Safety Data Sheet Giemsa Thick Film Solution

Section 1 - Chemical Product and Company Identification

SDS Name: Giemsa Thick Film Solution **Catalog Numbers:** SO-146, B-154-1

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

H316-Skin corrosion/irritation: 3 H360-Reproductive toxicity: 1B

H371-Specific target organ toxicity, single exposure: 2 H373-Specific target organ toxicity, repeated exposure: 2

Pictograms or Hazard Symbols and Hazard Statement(s):



Signal Word: Danger

Hazard Statements:

H316-Causes mild skin irritation

H360-May damage fertility or the unborn child

H371-May cause damage to organs (target organs: central nervous system and optic nerve)

H373-May cause 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.

P260-Do not breathe dust/fume/gas/mist/vapours/spray.

P264-Wash thoroughly after handling.

P270-Do not eat, drink, or smoke when using this product.

P280-Wear protective gloves/protective clothing/eye protection/face protection.

P308+P311-If exposed or concerned: Call a Poison Center/doctor.

P308+P313-If exposed or concerned: Get medical advice/attention.

P314-Get medical advice/attention if you feel unwell.

P332+P313-If skin irritation occurs: Get medical advice/attention.

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
51811-82-6	Giemsa Stain	0.02 w/v
56-81-5	Glycerin	1.5 v/v
67-56-1	Methyl Alcohol	1.5 v/v
7778-77-0	Potassium Phosphate Monobasic	0.01 w/v
7558-79-4	Sodium Phosphate Dibasic Anhydrous	0.02 w/v
89-83-8	Thymol	Trace
7732-18-5	Water	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. Seek medical attention.

Oral Exposure: If swallowed, seek immediate medical advice.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

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 gases may be generated through dermal decomposition or combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, phosphorus oxides, hydrogen chloride gas, hydrogen bromide gas, formaldehyde, phosphorus trihydride (phosphine), potassium oxides, 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: 2; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. 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. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Store in a cool, dry, and well-ventilated area. Keep container tightly closed. Keep away from incompatible materials.

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
Giemsa Stain CAS#51811-82-6	Not listed	Not listed	Not listed
Glycerin CAS#56-81-5	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
Potassium Phosphate Monobasic CAS#7778-77-0	Not listed	Not listed	Not listed
Sodium Phosphate Dibasic Anhydrous CAS#7558-79-4	Not listed	Not listed	Not listed
Thymol CAS#89-83-8	Not listed	Not listed	Not listed

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 Odor: Not available

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: Soluble in water Boiling Point: Not available Flash Point: Not available Evaporation Rate: Not available

Flammability (solid, gas): Not available

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.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, and hot

surfaces.

Incompatibilities with Other Materials: Oxidizing agents, metals, acids (including sulfuric acid, nitric acid, perchloric acid, permanganic acid), strong bases, dichromates, alkali metals, chloroform, chlorates, nitrates, perchlorates, acid anhydrides, acid halides, strong bases, peroxides (including hydrogen peroxide), alkaline earth metals, reducing agents, sodium hypochlorite, calcium hypochlorite, oxyhalogenic acid salts, chromium(VI) oxide, halogen oxides, nitrogen oxides, hydrides, halogens, tetrachloromethane, phosphorous oxides, various plastics, rubber, various coatings.

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, phosphorus oxides, hydrogen chloride gas, hydrogen bromide gas, formaldehyde, phosphorus trihydride (phosphine), potassium oxides, irritating and toxic fumes and gases.

Section 11 - Toxicological Information

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.

CAS#7778-77-0 Potassium Phosphate Monobasic: RTECS#: TC6615500

LD50 Oral: 3200 mg/kg (rat)

LD50 Dermal: >4640 mg/kg (rabbit) LC50 Inhalation: >0.83 mg/L 4h (rat)

Carcinogenicity: Potassium Phosphate Monobasic CAS#7778-77-0 is not listed by IARC,

NTP, ACGIH, OSHA, or California Prop. 65.

CAS#7558-79-4 Sodium Phosphate Dibasic Anhydrous: RTECS#: WC4500000

LD50 Oral: >2000 mg/kg (rat) LD50 Dermal: >2000 mg/kg (rat) LC50 Inhalation: >0.83 mg/L 4h (rat)

Carcinogenicity: Sodium Phosphate Dibasic CAS#7558-79-4 is not listed by IARC, NTP,

ACGIH, OSHA, or California Prop. 65.

CAS#89-83-8 Thymol: RTECS#: XP2275000

LD50 Oral: 980 mg/kg (rat) LD50 Dermal: >2000 mg/kg (rat) LC50 Inhalation: Not available

Carcinogenicity: Thymol CAS#89-83-8 is not listed by IARC, NTP, ACGIH, OSHA, or

California Prop. 65.

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, optic nerve. **Specific Target Organ Toxicity, Repeated Exposure:** Kidney, liver, spleen, and blood.

Symptoms associated with exposure: Skin contact may cause irritation, redness, dryness, and cracking. 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)

CAS#7778-77-0 Potassium Phosphate Monobasic:

LC50, freshwater fish: >100 mg/L 96h semi-static (oncorhynchus mykiss)(rainbow trout)

EC50, water flea: >100 mg/L 48h static (daphnia magna)

EC50, bacteria: >1000 mg/L 3h static (activated sludge)

ErC50, algae: >100 mg/L 72h static (desmodesmus subspicatus)(green algae)

CAS#7558-79-4 Sodium Phosphate Dibasic Anhydrous:

LC50, freshwater fish: >100 mg/L 96h semi-static (oncorhynchus mykiss)(rainbow trout)

EC50, water flea: >100 mg/L 48h static (daphnia magna)

EC50, bacteria: >1000 mg/L 3h static (activated sludge)

ErC50, algae: >100 mg/L 72h static (desmodesmus subspicatus)(green algae)

CAS#89-83-8 Thymol:

LC50, freshwater fish: 3.2-4.2 mg/L 96h (pimephales promelas)(fathead minnow)

EC50, water flea: 1.7-3.2 mg/L 96h

EC50, algae: 14 mg/L 72h (pseudokirchneriella subcapitata)(green algae)

Persistence and degradability: Not available. **Bio-accumulative potential:** Not available.

Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

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

Section 14 – Transport Information

DOT

Non-Regulated

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:** 11/12/14 YM **Revision #2:** 11-30-21 **Revision #3:** 9-22-23

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