

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
 Issue date: 7/22/2024 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
 Product name : Papanicolaou Stain EA-36 & EA-50
 Product code : all sizes of 7026 & 7028

1.2. Other means of identification

Synonyms : Papanicolaou Stain EA-36 & EA-50

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only, For professional use only
 Restrictions on use : Not for food, drug or household use

1.4. Supplier's details

Astral Diagnostics
 Ethos Biosciences, Inc.
 2070 Center Square Road
 Logan Township, New Jersey 08085
 United States
 T +1-856-224-0900; +1-800-441-0366 Technical Service; Monday-Friday: 8:00 AM-5:00 PM, Eastern US Time
www.ethosbiosciences.com

1.5. Emergency phone number

Emergency number : 800-424-9300 CHEMTREC (USA) -- 24 Hours/Day, 7 Days/Week

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Carcinogenicity, Category 1A	H350	May cause cancer.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H225 - Highly flammable liquid and vapor
 H350 - May cause cancer.
 H370 - Causes damage to organs.
 Precautionary statements (GHS US)
 : 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.

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

- P240 - Ground/Bond container and receiving equipment.
- P241 - Use explosion-proof equipment.
- P242 - Use non-sparking tools.
- P243 - Take action to prevent static discharges.
- P260 - Do not breathe dust, fume, gas, mist, vapors, spray.
- P264 - Wash hands, forearms and face thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
- P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P307+P311 - If exposed: Call a poison center/doctor.
- P308+P313 - If exposed or concerned: Get medical advice/attention.
- P321 - Specific treatment (see supplemental first aid instruction on this label).
- P370+P378 - In case of fire: Use appropriate media to extinguish.
- P403+P235 - Store in a well-ventilated place. Keep cool.
- P405 - Store locked up.
- P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc.	GHS US classification
ethanol	CAS-No.: 64-17-5	≈ 90.25	Flam. Liq. 2, H225 Carc. 1A, H350
methanol	CAS-No.: 67-56-1	≈ 4.75	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:dust,mist), H331 STOT SE 1, H370
water	CAS-No.: 7732-18-5	≥ 3	Not classified
Bismarck Brown Y (Basic Brown 1)	CAS-No.: 10114-58-6	≤ 0.3	Not classified
Eosin Y	CAS-No.: 17372-87-1	≤ 0.2	Eye Irrit. 2, H319
Phosphotungstic acid	CAS-No.: 12501-23-4	≤ 0.2	Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314 Eye Dam. 1, H318

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Name	Product identifier	Conc.	GHS US classification
lithium carbonate	CAS-No.: 554-13-2	≤ 0.05	Acute Tox. 4 (Oral), H302
Light Green SF Yellowish	CAS-No.: 5141-20-8	≤ 0.04	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
-----------------------------------	--------------------------

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
------------------	---

For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
----------------------	---

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Emergency procedures	: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.
For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions	: Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment	: Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray.
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures	: Ground/bond container and receiving equipment.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials	: Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

ethanol (64-17-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethanol
ACGIH OEL STEL	1000 ppm
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

ethanol (64-17-5)	
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Ethyl alcohol (Ethanol)
OSHA PEL TWA	1900 mg/m³
	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
methanol (67-56-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Methanol
ACGIH OEL TWA	200 ppm
ACGIH OEL STEL	250 ppm
Remark (ACGIH)	TLV® Basis: Headache; eye dam; dizziness; nausea. Notations: Skin; BEI
Regulatory reference	ACGIH 2024
USA - ACGIH - Biological Exposure Indices	
Local name	Methanol
BEI	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: End of shift - Notations: B, Ns
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Methyl alcohol
OSHA PEL TWA	260 mg/m³
	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

- Appropriate engineering controls
- : Ensure good ventilation of the work station.
- Environmental exposure controls
- : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Green
Odor	: Alcohol odour
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: Water: Solubility in water of component(s) of the mixture : • ethanol: 78.9 g/100ml • methanol: ≥ 100 g/100ml • Eosin Y: 30 g/100ml
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Light Green SF Yellowish

Particle characteristics	No data available
--------------------------	-------------------

Bismarck Brown Y (Basic Brown 1)

Particle characteristics	No data available
--------------------------	-------------------

lithium carbonate

Particle characteristics	No data available
--------------------------	-------------------

ethanol

Boiling point	78 °C (1013 hPa)
Flash point	13 °C (Closed cup, 1013.25 hPa)
Auto-ignition temperature	363 – 425 °C (1013.25 hPa, T2)
Vapor pressure	57 hPa (20 °C)
Vapor pressure at 50°C	300 hPa
Particle characteristics	No data available

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

methanol	
Boiling point	65 °C (1013 hPa)
Flash point	10 °C (Closed cup, 1013 hPa, EU Method A.9: Flash-Point)
Auto-ignition temperature	455 °C (1013 hPa, DIN 51794: Self-ignition temperature, T1)
Vapor pressure	128 hPa (20 °C)
Vapor pressure at 50°C	552 hPa
Particle characteristics	No data available

