

Material Safety Data Sheet

Wright Stain 1-Step

ACC# 89201

Section 1 - Chemical Product and Company Identification

MSDS Name: Wright Stain 1-Step**Catalog Numbers:** 23123745, 23123919, 23206441, 23250466, 55960, 55966, CS432**Synonyms:** None.**Company Identification:**

Fisher Diagnostics
 Fisher Scientific Company, LLC
 8365 Valley Pike
 Middletown, VA 22645-0307

For information, call: 800-524-0294**Emergency Number:** 800-524-0294**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
67-56-1	Methanol	~93.0	200-659-6
56-81-5	Glycerine	~8.0	200-289-5
0-01-1	Tris Hydroxymethyl Amino Methane	1.4	unlisted
110-16-7	Maleic Acid	<1.0	203-742-5
506-59-2	Dimethylamine Hydrochloride	<1.0	208-046-5
660-68-4	Diethylamine Hydrochloride	<1.0	211-541-9
68988-92-1	Wright Stain	~0.5	273-541-5
1310-58-3	Potassium Hydroxide	~0.1	215-181-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: dark blue liquid. Flash Point: 54 deg F.

Danger! Poison! **Flammable liquid and vapor.** Harmful if inhaled. May be fatal or cause blindness if swallowed. May cause severe eye irritation and possible injury. May be absorbed through intact skin. May cause skin and respiratory tract irritation. May cause central nervous system depression. May cause liver and kidney damage. May cause fetal effects based upon animal studies. May cause adverse reproductive effects based upon animal studies. Cannot be made non-poisonous.

Target Organs: Kidneys, central nervous system, liver, eyes.

Potential Health Effects

Eye: Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. Vapors may cause eye irritation. May cause painful sensitization to light.

Skin: May cause skin irritation. May be absorbed through the skin in harmful amounts.

Ingestion: May be fatal or cause blindness if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Inhalation: Harmful if inhaled. May cause respiratory tract irritation. May cause liver and kidney damage. May cause visual impairment and possible permanent blindness. May cause effects similar to those described for ingestion. May cause narcotic effects in high concentration. May cause drowsiness, unconsciousness, and central nervous system depression.

Chronic: Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Ethanol may inhibit methanol metabolism.

Antidote: Ethanol may inhibit methanol metabolism.

Section 5 - Fire Fighting Measures

General Information: 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 can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint.

Extinguishing Media: Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: 54e deg F (12.22 deg C)

Autoignition Temperature: Not available.

Explosion Limits, Lower:6.0

Upper: 36.0

NFPA Rating: (estimated) Health: 1; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid ingestion and inhalation. Use only in a chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: 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. Use only under a chemical fume hood.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Methanol	200 ppm TWA; 250 ppm STEL; skin - potential for cutaneous absorption	200 ppm TWA; 260 mg/m ³ TWA 6000 ppm IDLH	200 ppm TWA; 260 mg/m ³ TWA
Glycerine	10 mg/m ³ TWA	none listed	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Tris Hydroxymethyl Amino Methane	none listed	none listed	none listed
Maleic Acid	none listed	none listed	none listed
Dimethylamine Hydrochloride	none listed	none listed	none listed
Diethylamine Hydrochloride	none listed	none listed	none listed
Wright Stain	none listed	none listed	none listed
Potassium Hydroxide	2 mg/m ³ Ceiling	none listed	none listed

OSHA Vacated PELs: Methanol: 200 ppm TWA; 260 mg/m³ TWA Glycerine: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction) Tris Hydroxymethyl Amino Methane: No OSHA Vacated PELs are listed for this chemical. Maleic Acid: No OSHA Vacated PELs are listed for this chemical. Dimethylamine Hydrochloride: No OSHA Vacated PELs are listed for this chemical. Diethylamine Hydrochloride: No OSHA Vacated PELs are listed for this chemical. Wright Stain: No OSHA Vacated PELs are listed for this chemical. Potassium Hydroxide: No OSHA Vacated PELs are listed for this chemical.

