Safety Data Sheet
Wright-Giemsa Stain

Section 1 - Chemical Product and Company Identification

SDS Name: Wright-Giemsa Stain
Catalog Numbers: SO-243, B-149-1
Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923
For information, call: 978-739-4883
Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H225-Flammable liquids: 2
H301-Acute toxicity, oral: 3
H311-Acute toxicity, dermal: 3
H315-Skin corrosion/irritation: 2
H319-Serious eye damage/eye irritation: 2A
H331-Acute toxicity, inhalation: 3
H360-Reproductive toxicity: 1B
H370-Specific target organ toxicity, single exposure: 1
H372-Specific target organ toxicity, repeated exposure: 1

Pictograms or Hazard Symbols and Hazard Statement(s):

Signal Word: Danger

Hazard Statements:

H225-Highly flammable liquid and vapour
H301-Toxic if swallowed
H311-Toxic in contact with skin
H315-Causes skin irritation
H319-Causes serious eye irritation

H331-Toxic if inhaled
H360-May damage fertility or the unborn child
H370-Causes damage to organs (target organs: central nervous system and optic nerve)
H372-Causes damage to organs through prolonged or repeated exposure (target organs: kidney, liver, spleen, and blood)

Precautionary Statements:

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 dust/fume/gas/mist/vapours/spray.
P261-Avoid breathing dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P270-Do not eat, drink, or smoke when using this product.
P271-Use only outdoors or in a well-ventilated area.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310-If swallowed: Immediately call a Poison Center/doctor.
P302+P352-If on skin: Wash with plenty of soap and water.
P303+P361+P353-If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311-If exposed or concerned: Call a Poison Center/doctor.
P308+P313-If exposed or concerned: Get medical advice/attention.
P311-Call a Poison Center/doctor.
P312-Call a Poison Center/doctor if you feel unwell.
P314-Get medical advice/attention if you feel unwell.
P330-Rinse mouth.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P337+P313-If eye irritation persists: Get medical advice/attention.
P361+P364-Take off immediately all contaminated clothing and wash it before reuse.
P362+P364-Take off contaminated clothing and wash it before reuse.
P370+P378-In case of fire: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam to extinguish.
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.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
68988-92-1	Wright Stain	0.3 w/v
51811-82-6	Giemsa Stain	0.03 w/v
56-81-5	Glycerin	3.0 v/v
67-56-1	Methyl Alcohol	Balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek medical attention.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash clothing/shoes before reuse.

Oral Exposure: If swallowed, seek immediate medical advice. Do not induce vomiting unless directed by a physician.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Immediate medical attention is required.

Section 5 - Fire Fighting Measures

General Information: Flammable liquid and vapor. Risk of ignition. Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Extinguishing Media: For small fires use alcohol-resistant foam, dry chemical, or carbon dioxide. For large fires use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Do NOT use water jet.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, metal oxide/oxides, hydrogen chloride gas, hydrogen bromide gas, formaldehyde, irritating and toxic fumes and gases.

Flash Point: Not available
Autoignition Temperature: Not available
Explosion Limits, Lower: Not available

Upper: Not available
NFPA Rating: (estimated) Health: 1; Flammability: 3; Instability: 0

Note: Keep away from heat, sparks, or flames. Sensitive to static discharge.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):
Wear personal protective equipment and NIOSH approved respirator. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Keep away from heat. Eliminate all sources of ignition. Take precautionary measures against static discharges.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Use with adequate ventilation. Store capped at room temperature in a dry and well-ventilated place. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use under a chemical fume hood. Do not ingest. Keep away from direct sunlight, moisture, open flames, hot surfaces, and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges. Protect from heat. Keep away from incompatible materials. Vapors heavier than air may travel considerable distance and ignite or explode.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
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 a respirator's use.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Wright Stain CAS#68988-92-1	Not listed	Not listed	Not listed
Giemsa Stain CAS#51811-82-6	Not listed	Not listed	Not listed
Glycerin CAS#56-1-5	Not listed	Not listed	5 mg/m3 TWA 15 mg/m3 TWA
Methyl Alcohol CAS#67-56-1	200 ppm TWA 250 ppm Skin STEL	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL 6000 ppm IDLH	200 ppm TWA 260 mg/m3 TWA

OSHA Vacated PELs: Glycerin: 5 mg/m3 TWA; 10 mg/m3 TWA
Methyl Alcohol: 200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 Skin STEL

