

FREESTYLE PHOTOGRAPHIC SUPPLIES PREMIUM ARISTA® LIQUID LITH DEVELOPER PART A

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Distributor: Freestyle Photographic Supplies

5124 Sunset Blvd., Hollywood, CA 90027

Product Name: **PREMIUM LIQUID LITH DEVELOPER PART A**

Product Number: **163400**

Product Use: Photographic developer.

Customer Information Phone Number:

1-800-292-6137

CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300

Date Reviewed: 6/10/2020

Rev. 3.0

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the substance or mixture

Health hazard

Acute toxicity, Oral (Category 4), H302

Causes severe skin burns and eye damage (Skin Corr. 1B) H314

Serious eye damage (Category 1), H318

Skin sensitization (Category 2), H317

Acute toxicity, Inhalation (Category 3), H331

Germ cell mutagenicity (Category 2), H341

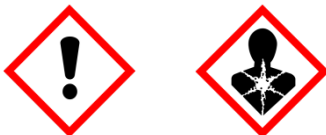
Carcinogenicity (Category 2), H351

Harmful to aquatic life (Category 3), H402

Chronic aquatic toxicity (Category 1), H410

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: DANGER

Hazard statement(s)

H302	Harmful if swallowed
H317	May cause allergic skin reaction
H318	Causes severe eye damage
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer

H402 Harmful to aquatic life.
H410 Very toxic to aquatic life

Precautionary statement(s)

P201 Obtain special instructions before use
 P260 Do not breathe mist
 P264 Wash skin thoroughly after handling
 P270 Do not eat, drink, or smoke when using this product
 P273 Avoid release into the environment
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P301 + P312 IF SWALLOWED; call a POISON CENTER or doctor/physician Do NOT induce vomiting
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P321 Specific treatment (see supplemental first aid instructions on this label).
 P330 Rinse mouth.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse
 P391 Collect spillage
 P501 Dispose of contents to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OHSA PEL	ACGIH TLV	Weight %
TRIETHYLENE GLYCOL	112-27-6	N.E.	100 mg/m ³ aerosol	10-15
HYDROQUINONE	123-31-9	2 mg/m ³	2 mg/m ³	5-10
SODIUM METABISULFITE	7681-57-4	5 mg/m ³	5 mg/m ³	5-10
FORMALDEHYDE	50-00-0	2 mg/m ³ C	0.37 mg/m ³ , A ² C	5-10

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Inhalation: If symptomatic, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: If swallowed, give victim a glass of water or milk. Do not induce vomiting. Only induce vomiting at the instruction of medical personnel. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Skin Contact: Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.

Aggravated Medical Conditions: Individuals who are under the care of a physician or have chronic ailments, should consult a physician before using this product. May cause severe allergic

reaction in some asthmatics and sulfite sensitive individuals.
Supplemental Health Information: Formaldehyde is listed by IARC, NTP, and OSHA as carcinogen.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Nonflammable. Use Water spray, carbon dioxide, dry chemical, or alcohol foam.

5.2 Special Hazards arising from substance or mixture

Fire or excessive heat may cause production of hazardous decomposition products.
Combustion Products: Carbon dioxide, carbon monoxide, formaldehyde, and oxides of sulfur.

5.3 Advise for firefighters

Wear self-contained breathing NIOSH/MSHA approved apparatus and protective clothing to prevent contact with skin and eyes. Use water to keep containers cool.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Review fire and explosion hazards and safety precautions before proceeding with cleanup. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage. Dike the spill. Prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. Soak up with vermiculite, sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill.

6.2 Environmental precautions

Prevent liquid from entering sewers, waterways or low areas. Discharge to sewer requires approval of permitting authority and may require pre-treatment.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Store in a cool, dry, well-ventilated area. Keep containers closed. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

7.2 Conditions for safe storage, including any incompatibles

Do not store with incompatible materials. Do not store with strong acids. All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Triple rinse before disposal. Dispose of in a licensed facility.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

See Section 3.

8.2 Exposure controls

Use good personal hygiene when handling this product. Avoid contact with skin and eyes. Wash hands after use, before smoking, or using the toilet. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal protective equipment

Eye Protection: Safety glasses with side shields (or goggles).

Respiratory Protection: When this product is used in the intended way, no respiratory protection is anticipated to be necessary if airborne concentrations are maintained below exposure limits. Otherwise, an approved respirator should be worn of the HEPA type.

Skin protection: Nitrile rubber, Latex, or neoprene waterproof gloves are recommended.

Body protection: Rubber or plastic apron.

Respiratory protection: Local exhaust ventilation is recommended. Good ventilation of 10 room volumes per hour. Ventilation rates should match conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance And Odor: Light straw color; no odor.

Solubility In Water: Complete

Boiling Point: 100° C

Specific Gravity: 1.12

Evaporation Rate: Not established

Melting Point: Not applicable

Freezing Point: Not established

Vapor Density: Not established

Percent Volatile: 74.02

Ph: 7.9

Pounds Per Gallon: 9.26

Molecular Weight: Not applicable

Vapor Pressure: Not established

V.O.C. is 42.9 g/L or 3.84% or 0.36 lb. /gal.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable

10.2 Chemical stability

Conditions To Avoid: None

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

High temperatures.

10.5 Incompatible Materials

Strong acids, strong bases, and strong oxidizing agents.

10.6 Decomposition Products

May produce sulfur dioxide under acid conditions (pH < 4), and formaldehyde

11. TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Component information

Hydroquinone 123-31-9

Acute toxicity:

Oral LD-50 (rat)

367.3 mg/kg (OECD Test Guidance 401)

Dermal LD-50 (rabbit)

>2,000 mg/kg (OECD Test Guidance 402)

Inhalation: no data

Skin irritation: no data**Eye irritation: no data****Respiratory or Skin Sensitization** (in vivo assay – mouse (OECD Test Guidance 429)

May cause sensitization by skin contact.