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: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: dark blue
Odor: Alcoholic
pH: Not available.
Vapor Pressure: 96 mm Hg
Vapor Density: 1.1
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 66 deg C
Freezing/Melting Point: -98 deg C
Decomposition Temperature: Not available.
Solubility: Infinite
Specific Gravity/Density: 0.9
Molecular Formula: Not available.
Molecular Weight: Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, ignition sources, excess heat.
Incompatibilities with Other Materials: The incompatibilities associated with potassium hydroxide include: acids, bromoform, chlorine dioxide, cyclopentadiene, germanium, hyponitrous acid, maleic anhydride, nitroalkanes, nitrobenzene, nitrogen trichloride, 2-nitrophenol, potassium peroxodisulfate, sugars, 2,2,3,3-tetrafluoropropanol, tetrahydrofuran, thorium dicarbide, 2,4,6-trinitrotoluene, acetic acid, acrolein, acrylonitrile, chlorine+hydrogen peroxide, chloroform+methanol, phosphorus, trichloroethylene, tetrachloroethane. It reacts violently with o-nitrophenol. Reactions with 1,2-dichloroethylene produce chloroacetylene which is explosive and spontaneously flammable in air. Potassium hydroxide generates large amounts of heat when in contact with water and may steam and splatter. Potassium hydroxide is corrosive to metals such as aluminum, tin, and zinc to cause formation of flammable hydrogen gas. The incompatibilities associated with glycerol include: acetic anhydride, calcium hypochlorite, chromium oxide, fluorine+lead oxide, perchloric acid+lead oxide, and potassium permanganate. Wright's stain is incompatible with strong oxidizing agents. The incompatibilities associated with methanol include: oxidants, phosphorus (III) oxide, dichloromethane, acetyl bromide, active metals, alkyl aluminum salts, beryllium dihydride, carbon tetrachloride+metals, chloroform+heat, chloroform+sodium hydroxide, cyanuric chloride, diethyl zinc, potassium tertbutoxide, chromic anhydride, lead perchlorate, perchloric acid, and chloroform+potassium hydroxide.
Hazardous Decomposition Products: Oxides of nitrogen, oxides of carbon.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:
CAS# 67-56-1: PC1400000
CAS# 56-81-5: MA8050000
CAS# 0-01-1 unlisted.
CAS# 110-16-7: OM9625000

CAS# 506-59-2: IQ0220000

CAS# 660-68-4: IA3084000

CAS# 68988-92-1 unlisted.

CAS# 1310-58-3: TT2100000

LD50/LC50:

CAS# 67-56-1:

Draize test, rabbit, eye: 40 mg Moderate;

Draize test, rabbit, eye: 100 mg/24H Moderate;

Draize test, rabbit, skin: 20 mg/24H Moderate;

Inhalation, rabbit: LC50 = 81000 mg/m³/14H;

Inhalation, rat: LC50 = 64000 ppm/4H;

Oral, mouse: LD50 = 7300 mg/kg;

Oral, rabbit: LD50 = 14200 mg/kg;

Oral, rat: LD50 = 5600 mg/kg;

Skin, rabbit: LD50 = 15800 mg/kg;

CAS# 56-81-5:

Draize test, rabbit, eye: 126 mg Mild;

Draize test, rabbit, eye: 500 mg/24H Mild;

Draize test, rabbit, skin: 500 mg/24H Mild;

Inhalation, rat: LC50 = >570 mg/m³/1H;

Oral, mouse: LD50 = 4090 mg/kg;

Oral, rabbit: LD50 = 27 gm/kg;

Oral, rat: LD50 = 12600 mg/kg;

Skin, rabbit: LD50 = >10 gm/kg;

CAS# 0-01-1:

CAS# 110-16-7:

Draize test, rabbit, eye: 100 mg Severe;

Draize test, rabbit, eye: 1%/2M Severe;

Draize test, rabbit, skin: 500 mg/24H Mild;

Inhalation, rat: LC50 = >720 mg/m³/1H;

Oral, mouse: LD50 = 2400 mg/kg;

Oral, rat: LD50 = 708 mg/kg;

Skin, rabbit: LD50 = 1560 mg/kg;

CAS# 506-59-2:

Oral, mouse: LD50 = 8100 mg/kg;

Oral, rabbit: LD50 = 1600 mg/kg;

Oral, rat: LD50 = 1070 mg/kg;

CAS# 660-68-4:

Oral, mouse: LD50 = 4860 mg/kg;

Oral, rat: LD50 = 9900 mg/kg;

CAS# 68988-92-1:

CAS# 1310-58-3:

Draize test, rabbit, skin: 50 mg/24H Severe;

Oral, rat: LD50 = 273 mg/kg;

Carcinogenicity:

CAS# 67-56-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 56-81-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 0-01-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 110-16-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 506-59-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 660-68-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 68988-92-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 1310-58-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Methanol has been shown to produce fetotoxicity in the embryo or fetus. Specific developmental abnormalities include the urogenital, musculoskeletal and cardiovascular systems.

