



Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name	Wright's Stain Pack	Product Code	65043
Manufacturer	EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.	Effective Date	8/11/2005
		Print Date	10/5/2005

For More Information Call

856-423-6300 Technical Service
Monday-Friday: 8:00 AM - 5:00 PM

In Case of Emergency Call

800-424-9300 CHEMTREC (USA)
613-996-6666 CANUTEC (Canada)
24 Hours/Day: 7 Days/Week

Synonym	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	None. None. None.
Material Uses	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Laboratory Reagent Laboratory Reagent Laboratory Reagent
Chemical Family	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Dye Solution Solution. Solution.

Section 2. Composition and Information on Ingredients

Product name / Reagent.	Component ; CAS # ; % by Weight
0.17% Wright Stain in methanol	Methanol; 67-56-1; 99.99% Wright Stain ; 68988-92-1; 0.9%
Inorganic buffer pH 6.7, Surfactant preservative	Water; 7732-18-5; 98.98% Thymol; 89-83-8; 0.9% Triton® X-100 ® Trademark of the Union Carbide / Dow Chemical Company ; 9002-93-1; 0.09% Sodium Phosphate, Dibasic ; 7558-79-4; 0.9% Potassium Phosphate, Monobasic; 7778-77-0; 0.9%
10% Buffer Methanol	Water; 7732-18-5; 87.87% Marlipal MG; 9002-92-0; 0.9% Sodium Phosphate, Dibasic ; 7558-79-4; 0.9% Methanol; 67-56-1; 10% Potassium Phosphate, Monobasic; 7778-77-0; 0.9%

Section 3. Hazards Identification

Physical State and Appearance	0.17% Wright Stain in methanol	Liquid.
	Inorganic buffer pH 6.7, surfactant preservative	Liquid.
	10% Buffer Methanol	Liquid.
Emergency Overview	0.17% Wright Stain in methanol	MAY BE FATAL IF INHALED OR SWALLOWED. HARMFUL IF ABSORBED THROUGH SKIN. CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA. FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. MAY CAUSE EYE IRRITATION.
	Inorganic buffer pH 6.7, surfactant preservative	CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA. MAY CAUSE EYE IRRITATION.
	10% Buffer Methanol	MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA. FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE EYE AND SKIN IRRITATION.
	0.17% Wright Stain in methanol	California prop. 65: Not listed.
	Inorganic buffer pH 6.7, surfactant preservative	California prop. 65: Not listed.
	10% Buffer Methanol	California prop. 65: Not listed.
Routes of Entry	0.17% Wright Stain in methanol	Dermal contact. Eye contact. Inhalation. Ingestion.
	Inorganic buffer pH 6.7, surfactant preservative	Eye contact. Inhalation. Ingestion.
	10% Buffer Methanol	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
Potential Acute Health Effects		
<i>Eyes</i>	0.17% Wright Stain in methanol	May be hazardous in case of eye contact (irritant).
	Inorganic buffer pH 6.7, surfactant preservative	No known effect on eye contact, rinse with water for a few minutes.
	10% Buffer Methanol	May be hazardous in case of eye contact (irritant).

<i>Skin</i>	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Hazardous in case of skin contact (permeator). No known effect on skin contact, rinse with water for a few minutes. May be hazardous in case of skin contact (permeator, irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
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<i>Inhalation</i>	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Extremely hazardous in case of inhalation. May be fatal if inhaled. No known acute effects of this product resulting from inhalation. Hazardous in case of inhalation.
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<i>Ingestion</i>	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Extremely hazardous in case of ingestion. May be fatal if swallowed. No known acute effects of this product resulting from ingestion. Extremely hazardous in case of ingestion. May be fatal if swallowed.
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Potential Chronic Health Effects

<i>Carcinogenic Effects</i>	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	This material is not known to cause cancer in animals or humans. This material is not known to cause cancer in animals or humans. This material is not known to cause cancer in animals or humans.
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Additional information See Toxicological Information (section 11)

Medical Conditions Aggravated by Overexposure:	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. Repeated or prolonged exposure is not known to aggravate medical condition. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
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Section 4. First Aid Measures

