

• SAFETY DATA SHEET

Version 8.15
Revision Date 10/14/2025
Print Date 10/15/2025

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : Sudan Black B Staining System

Product Number : 380B

Brand : Sigma

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765

Fax : +1 800 325-5052

1.4 Emergency telephone number

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-
527-3887 CHEMTREC (International) 24
Hours/day; 7 Days/week

This is a summary SDS for a kit. For the full SDS for each of the components listed in section 16 please visit our website.

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SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards for the product as supplied

Flammable liquids : Category 2

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion	: Sub-category 1B
Serious eye damage	: Category 1
Respiratory sensitisation	: Category 1
Skin sensitisation	: Category 1
Germ cell mutagenicity	: Category 2
Reproductive toxicity	: Category 1B
Specific target organ toxicity - single exposure	: Category 2 (Eyes, Central nervous system)
Specific target organ toxicity - repeated exposure	: Category 2 (Nervous system, Kidney, Liver, Skin)
Specific target organ toxicity - repeated exposure (Oral)	: Category 2 (Kidney)
Short-term (acute) aquatic hazard	: Category 2
Long-term (chronic) aquatic hazard	: Category 3

Other hazards

Corrosive to the respiratory tract.

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H225 Highly flammable liquid and vapour.
H302 + H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341 Suspected of causing genetic defects.
H360 May damage fertility or the unborn child.
H371 May cause damage to organs (Eyes, Central nervous system).
H373 May cause damage to organs (Nervous system,

Kidney, Liver, Skin) through prolonged or repeated exposure.
H373 May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements : Corrosive to the respiratory tract.

Precautionary statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P260 Do not breathe mist or vapours.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P285 In case of inadequate ventilation wear respiratory protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 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.

P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Refer to component SDS

SECTION 4. FIRST AID MEASURES

Refer to component SDS

SECTION 5. FIREFIGHTING MEASURES

Refer to component SDS

SECTION 6. ACCIDENTAL RELEASE MEASURES

Refer to component SDS

SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition.
Take precautionary measures against static discharge.

Advice on safe handling : Work under hood. Do not inhale substance/mixture.
Avoid generation of vapours/aerosols.

Further information on storage conditions : Keep container tightly closed in a dry and well-ventilated place.
Keep away from heat and sources of ignition.
Keep locked up or in an area accessible only to qualified or authorised persons.

Storage class : 3, Flammable liquids

Recommended storage temperature : 36 - 46 °F / 2 - 8 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Refer to component SDS

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component SDS

SECTION 10. STABILITY AND REACTIVITY

Refer to component SDS

SECTION 11. TOXICOLOGICAL INFORMATION

Refer to component SDS

SECTION 12. ECOLOGICAL INFORMATION

Refer to component SDS

SECTION 13. DISPOSAL CONSIDERATIONS

Refer to component SDS

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 3316
Proper shipping name : Chemical kit
Class : 9
Packing group : II
Labels : Class 9 - Miscellaneous dangerous substances and articles
Packing instruction (cargo aircraft) : 960
Packing instruction (passenger aircraft) : 960

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IMDG-Code

UN number : UN 3316
Proper shipping name : CHEMICAL KIT

Class : 9
Packing group : II
Labels : 9
EmS Code : F-A, S-P
Marine pollutant : no

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations**49 CFR Road**

UN/ID/NA number : UN 3316
Proper shipping name : Chemical kits

Class : 9
Packing group : II
Labels : Class 9 - Miscellaneous dangerous substances and articles
ERG Code : 171
Marine pollutant : no

Poison Inhalation Hazard : No

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

SECTION 16. OTHER INFORMATION**Kit Components:**

Sudan black B staining reagent	Sigma	3801
Glutaraldehyde solution	Sigma-Aldrich	3802
HEMATOXYLIN SOLUTION GILL NO 3	Sigma	GHS3

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); EC_x - Concentration associated with x% response; EHS - Extremely Hazardous Substance; EL_x - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErC_x - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC₅₀ - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC₅₀ - Lethal Concentration to 50 % of a test population; LD₅₀ - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

US / EN

Kit Components:

Sudan black B staining reagent					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - 3801		Danger	<p>Highly flammable liquid and vapour.</p> <p>Harmful if swallowed.</p> <p>Causes severe skin burns and eye damage.</p> <p>Suspected of causing genetic defects.</p> <p>May cause damage to organs (Eyes, Central nervous system).</p> <p>May cause damage to organs (Nervous system, Kidney, Liver, Skin) through prolonged or repeated exposure.</p> <p>Harmful to aquatic life with long lasting effects.</p>	<p>Obtain special instructions before use. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. Store in a well-ventilated place. Keep cool. Dispose of contents/ container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store locked up. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Keep container tightly closed. IF INHALED:</p>	

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				<p>Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. Ground/bond container and receiving equipment. 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. Use explosion-proof electrical/ ventilating/ lighting equipment. IF exposed or concerned: Call a POISON CENTER/ doctor. Use only non-sparking tools. IF exposed or concerned: Get medical advice/ attention. Take precautionary measures against static discharge. Wash contaminated clothing before reuse. Do not breathe mist or vapours. In case of fire: Use dry sand, dry</p>	
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				<p>chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection.</p>	
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Glutaraldehyde solution					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 3802		Danger	<p>Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May damage fertility or the unborn child. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.</p>	<p>Obtain special instructions before use. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/ container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store locked up. Avoid breathing</p>	

				<p>mist or vapours. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash skin thoroughly after handling. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. Do not eat, drink or smoke when using this product. 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. Use only outdoors or in a well-ventilated area. IF exposed or concerned: Get medical advice/ attention. Contaminated work clothing must not be allowed out of the workplace. If skin irritation or rash occurs: Get medical</p>	
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				<p>advice/ attention. Avoid release to the environment. If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. Wear protective gloves/ protective clothing/ eye protection/ face protection. Wash contaminated clothing before reuse. In case of inadequate ventilation wear respiratory protection.</p>	
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HEMATOXYLIN SOLUTION GILL NO 3

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - GHS3		Danger	<p>Harmful if swallowed. Causes serious eye damage. May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.</p>	<p>Do not breathe mist or vapours. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. Dispose of contents/ container to an approved waste disposal plant. Wash skin thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue</p>	

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				rinsing. Immediately call a POISON CENTER/ doctor. Do not eat, drink or smoke when using this product. Get medical advice/ attention if you feel unwell. Wear eye protection/ face protection.	
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