Teratogenicity: No information available.

Reproductive Effects: Methanol has been shown to produce reproductive effects in laboratory animals.

Neurotoxicity: No information available.

Mutagenicity: Methanol has been shown to produce DNA damage in laboratory animals.

Other Studies: The hazards associated with methanol may be seen in this product. See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Fish: Rainbow trout: LC50 = 13-68 mg/L; 96 Hr.; 12 degrees C
 Fish: Fathead Minnow: LC50 = 29400 mg/L; 96 Hr.; 25 degrees C, pH 7.63
 Fish: Rainbow trout: LC50 = 8000 mg/L; 48 Hr.; Unspecified
 Bacteria: Phytobacterium phosphoreum: EC50 = 51,000-320,000 mg/L; 30 minutes; Microtox test No data available.

Environmental: Methanol is expected to be biodegradable in soil based on the results of a large number of biological screening studies, which include soil microcosm studies. Methanol's miscibility in water and log Kow (-0.77) suggest high mobility in soil.

Physical: No information available.

Other: For more information, see "HANDBOOK OF ENVIRONMENTAL FATE AND EXPOSURE DATA."

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: CAS# 67-56-1: waste number U154 (Ignitable waste).

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	METHANOL	METHANOL
Hazard Class:	3	3(6.1)
UN Number:	UN1230	UN1230
Packing Group:	II	II
Additional Info:		FLASHPOINT 12 C

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 67-56-1 is listed on the TSCA inventory.

CAS# 56-81-5 is listed on the TSCA inventory.

CAS# 0-01-1 is not listed on the TSCA inventory. It is for research and development use only.

CAS# 110-16-7 is listed on the TSCA inventory.

CAS# 506-59-2 is listed on the TSCA inventory.
 CAS# 660-68-4 is listed on the TSCA inventory.
 CAS# 68988-92-1 is listed on the TSCA inventory.
 CAS# 1310-58-3 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs

CAS# 67-56-1: 5000 lb final RQ; 2270 kg final RQ CAS# 110-16-7: 5000 lb final RQ; 2270 kg final RQ CAS# 1310-58-3: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 67-56-1: acute, flammable. CAS # 56-81-5: chronic. CAS # 110-16-7: acute. CAS # 660-68-4: acute. CAS # 68988-92-1: reactive. CAS # 1310-58-3: acute, reactive.

Section 313

This material contains Methanol (CAS# 67-56-1, 93 0%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 67-56-1 is listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 110-16-7 is listed as a Hazardous Substance under the CWA. CAS# 1310-58-3 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 67-56-1 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 56-81-5 can be found on the following state right to know lists: Pennsylvania, Minnesota, Massachusetts.

CAS# 0-01-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 110-16-7 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

CAS# 506-59-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 660-68-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 68988-92-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 1310-58-3 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

R 10 Flammable.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

WGK (Water Danger/Protection)

CAS# 67-56-1: 1

CAS# 56-81-5: 0

CAS# 0-01-1: No information available.

CAS# 110-16-7: 1

CAS# 506-59-2: 1

CAS# 660-68-4: 1

CAS# 68988-92-1: No information available.

CAS# 1310-58-3: 1

Canada - DSL/NDSL

CAS# 67-56-1 is listed on Canada's DSL List.

CAS# 56-81-5 is listed on Canada's DSL List.

CAS# 110-16-7 is listed on Canada's DSL List.

CAS# 506-59-2 is listed on Canada's DSL List.

CAS# 660-68-4 is listed on Canada's DSL List.

CAS# 68988-92-1 is listed on Canada's DSL List.

CAS# 1310-58-3 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2, D1A, D2B.

Canadian Ingredient Disclosure List

CAS# 67-56-1 is listed on the Canadian Ingredient Disclosure List.

CAS# 110-16-7 is listed on the Canadian Ingredient Disclosure List.

CAS# 1310-58-3 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 7/21/1999**Revision #7 Date:** 10/05/2004

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.