Eye Contact	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention. Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention. Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
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Skin Contact	0.17% Wright Stain in methanol	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
	Inorganic buffer pH 6.7, surfactant preservative	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
	10% Buffer Methanol	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	0.17% Wright Stain in methanol	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
	Inorganic buffer pH 6.7, surfactant preservative	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
	10% Buffer Methanol	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	0.17% Wright Stain in methanol	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
	Inorganic buffer pH 6.7, surfactant preservative	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
	10% Buffer Methanol	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flammability of the Product	0.17% Wright Stain in methanol	Product will burn.
	Inorganic buffer pH 6.7, surfactant preservative	Non-flammable.
	10% Buffer Methanol	Product will burn.
Auto-ignition Temperature	0.17% Wright Stain in methanol	The lowest known value is 464.05°C (867.3°F) (METHANOL).
	Inorganic buffer pH 6.7, surfactant preservative	Not applicable.
	10% Buffer Methanol	The lowest known value is 464.05°C (867.3°F) (METHANOL).

Flash Points	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Closed cup: 11.111°C (52°F). Not applicable. Closed cup: 11.111°C (52°F).
Flammable Limits	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	LOWER: 6.7% UPPER: 36.5% Not applicable. The greatest known range is LOWER: 6% UPPER: 36.5% (METHANOL)
Products of Combustion	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	These products are carbon oxides (CO, CO ₂). Not applicable. These products are carbon oxides (CO, CO ₂).
Fire Hazards in Presence of Various Substances	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Highly flammable in presence of open flames, sparks and static discharge, of shocks, of heat, of oxidizing materials. Not applicable. Highly flammable in presence of open flames, sparks and static discharge, of shocks, of heat. Flammable in presence of oxidizing materials.
Explosion Hazards in Presence of Various Substances	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Risks of explosion of the product in presence of static discharge: Highly flammable in presence of open flames, sparks and static discharge. Highly explosive in presence of open flames, sparks and static discharge. Risks of explosion of the product in presence of mechanical impact: Highly flammable in presence of shocks. Highly explosive in presence of shocks. Risks of explosion of the product in presence of static discharge: No. Risks of explosion of the product in presence of mechanical impact: No. Risks of explosion of the product in presence of static discharge: Highly flammable in presence of open flames, sparks and static discharge. Explosive in presence of open flames, sparks and static discharge. Risks of explosion of the product in presence of mechanical impact: Highly flammable in presence of shocks. Explosive in presence of shocks.

Fire Fighting Media and Instructions

0.17% Wright Stain in methanol

SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Not applicable.

Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Protective Clothing (Fire)

0.17% Wright Stain in methanol

Be sure to use an approved/certified respirator or equivalent.

Inorganic buffer pH 6.7, surfactant preservative

Not applicable.

10% Buffer Methanol

Be sure to use an approved/certified respirator or equivalent.

Special Remarks on Fire Hazards

0.17% Wright Stain in methanol

Vapor may travel considerable distance to source of ignition and flash back.

Inorganic buffer pH 6.7, surfactant preservative

Not available.

10% Buffer Methanol

Vapor may travel considerable distance to source of ignition and flash back.

Special Remarks on Explosion Hazards

0.17% Wright Stain in methanol

Decomposition products thermal decomposition may release hazardous gases.

Inorganic buffer pH 6.7, surfactant preservative

Not available.

10% Buffer Methanol

Not available.

Section 6. Accidental Release Measures

Small Spill and Leak

0.17% Wright Stain in methanol

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Inorganic buffer pH 6.7, surfactant preservative

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

10% Buffer Methanol

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill and Leak

0.17% Wright Stain in methanol

Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Inorganic buffer pH 6.7, surfactant preservative

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary

10% Buffer Methanol system.
 Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Spill Kit Information

0.17% Wright Stain in methanol The following EMD Chemicals Inc. SpillSolv (TM) absorbent is recommended for this product:
 SX1330 Solvent Treatment Kit

Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol No specific spill kit required for this product.

