond container and receiving equipment.  
 Keep container tightly closed.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Wash thoroughly after handling.  
 Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 Immediately call a poison center/doctor.  
 Specific treatment (see on this label).  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Wash contaminated clothing before reuse.  
 IF exposed or concerned: Get medical advice/attention.  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 Get medical advice/attention if you feel unwell.  
 In case of fire: Use for extinction: CO2, powder or water spray.  
 Store locked up.  
 Store in a well-ventilated place. Keep cool.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

## \* **3 Composition/information on ingredients**

### · **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

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· <b>Dangerous Components:</b>	
64-17-5	Ethyl alcohol ⚠ Flam. Liq. 2, H225; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320
108-95-2	phenol ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Muta. 2, H341; STOT RE 2, H373; ⚠ Skin Corr. 1B, H314
4197-24-4	Carbol Fuchsin ⚠ Muta. 2, H341; Carc. 1B, H350; STOT SE 2, H371; STOT RE 2, H373; ⚠ Skin Corr. 1B, H314; Eye Dam. 1, ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332

### 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **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 several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a 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:**  
CO<sub>2</sub>, 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**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.  
Dispose of the collected material according to regulations.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

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### 7 Handling and storage

- **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.  
 Open and handle receptacle with care.  
 Prevent formation of aerosols.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.  
 Protect from heat.  
 Protect against electrostatic charges.  
 Keep protective respiratory device available.

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.  
 Store in cool, dry conditions in well sealed receptacles.  
 Protect from heat and direct sunlight.

- **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:**

**64-17-5 Ethyl alcohol**

PEL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
TLV	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm

**108-95-2 phenol**

PEL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Skin
REL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Ceiling limit value: 60* mg/m <sup>3</sup> , 15.6* ppm *15-min; Skin
TLV	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Skin; BEI

- **Ingredients with biological limit values:**

**108-95-2 phenol**

BEI	250 mg/g creatinine urine end of shift Phenol with hydrolysis (background, nonspecific)
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- **Additional information:** The lists that were valid during the creation were used as basis.

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- **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.  
Store protective clothing separately.  
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.
- **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:** Clear
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/Melting range:** Not determined.
  - **Boiling point/Boiling range:** 78 °C (172 °F)
- **Flash point:** 17 °C (63 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 425 °C (797 °F)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- **Explosion limits:**
  - **Lower:** 0.0 Vol %

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- Upper:** 15.0 Vol %
- **Vapor pressure @ 20 °C (68 °F):** 59 hPa (44 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:** 22.4 %
  - Water:** 76.0 %
  - VOC content:** 22.4 %
  - Solids content:** 8.8 %
- **Other information** No further relevant information available.

### 10 Stability and reactivity

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

<b>108-95-2 phenol</b>		
Oral	LD50	317 mg/kg (rat)
Dermal	LD50	850 mg/kg (rabbit)
<b>569-61-9 Basic fuchsin</b>		
Oral	LD50	5000 mg/kg (mouse)

- **Primary irritant effect:**
  - **on the skin:** Strong caustic effect on skin and mucous membranes.
  - **on the eye:** Corrosive effect.
- **Additional toxicological information:**

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

  - Corrosive
  - Carcinogenic.

Swallowing will lead to a corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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- **Carcinogenic categories**

• <b>IARC (International Agency for Research on Cancer)</b>		
108-95-2	phenol	3
569-61-9	Basic fuchsin	2B
• <b>NTP (National Toxicology Program)</b>		
569-61-9	Basic fuchsin	R
• <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>		
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:**

Water hazard class 3 (Self-assessment): extremely hazardous for water  
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
 Must not reach bodies of water or drainage ditch undiluted or unneutralized.  
 Danger to drinking water if even extremely small quantities leak into the ground.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### \* 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **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, IMDG, IATA** UN1993

- **UN proper shipping name**

• **DOT** Flammable liquids, n.o.s. (Ethanol)  
 • **ADR** UN1993 Flammable liquids, n.o.s. (Ethanol (Ethylalcohol))  
 • **IMDG** FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYL ALCOHOL))  
 • **IATA** FLAMMABLE LIQUID, N.O.S. (ETHANOL)

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· **Transport hazard class(es)**

· **DOT**



· **Class** 3 Flammable liquids  
· **Label** 3

· **ADR**



· **Class** 3 (F1) Flammable liquids  
· **Label** 3

· **IMDG, IATA**



· **Class** 3 Flammable liquids  
· **Label** 3  
· **Packing group**  
· **DOT, ADR, IMDG, IATA** II  
· **Environmental hazards:**  
· **Marine pollutant:** No  
· **Special precautions for user** Warning: Flammable liquids  
· **Danger code (Kemler):** 33  
· **EMS Number:** F-E, S-E  
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.  
· **Transport/Additional information:**  
· **DOT**  
· **Quantity limitations** On passenger aircraft/rail: 5 L  
On cargo aircraft only: 60 L

· **ADR**

· **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

· **IMDG**

· **Limited quantities (LQ)** 1L  
· **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN1993, Flammable liquids, n.o.s. (Ethanol (Ethyl alcohol)), 3, II

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### \* 15 Regulatory information

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

- **Section 355 (extremely hazardous substances):**

108-95-2	phenol
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- **Section 313 (Specific toxic chemical listings):**

108-95-2	phenol
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- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

569-61-9	Basic fuchsin
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- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

64-17-5	Ethyl alcohol
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- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

108-95-2	phenol	D, I
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- **TLV (Threshold Limit Value established by ACGIH)**

64-17-5	Ethyl alcohol	A3
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108-95-2	phenol	A4
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- **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**



GHS02 GHS05 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

phenol

Basic fuchsin

- **Hazard statements**

Highly flammable liquid and vapor.

Causes severe skin burns and eye damage.

Suspected of causing genetic defects.

May cause cancer.

May cause damage to organs through prolonged or repeated exposure.

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**Trade name: AFB/Kinyoun Stain**
**Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Use explosion-proof electrical/ventilating/lighting/equipment.  
 Do not breathe dusts or mists.  
 Wear protective gloves / eye protection / face protection.  
 Ground/bond container and receiving equipment.  
 Keep container tightly closed.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Wash thoroughly after handling.  
 Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 Immediately call a poison center/doctor.  
 Specific treatment (see on this label).  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Wash contaminated clothing before reuse.  
 IF exposed or concerned: Get medical advice/attention.  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 Get medical advice/attention if you feel unwell.  
 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.  
 Store locked up.  
 Store in a well-ventilated place. Keep cool.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

**National regulations:**

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

**State Right to Know**

64-17-5	Ethyl alcohol  Flam. Liq. 2, H225;  Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320
108-95-2	phenol  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331;  Muta. 2, H341; STOT RE 2, H373;  Skin Corr. 1B, H314
569-61-9	Basic fuchsin  Carc. 1B, H350
7732-18-5	water, distilled, conductivity or of similar purity
All ingredients are listed.	

**Information about limitation of use:**

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

**Date of preparation / last revision** 10/23/2014 / 2

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• **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. 2: Flammable liquids, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

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

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

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

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

Muta. 2: Germ cell mutagenicity, Hazard Category 2

Carc. 1B: Carcinogenicity, Hazard Category 1B

STOT SE 2: Specific target organ toxicity - Single exposure, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

• **\* Data compared to the previous version altered.**

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