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Dark blue-purple
Odor: Methanol-like
Vapor Pressure: Not available
Odor Threshold: Not available
Vapor Density: Not available
pH: Not available
Relative Density: Not available
Melting point/freezing point: Not available
Solubility: Miscible in water
Boiling Point: Not available
Flash Point: Not available
Evaporation Rate: Not available
Flammability (solid, gas): Not applicable
Partition coefficient: n-octanol/water: Not available
Autoignition Temperature: Not available
Decomposition Temperature: Not available
Viscosity: Not available
Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Note: Vapors may form explosive mixtures with air.
Conditions to Avoid: Incompatible materials, ignition sources, excess heat, and hot surfaces. Do not allow vapors to accumulate.
Incompatibilities with Other Materials: Oxidizing agents, reducing agents, metals, acids (including sulfuric acid, nitric acid, perchloric acid, permanganic acid), alkali metals,

chloroform, chlorates, nitrates, perchlorates, strong alkalies, dichromates, acid chlorides, acid anhydrides, acid halides, strong bases, peroxides (including hydrogen peroxide), alkaline earth metals, sodium hypochlorite, calcium hypochlorite, oxyhalogenic acid salts, chromium(VI) oxide, halogen oxides, nitrogen oxides, hydrides, halogens, tetrachloromethane, phosphorous oxides, various plastics, rubber, and various coatings.
Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, metal oxide/oxides, hydrogen chloride gas, hydrogen bromide gas, formaldehyde, irritating and toxic fumes and gases.

Note: May react with metals to produce dangerous Hydrogen gas.

Section 11 - Toxicological Information

CAS#68988-92-1 Wright Stain:
LD50 Oral: Not available
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Wright Stain CAS#68988-92-1 is not listed by NTP, ACGIH, OSHA, or California Prop. 65. Wright Stain is listed by IARC (Group 3, Not Classifiable as to its Carcinogenicity to Humans).

CAS#51811-82-6 Giemsa Stain:
LD50 Oral: >5000 mg/kg (calculation method)
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Giemsa Stain CAS#51811-82-6 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#56-81-5 Glycerin: RTECS#: MA8050000
LD50 Oral: 12600 mg/kg (rat)
LD50 Dermal: >10 g/kg (rabbit)
LC50 Inhalation: >2.75 mg/L 4h mist (rat)

Carcinogenicity: Glycerin CAS#56-81-5 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#67-56-1 Methyl Alcohol: RTECS#: PC1400000
LD50 Oral: 100.1 mg/kg (expert judgement)
LD50 Dermal: 300.1 mg/kg (expert judgement)
LC50 Inhalation: 3.1 mg/L 4h vapor (expert judgement)
Investigated as a mutagen, reproductive effecter.

Draize test, rabbit, eye: 100 mg/24h Moderate Irritant.
Draize test, rabbit, skin: 20 mg/24h Moderate Irritant.

Carcinogenicity: Methyl Alcohol CAS#67-56-1 is not listed by IARC, NTP, ACGIH, or OSHA. Methyl Alcohol is listed by California Prop. 65 as a developmental carcinogen.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.
Teratogenicity: Not available
Reproductive Effects: Experiments have shown fetotoxicity, specific developmental abnormalities, and other adverse reproductive effects (Methanol).
Developmental Effects: Not available.
Neurotoxicity: Not available.
Mutagenicity: Not available.
Specific Target Organ Toxicity, Single Exposure: Central nervous system and optic nerve.
Specific Target Organ Toxicity, Repeated Exposure: Kidney, liver, spleen, and blood.

Symptoms associated with overexposure: Toxic if inhaled. Toxic if swallowed. Toxic in contact with skin. Exposure causes damage to organs (including CNS, optic nerve, kidney, liver, spleen, blood). Causes serous eye irritation which may include pain, watering, redness, and blurred vision. May cause eye lesions and blindness. Once absorbed into the body, it is very slowly eliminated. A person may get better but then worse again up to 30 hours later. Overexposure may cause headache, dizziness, tiredness, nausea, vomiting, abdominal pain, coughing, respiratory tract irritation, fatigue, stomach irregularities, blindness, coma, and death. Skin contact may cause irritation, redness, dryness, and cracking. Skin absorption may occur. Ingestion can intoxicate and cause blindness. Exposure may damage fertility or the unborn child.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains.

CAS#56-81-5 Glycerin:
LC50, freshwater fish: 54000 mg/L 96h static (oncorhynchus mykiss)(rainbow trout)

CAS#67-56-1 Methyl Alcohol:
LC50, freshwater fish: 15400 mg/L 96h flow-through (lepomis macrochirus)(bluegill)
LC50, freshwater fish: 19000 mg/L 96h (oncorhynchus mykiss)(rainbow trout)
EC50, water flea: 18260 mg/L 96h semi-static (daphnia magna)
ErC50, algae: 22000 mg/L 96h static (pseudokirchneriella subcapitata)(green algae)
IC50, bacteria: >1000 mg/L 3h (activated sludge)

Persistence and degradability: Not available.
Bio-accumulative potential: Not available.
Mobility: Will likely be mobile in the environment due to its volatility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

DOT
Proper shipping name: Methanol
UN1230
PG II
Hazard class 3 (flammable)

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 2/2/12
Revision #1: 12/2/14 RC
Revision #2: 4-2-19
Revision #3: 8-14-19
Revision #4: 12-10-21
Revision #5: 9-21-23

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