The following EMD Chemicals Inc. SpillSolv (TM) absorbent is recommended for this product:
 SX1330 Solvent Treatment Kit

Section 7. Handling and Storage

Handling

0.17% Wright Stain in methanol Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol Avoid contact with eyes. Wash thoroughly after handling.

Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

Storage

0.17% Wright Stain in methanol Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol Keep container tightly closed. Keep container in a cool, well-ventilated area.

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8. Exposure Controls/Personal Protection

Engineering Controls		
0.17% Wright Stain in methanol		Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Inorganic buffer pH 6.7, surfactant preservative		Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.
10% Buffer Methanol		Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

<i>Eyes</i>	0.17% Wright Stain in methanol	Splash goggles.
	Inorganic buffer pH 6.7, surfactant preservative	Splash goggles.
	10% Buffer Methanol	Splash goggles.
<i>Body</i>	0.17% Wright Stain in methanol	Lab coat.
	Inorganic buffer pH 6.7, surfactant preservative	Lab coat.
	10% Buffer Methanol	Lab coat.
<i>Respiratory</i>	0.17% Wright Stain in methanol	Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
	Inorganic buffer pH 6.7, surfactant preservative	Not applicable.
	10% Buffer Methanol	Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
<i>Hands</i>	0.17% Wright Stain in methanol	Gloves.
	Inorganic buffer pH 6.7, surfactant preservative	Not applicable.
	10% Buffer Methanol	Gloves.
<i>Feet</i>	0.17% Wright Stain in methanol	Not applicable.
	Inorganic buffer pH 6.7, surfactant preservative	Not applicable.
	10% Buffer Methanol	Not applicable.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill

0.17% Wright Stain in methanol	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Inorganic buffer pH 6.7, surfactant preservative	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
10% Buffer Methanol	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name

Exposure Limits

METHANOL

ACGIH (United States, 1994). Skin
TWA: 262 mg/m³
STEL: 328 mg/m³
OSHA (United States, 1989). Skin
TWA: 260 mg/m³
STEL: 325 mg/m³
ACGIH (United States, 1994). Skin
STEL: 328 mg/m³
STEL: 250 ppm
TWA: 262 mg/m³
TWA: 200 ppm
NIOSH REL (United States, 1994). Skin
STEL: 325 mg/m³
STEL: 250 ppm
TWA: 260 mg/m³ Period: 10 hour(s).
TWA: 200 ppm Period: 10 hour(s).
OSHA Final Rule (United States, 1989). Skin
STEL: 325 mg/m³
STEL: 250 ppm
TWA: 260 mg/m³
TWA: 200 ppm

WRIGHT STAIN

Not available.

Water

Not available.

THYMOL

Not available.

Triton X-100

Not available.

Sodium Phosphate, Dibasic, Anhydrous

Not available.

Potassium Phosphate

Not available.

Brij®35

Not available.

Section 9. Physical and Chemical Properties

Odor

0.17% Wright Stain in methanol	Alcohol like.
Inorganic buffer pH 6.7, surfactant preservative	Odorless.
10% Buffer Methanol	Alcohol like. (Slight.)

Color

0.17% Wright Stain in methanol	Purple.
Inorganic buffer pH 6.7, surfactant preservative	Clear.
10% Buffer Methanol	Clear.

Physical State and Appearance	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Liquid. Liquid. Liquid.
Molecular Weight	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Not applicable. Not applicable. Not applicable.
Molecular Formula	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Not applicable. Not applicable. Not applicable.
pH	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Not available. Not available. Not available.
Boiling/Condensation Point	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	64.5°C (148.1°F) The lowest known value is 99.9°C (211.8°F) (Water). The lowest known value is 64.55°C (148.2°F) (METHANOL). Weighted average: 96.29°C (205.3°F)
Melting/Freezing Point	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	-98°C (-144.4°F) May start to solidify at -0.1°C (31.8°F) based on data for: Water. May start to solidify at -0.1°C (31.8°F) based on data for: Water. Weighted average: -10.07°C (13.9°F)
Critical Temperature	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Not available. Not available. Not available.
Specific Gravity	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	0.791 (Water = 1) Not available. The only known value is 0.792 (Water = 1) (METHANOL).
Vapor Pressure	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	12.9 kPa (97 mmHg) (@ 20°C) Not available. The highest known value is 12.9 kPa (97 mmHg) (@ 20°C) (METHANOL).