May cause allergic skin reaction.

Carcinogenicity/mutagenicity: none

Sodium Metabisulfite 7681-57-4

Acute toxicity:

LD50 Oral – rat – 1,540 mg/kg

Inhalation: No data available

LD50 Dermal – Rat - >2,000 mg/kg

Skin irritation: No data available**Eye irritation:** Rabbit – Risk of serious damage to eyes**Respiratory or Skin Sensitization**

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Carcinogenicity/mutagenicity: none

Formaldehyde Solution 50-00-0

Acute toxicity:

Oral LD50 (rat): 500 mg/kg

Inhalation LD-50 (rat): 0.578 mg/l – 4h

Dermal: no data available

Skin irritation:

No data available

Eye irritation:

No data available

Respiratory or Skin Sensitization

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Carcinogenicity/mutagenicity: A2 – suspected carcinogen (ACGIH); 0.5 ppm Action Level: 0.75 ppm TWA (OSHA) irritant and potential cancer hazard; Potential occupational carcinogen (NIOSH); possible Select carcinogen (NTP); and carcinogenic to humans (IARC).

Triethylene Glycol 112-27-6**Acute toxicity:**

Oral LD50 (rat): 17,000 mg/kg

Inhalation: Respiratory disorder

Dermal LD50: - rabbit - > 22,500 mg/kg

Skin irritation:

Mild skin irritation to humans.

Eye irritation:

Mild eye irritation to rabbits.

Respiratory or Skin Sensitization

No data available.

Carcinogenicity/mutagenicity: None**12. ECOLOGICAL INFORMATION****Component information****Triethylene Glycol 112-27-6****12.1 Toxicity**

Toxicity to fish	LC50 – Leuciscus indus (Golden orfe) > 100 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 – Daphnia magna (Water flea) – 46,500 mg/l - 48 h
Toxicity to algae	No data available

12.2 Persistence and degradability

Biodegradability Result: > 70% - readily biodegradable

12.3 Bioaccumulative potential

Does not bioaccumulate (log Pow <=4)

12.4 Mobility in soil

No data available

12.5 Result of PBT and vPvB assessment

Assessment not available as chemical assessment not required/not conducted

12.6 Other adverse effects

No data available

Sodium Metabisulfite 7681-57-4**12.1 Toxicity**

Toxicity to fish	LC50 – Oncorhynchus mykiss (rainbow trout) – 150-220 mg/l – 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 – Daphnia magna (Water flea) – 89 mg/l - 24 h

Toxicity to algae IC50 – *Desmodesmus subspicatus* (green algae) – 48 mg/l – 72 h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Result of PBT and vPvB assessment

Assessment not available as chemical assessment not required/not conducted

Hydroquinone 123-31-9

12.1 Toxicity

Toxicity to fish LC50-*Oncorhynchus mykiss* (rainbow trout) – 0.4 -0.1 mg/l – 96h

Toxicity to daphnia and other aquatic invertebrates LC50 – *Daphnia magna* (Water flea) – 0.13 – 48h

Toxicity to algae EC50 – *Pseudokirchneriella subcapitata* (green algae) -0.335 mg/l – 72 h

12.2 Persistence and degradability

Biodegradability Biotic/Aerobic – exposure time 14d
Result: 86% - Readily biodegradable

12.3 Bioaccumulative potential

Bioaccumulation *Leuciscus idus* (golden orfe) – 3d – 50 µg/l No data available
Bioconcentration factor (BCF):40

12.4 Mobility in soil

No data available

12.5 Result of PBT and vPvB assessment

Assessment not available as chemical assessment not required/not conducted

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

Formaldehyde Solution 50-00-0

Components of this product are hazardous to aquatic life. This product is biodegradable under aerobic and anaerobic conditions.

12.1 Toxicity

Toxicity to fish LC50- *Pimepales promelas* -24.1 mg/l – 96h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Result of PBT and vPvB assessment

Assessment not available as chemical assessment not required/not conducted

12.6 Other adverse effects

None

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product**

Preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

14. TRANSPORT INFORMATION**DOT (US)**

Not regulated

15. REGULATORY INFORMATION**SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302:

	Cas#	Revision Date
Formaldehyde	50-00-0	2007-07-01
Hydroquinone	123-31-9	2007-07-01
Methanol	67-56-1	2007-07-01

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

	Cas#	Revision Date
Formaldehyde	50-00-0	2007-07-01
Hydroquinone	123-31-9	2007-07-01
Methanol	67-56-1	2007-07-01

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

California Prop 65 Components

This product contains chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm. Methanol (Cas # 67-56-1) a component of the Formadehyde Solution and Formaldehyde (Cas# 50-00-0) are listed.

TSCA

All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SCAQMD Rule 443.1

Photochemically Reactive: No
Maximum Grams of VOC per Liter: 42.9 gm/L
Vapor Pressure: 18 mm Hg@ 20 Degrees C

16. OTHER INFORMATION**Full text of H-statements referred to under sections 2 and 3.**

Acute toxicity, Oral (Category 4), H302
Causes severe skin burns and eye damage (Skin Corr. 1B) H314
Serious eye damage (Category 1), H318
Skin sensitization (Category 2), H317
Acute toxicity, Inhalation (Category 3), H331
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 2), H351
Harmful to aquatic life (Category 3), H402
Chronic aquatic toxicity (Category 1), H410

HMIS RATING

Health: 2
Chronic Health Hazard: *
Flammability: 0
Physical Hazard: 0

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.