Eosin Y	
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Particle characteristics	No data available

Phosphotungstic acid	
Boiling point	107.9 °C Atm. press.: 1013,25 hPa Decomposition: 'no'
Particle characteristics	No data available

water	
Particle characteristics	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Light Green SF Yellowish (5141-20-8)	
LD50 oral rat	> 2000 mg/kg Source: NLM;ChemIDPlus
lithium carbonate (554-13-2)	
LD50 oral	753 mg/kg body weight Animal: mouse
LD50 dermal rabbit	> 3000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 2 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
ATE US (oral)	753 mg/kg body weight
ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	8300 mg/kg body weight Animal: mouse
LD50 dermal rabbit	> 15800 mg/kg body weight (Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	124.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	8300 mg/kg body weight
methanol (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg body weight (BASF test, Rat, Male / female, Experimental value, 15-35 % aqueous solution, Oral, 7 day(s))
LD50 dermal rabbit	17100 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)
LC50 Inhalation - Rat	128.2 mg/l air (BASF test, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	1187 mg/kg body weight
ATE US (dermal)	17100 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h
Phosphotungstic acid (12501-23-4)	
LD50 oral rat	300 – 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
ATE US (oral)	300 mg/kg body weight
Skin corrosion/irritation	: Not classified
ethanol (64-17-5)	
pH	7 (789 g/l, 20 °C)

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

methanol (67-56-1)	
pH	No data available in the literature
Phosphotungstic acid (12501-23-4)	
pH	2 Temp.: 20 °C Concentration: 1 other:
Serious eye damage/irritation	: Not classified
ethanol (64-17-5)	
pH	7 (789 g/l, 20 °C)
methanol (67-56-1)	
pH	No data available in the literature
Phosphotungstic acid (12501-23-4)	
pH	2 Temp.: 20 °C Concentration: 1 other:
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Light Green SF Yellowish (5141-20-8)	
IARC group	3 - Not classifiable
ethanol (64-17-5)	
IARC group	1 - Carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Causes damage to organs.
methanol (67-56-1)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	: Not classified
ethanol (64-17-5)	
NOAEL (subchronic,oral,animal/male,90 days)	< 9700 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
NOAEL (subchronic,oral,animal/female,90 days)	> 9400 mg/kg body weight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
Aspiration hazard	: Not classified
Papanicolaou Stain EA-36 & EA-50	
Viscosity, kinematic	No data available
Light Green SF Yellowish (5141-20-8)	
Viscosity, kinematic	No data available
Bismarck Brown Y (Basic Brown 1) (10114-58-6)	
Viscosity, kinematic	No data available
lithium carbonate (554-13-2)	
Viscosity, kinematic	No data available

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Light Green SF Yellowish (5141-20-8)	
ethanol (64-17-5)	
Viscosity, kinematic	1.6 mm ² /s (20 °C)
methanol (67-56-1)	
Viscosity, kinematic	0.68 – 0.747 mm ² /s
Eosin Y (17372-87-1)	
Viscosity, kinematic	Not applicable
Phosphotungstic acid (12501-23-4)	
Viscosity, kinematic	No data available
water (7732-18-5)	
Viscosity, kinematic	No data available

Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Bismarck Brown Y (Basic Brown 1) (10114-58-6)	
LC50 - Fish [1]	0.5 mg/l Source: ECOTOX
lithium carbonate (554-13-2)	
LC50 - Fish [1]	30.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	33.2 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 400 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	2.53 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	17.35 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'
ethanol (64-17-5)	
LC50 - Fish [1]	15300 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 72h - Algae [1]	275 mg/l (Equivalent or similar to OECD 201, Chlorella vulgaris, Static system, Fresh water, Experimental value, Growth rate)
NOEC (chronic)	9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

methanol (67-56-1)	
LC50 - Fish [1]	15400 mg/l (EPA 660/3 - 75/009, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	18260 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 96 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, Locomotor effect)
EC50 96h - Algae [1]	22000 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	446.7 mg/l Test organisms (species): Pimephales promelas Duration: '28 d'

Eosin Y (17372-87-1)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	51.3 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate)

Phosphotungstic acid (12501-23-4)	
EC50 - Crustacea [1]	70.8 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	7.8 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	1.2 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

Papanicolaou Stain EA-36 & EA-50	
Persistence and degradability	Not rapidly degradable
Light Green SF Yellowish (5141-20-8)	
Persistence and degradability	Not rapidly degradable
Bismarck Brown Y (Basic Brown 1) (10114-58-6)	
Persistence and degradability	Not rapidly degradable
lithium carbonate (554-13-2)	
Persistence and degradability	Not rapidly degradable
ethanol (64-17-5)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.8 – 0.967 g O ₂ /g substance
Chemical oxygen demand (COD)	1.7 g O ₂ /g substance
ThOD	2.1 g O ₂ /g substance
BOD (% of ThOD)	0.43
methanol (67-56-1)	
Persistence and degradability	Readily biodegradable in the soil, Readily biodegradable in water.