Vapor Density	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	1.1 (Air = 1) Not available. The highest known value is 1.11 (Air = 1) (METHANOL).
Volatility	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	>99.9% (v/v). Not available. 99.9% (v/v). (METHANOL.)
Odor Threshold	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	The lowest known value is 100 ppm (METHANOL) Not available. The lowest known value is 100 ppm (METHANOL)
Evaporation Rate	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, Surfactant preservative 10% Buffer Methanol	>1 0.36 (Water) compared to (n-Butyl Acetate =1) 5.91 (Methanol) compared to (n-Butyl Acetate =1)
VOC	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	101 (%) Not available. 12 (%)
Viscosity	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Not available. Not available. Not available.
LogK_{ow}	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Not available. Not available. Not available.
Ionicity (in Water)	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Not available. Not available. Not available.
Solubility	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Soluble in water. Easily soluble in water. Soluble in water.

Physical Chemical Comments	0.17% Wright Stain in methanol	Not available.
	Inorganic buffer pH 6.7, surfactant preservative	Not available.
	10% Buffer Methanol	Not available.

Section 10. Stability and Reactivity

Stability and Reactivity	0.17% Wright Stain in methanol	The product is stable.
	Inorganic buffer pH 6.7, surfactant preservative	The product is stable.
	10% Buffer Methanol	The product is stable.
Conditions of Instability	0.17% Wright Stain in methanol	Not available.
	Inorganic buffer pH 6.7, surfactant preservative	Not available.
	10% Buffer Methanol	Not available.
Incompatibility with Various Substances	0.17% Wright Stain in methanol	Reactive with oxidizing agents, metals, acids.
	Inorganic buffer pH 6.7, surfactant preservative	Not available.
	10% Buffer Methanol	Reactive with oxidizing agents. Slightly reactive to reactive with metals, acids.
Rem/Incompatibility	Incompatible with nitric acid, trioxide, hydrogen peroxide, silver nitrate, perchlorates. Incompatible products : Acetaldehyde , Barium perchlorate , Chlorine , Hexamethylene diisocyanate , Lithium aluminum hydride and Perchloric acid. (Brij®35)	
Hazardous Decomposition Products	0.17% Wright Stain in methanol	Not available.
	Inorganic buffer pH 6.7, surfactant preservative	Not available.
	10% Buffer Methanol	Not available.
Hazardous Polymerization	0.17% Wright Stain in methanol	Will not occur.
	Inorganic buffer pH 6.7, surfactant preservative	Will not occur.
	10% Buffer Methanol	Will not occur.

Section 11. Toxicological Information

RTECS Number:	Methanol	PC1400000
	Wright Stain	Not available.
	Water	ZC0110000
	Thymol	XP2275000
	Triton X 100	MD0907700, YM0616666, YM0683332
	Sodium Phosphate, Dibasic, Anhydrous	WC4500000
	Potassium Phosphate	TC6615500
	Brij ® 35 (30% Wetting Agent)	JR5970000, JR5990000, MD0875000, JR5960000
Toxicity	0.17% Wright Stain in methanol	Acute oral toxicity (LD ₅₀): 5628 mg/kg [Rat]. (METHANOL). Acute dermal toxicity (LD ₅₀): 15800 mg/kg [Rabbit]. (METHANOL). Acute toxicity of the vapor (LC ₅₀): 64000 ppm 4 hour(s) [Rat]. (METHANOL).

Inorganic buffer pH 6.7, LD₅₀: Not available.
 surfactant preservative LC₅₀: Not available.
 10% Buffer Methanol Acute oral toxicity (LD₅₀): 5628 mg/kg [Rat].
 (METHANOL).
 Acute dermal toxicity (LD₅₀): 15800 mg/kg [Rabbit].
 (METHANOL).
 Acute toxicity of the vapor (LC₅₀): 64000 ppm 4 hour(s)
 [Rat]. (METHANOL).

Chronic Effects on Humans

Not available.

Acute Effects on Humans

0.17% Wright Stain in methanol May be hazardous in case of eye contact (irritant). Hazardous in case of skin contact (permeator). Extremely hazardous in case of inhalation. May be fatal if inhaled. Extremely hazardous in case of ingestion. May be fatal if swallowed.

Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol May be hazardous in case of eye contact (irritant). May be hazardous in case of skin contact (permeator, irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Hazardous in case of inhalation. Extremely hazardous in case of ingestion. May be fatal if swallowed.

Special Remarks on Toxicity

0.17% Wright Stain in methanol Not available.
 Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol Not available.
 Not available.

Special Remarks on Chronic Effects on Humans

0.17% Wright Stain in methanol Not available.
 Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol Not available.
 Not available.

Special Remarks on Other Toxic Effects on Humans

0.17% Wright Stain in methanol Not available.
 Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol Not available.
 Not available.

Synergetic Products (Toxicologically)

0.17% Wright Stain in methanol Not available.
 Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol Not available.
 Not available.

Irritancy

0.17% Wright Stain in methanol Draize Test: Not available.
 Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol Draize Test: Not available.
Draize Test: Not available.

Sensitization

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

Not available.
Not available.
Not available.

Carcinogenic Effects

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

This material is not known to cause cancer in animals or humans.
This material is not known to cause cancer in animals or humans.
This material is not known to cause cancer in animals or humans.

Toxicity to Reproductive System

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

Not available.
Not available.
Not available.

Teratogenic Effects

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

Not available.
Not available.
Not available.

Mutagenic Effects

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

Not available.
Not available.
Not available.

Section 12. Ecological Information

Ecotoxicity

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

Not available.
Not available.
Not available.

BOD5 and COD

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

Not available.
Not available.
Not available.

Biodegradable/OECD

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

Not available.
Not available.
Not available.

Mobility

0.17% Wright Stain in methanol
Inorganic buffer pH 6.7, surfactant preservative
10% Buffer Methanol

Not available.
Not available.
Not available.

0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	These products are carbon oxides (CO, CO ₂) and water. Not available. These products are carbon oxides (CO, CO ₂) and water.
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Toxicity of the Products of Biodegradation	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	The products of degradation are less toxic than the product itself. The product itself and its products of degradation are not toxic. The products of degradation are less toxic than the product itself.
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Special Remarks on the Products of Biodegradation	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Not available. Not available. Not available.
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Section 13. Disposal Considerations

EPA Waste Number	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	D001 U154 Not available. D001
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Treatment	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, surfactant preservative 10% Buffer Methanol	Incineration, fuels blending or recycle. Contact your local permitted waste disposal site (TSD) for permissible treatment sites. ALWAYS CONTACT PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS. Material does not have an EPA Waste number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. Incineration, fuels blending or recycle. Contact your local permitted waste disposal site (TSD) for permissible treatment sites. ALWAYS CONTACT PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.
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Section 14. Transport Information

DOT Classification	Proper Shipping Name: METHANOL SOLUTION Hazard Class: 3 UN number: UN1230 Packing Group: II RQ: Not applicable.
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TDG Classification	Not available.
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IMO/IMDG Classification	Not available.
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ICAO/IATA Classification	Not available.
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Section 15. Regulatory Information

U.S. Federal Regulations	0.17% Wright Stain in methanol Inorganic buffer pH 6.7, Surfactant preservative	TSCA 8(b) inventory: Methanol; Wright Stain TSCA 8(a) PAIR: Triton® X-100 ® Trademark of the Union Carbide / Dow Chemical Company TSCA 8(b) inventory: Water; Thymol; Triton® X-100 ® Trademark of the Union Carbide / Dow Chemical Company ; Sodium Phosphate, Dibasic ; Potassium Phosphate, Monobasic TSCA 8(d) H and S data reporting: Triton® X-100 ® Trademark of the Union Carbide / Dow Chemical Company : 1996
	10% Buffer Methanol	TSCA 8(b) inventory: Water; Marlipal MG; Sodium Phosphate, Dibasic ; Methanol; Potassium Phosphate, Monobasic
	0.17% Wright Stain in methanol	SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: METHANOL SARA 311/312 MSDS distribution - chemical inventory - hazard identification: METHANOL: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
	Inorganic buffer pH 6.7, surfactant preservative	SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: Triton X-100; Sodium Phosphate, Dibasic, Anhydrous SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Triton X-100: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Sodium Phosphate, Dibasic, Anhydrous: Immediate (Acute) Health Hazard
	10% Buffer Methanol	SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: Brij®35; Sodium Phosphate, Dibasic, Anhydrous; METHANOL SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Brij®35: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Sodium Phosphate, Dibasic, Anhydrous: Immediate (Acute) Health Hazard; METHANOL: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

0.17% Wright Stain in methanol	SARA 313 toxic chemical notification and release reporting: METHANOL 99.99%
Inorganic buffer pH 6.7, surfactant preservative	SARA 313 toxic chemical notification and release reporting: No products were found.
10% Buffer Methanol	SARA 313 toxic chemical notification and release reporting: METHANOL 10%
0.17% Wright Stain in methanol	Clean Water Act (CWA) 307: No products were found.
Inorganic buffer pH 6.7, surfactant preservative	Clean Water Act (CWA) 307: No products were found.
10% Buffer Methanol	Clean Water Act (CWA) 307: No products were found.
0.17% Wright Stain in methanol	Clean Water Act (CWA) 311: No products were found.
Inorganic buffer pH 6.7, surfactant preservative	Clean Water Act (CWA) 311: Sodium Phosphate, Dibasic, Anhydrous
10% Buffer Methanol	Clean Water Act (CWA) 311: Sodium Phosphate, Dibasic, Anhydrous
0.17% Wright Stain in methanol	Clean air act (CAA) 112 accidental release prevention: No products were found.
Inorganic buffer pH 6.7, surfactant preservative	Clean air act (CAA) 112 accidental release prevention: No products were found.
10% Buffer Methanol	Clean air act (CAA) 112 accidental release prevention: No products were found.
0.17% Wright Stain in methanol	Clean air act (CAA) 112 regulated flammable substances: No products were found.
Inorganic buffer pH 6.7, surfactant preservative	Clean air act (CAA) 112 regulated flammable substances: No products were found.
10% Buffer Methanol	Clean air act (CAA) 112 regulated flammable substances: No products were found.
0.17% Wright Stain in methanol	Clean air act (CAA) 112 regulated toxic substances: No products were found.
Inorganic buffer pH 6.7, surfactant preservative	Clean air act (CAA) 112 regulated toxic substances: No products were found.
10% Buffer Methanol	Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada)

0.17% Wright Stain in methanol	CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). Class D-2B: Material causing other toxic effects (TOXIC).
Inorganic buffer pH 6.7, surfactant preservative	Not controlled under WHMIS (Canada).
10% Buffer Methanol	CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). Class D-2B: Material causing other toxic effects (TOXIC).

0.17% Wright Stain in methanol	CEPA DSL: Methanol; Wright Stain
Inorganic buffer pH 6.7, Surfactant preservative	CEPA DSL: Water; Thymol; Triton® X-100 ® Trademark of the Union Carbide / Dow Chemical Company ; Sodium Phosphate, Dibasic ; Potassium Phosphate, Monobasic
10% Buffer Methanol	CEPA DSL: Water; Marlipal MG; Sodium Phosphate, Dibasic ; Methanol; Potassium Phosphate, Monobasic

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

International Regulations

EINECS

0.17% Wright Stain in methanol	Methanol	200-659-6
	Wright Stain	273-541-5
Inorganic buffer pH 6.7, Surfactant preservative	Water	231-791-2
	Thymol	201-944-8
	Triton® X-100	
	® Trademark of the Union Carbide / Dow Chemical Company	Not available.
	Sodium Phosphate, Dibasic	231-448-7
	Potassium Phosphate, Monobasic	231-913-4
10% Buffer Methanol	Water	231-791-2
	Marlipal MG	Not available.
	Sodium Phosphate, Dibasic	231-448-7
	Methanol	200-659-6
	Potassium Phosphate, Monobasic	231-913-4

DSCL (EEC)

0.17% Wright Stain in methanol	R11- Highly flammable. R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R39/23/24/25- Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
Inorganic buffer pH 6.7, surfactant preservative	This product is not classified according to the EU regulations.
10% Buffer Methanol	R11- Highly flammable. R20/21/22- Harmful by inhalation, in contact with skin and if swallowed. R39/23/24/25- Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

International Lists

0.17% Wright Stain in methanol	Australia (NICNAS): Methanol; Wright Stain Japan (MITI): Methanol Korea (TCCL): Methanol
Inorganic buffer pH 6.7, Surfactant preservative	Philippines (RA6969): Methanol; Wright Stain Australia (NICNAS): Water; Thymol; Triton® X-100 ® Trademark of the Union Carbide / Dow Chemical Company ; Sodium Phosphate, Dibasic ; Potassium Phosphate, Monobasic Japan (MITI): Water; Thymol; Sodium Phosphate, Dibasic ; Potassium Phosphate, Monobasic Korea (TCCL): Water; Thymol; Triton® X-100 ® Trademark of the Union Carbide / Dow Chemical

Company ; Sodium Phosphate, Dibasic ; Potassium Phosphate, Monobasic
 Philippines (RA6969): Water; Thymol; Triton® X-100
 ® Trademark of the Union Carbide / Dow Chemical Company ; Sodium Phosphate, Dibasic ; Potassium Phosphate, Monobasic
 10% Buffer Methanol Australia (NICNAS): Water; Marlipal MG; Sodium Phosphate, Dibasic ; Methanol; Potassium Phosphate, Monobasic
 Germany water class: Marlipal MG
 Japan (MITI): Water; Sodium Phosphate, Dibasic ; Methanol; Potassium Phosphate, Monobasic
 Korea (TCCL): Water; Marlipal MG; Sodium Phosphate, Dibasic ; Methanol; Potassium Phosphate, Monobasic
 Philippines (RA6969): Water; Marlipal MG; Sodium Phosphate, Dibasic ; Methanol; Potassium Phosphate, Monobasic

0.17% Wright Stain in methanol China: No products were found.
 Inorganic buffer pH 6.7, surfactant preservative China: No products were found.
 10% Buffer Methanol China: No products were found.

State Regulations

0.17% Wright Stain in methanol Pennsylvania RTK: Methanol: (environmental hazard, generic environmental hazard)
 Massachusetts RTK: Methanol
 New Jersey: 0.17% Wright Stain in methanol
 Inorganic buffer pH 6.7, Surfactant preservative Pennsylvania RTK: Sodium Phosphate, Dibasic : (environmental hazard, generic environmental hazard)
 Massachusetts RTK: Sodium Phosphate, Dibasic
 New Jersey: Inorganic buffer pH 6.7, Surfactant preservative
 10% Buffer Methanol Pennsylvania RTK: Sodium Phosphate, Dibasic : (environmental hazard, generic environmental hazard);
 Methanol: (environmental hazard, generic environmental hazard)
 Massachusetts RTK: Sodium Phosphate, Dibasic ; Methanol
 New Jersey: 10% Buffer Methanol
 0.17% Wright Stain in methanol California prop. 65: No products were found.
 Inorganic buffer pH 6.7, surfactant preservative California prop. 65: No products were found.
 10% Buffer Methanol California prop. 65: No products were found.

Section 16. Other Information

National Fire
Protection
Association
(U.S.A.)



Other Special Considerations	0.17% Wright Stain in methanol	Not available.
	Inorganic buffer pH 6.7, surfactant preservative	Not available.
	10% Buffer Methanol	Not available.

Changed Since Last Revision +

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Wright's Stain Pack

65043

Page: 20/20

Continued on Next Page