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

methanol (67-56-1)	
Biochemical oxygen demand (BOD)	0.6 – 1.12 g O ₂ /g substance
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance
ThOD	1.5 g O ₂ /g substance
Eosin Y (17372-87-1)	
Persistence and degradability	Readily biodegradable in water.
Phosphotungstic acid (12501-23-4)	
Persistence and degradability	Not rapidly degradable
water (7732-18-5)	
Persistence and degradability	Not rapidly degradable
12.3. Bioaccumulative potential	
ethanol (64-17-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.35 (Experimental value, Equivalent or similar to OECD 107, 24 °C)
Bioaccumulative potential	Not bioaccumulative.
methanol (67-56-1)	
BCF - Fish [1]	1 – 4.5 (72 h, Cyprinus carpio, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-0.77 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Eosin Y (17372-87-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.68 (Estimated value, KOWWIN)
Bioaccumulative potential	Not bioaccumulative.
12.4. Mobility in soil	
Light Green SF Yellowish (5141-20-8)	
Mobility in soil	0.221 Source: EPI SUITE
ethanol (64-17-5)	
Surface tension	22.31 mN/m (20 °C, 100 %)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.2 (log Koc, Experimental value)
Ecology - soil	Highly mobile in soil.
methanol (67-56-1)	
Mobility in soil	2.75 Source: HSDB
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	-0.89 – -0.21 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Eosin Y (17372-87-1)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.024 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

UN-No. (DOT)	: UN1170
UN-No. (TDG)	: UN1170
UN-No. (IMDG)	: 1170
UN-No. (IATA)	: 1170

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Ethanol solutions
Proper Shipping Name (TDG)	: ETHANOL SOLUTION
Proper Shipping Name (IMDG)	: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IATA)	: Ethanol solution

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: 3
Hazard labels (DOT)	: 3



TDG

Transport hazard class(es) (TDG)	: 3
Hazard labels (TDG)	: 3



IMDG

Transport hazard class(es) (IMDG)	: 3
-----------------------------------	-----

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Hazard labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3

Hazard labels (IATA) : 3



14.4. Packing group

Packing group (DOT) : II

Packing group (TDG) : II

Packing group (IMDG) : II

Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : UN1170

DOT Special Provisions (49 CFR 172.102) : 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III.
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 4b;150

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

TDG

UN-No. (TDG) : UN1170

TDG Special Provisions : 150 - An approved ERAP is required for the dangerous goods referred to in paragraph 7.2(1)(f) of Part 7 (Emergency Response Assistance Plan).

Explosive Limit and Limited Quantity Index : 1 L

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Excepted quantities (TDG) : E2
Passenger Carrying Road Vehicle or Passenger : 5 L
Carrying Railway Vehicle Index
Emergency Response Guide (ERG) Number : 127

IMDG
Special provision (IMDG) : 144
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG) : A
Properties and observations (IMDG) : Colorless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19%.
Miscible with water.

IATA
Special provision (IATA) : A3, A58, A180
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
ERG code (IATA) : 3L

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Phosphotungstic acid	CAS-No. 12501-23-4	≤ 0.2%
----------------------	--------------------	--------

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Lithium carbonate	CAS-No. 554-13-2	≤ 0.05%
methanol	CAS-No. 67-56-1	≈ 4.75%

methanol (67-56-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
-----------	---------

15.2. International regulations

CANADA

Light Green SF Yellowish (5141-20-8)

Listed on the Canadian DSL (Domestic Substances List)

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Bismarck Brown Y (Basic Brown 1) (10114-58-6)

Listed on the Canadian DSL (Domestic Substances List)

lithium carbonate (554-13-2)

Listed on the Canadian DSL (Domestic Substances List)

ethanol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List)

methanol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

Eosin Y (17372-87-1)

Listed on the Canadian DSL (Domestic Substances List)

Phosphotungstic acid (12501-23-4)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

lithium carbonate (554-13-2)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

methanol (67-56-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Eosin Y (17372-87-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

water (7732-18-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations



WARNING:

This product can expose you to lithium carbonate, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Papanicolaou Stain EA-36 & EA-50

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Component	State or local regulations
Light Green SF Yellowish(5141-20-8)	U.S. - New Jersey - Right to Know Hazardous Substance List
lithium carbonate(554-13-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List
ethanol(64-17-5)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
methanol(67-56-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date : 7/22/2024

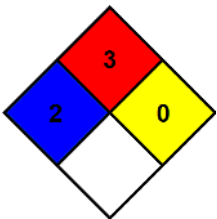
Full text of hazard classes and H-statements	
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H350	May cause cancer.
H370	Causes damage to organs.

- NFPA health hazard

: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Safety Data Sheet (SDS), USA

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness