

QUICK SILVER PRINT DEVELOPER SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: Quick Silver Print Developer

Recommended use of the chemical and restrictions

Photographic print developer

on use:

Supplier: Sprint Systems of Photography, Inc.

60 Kindergarten St. Woonsocket, RI 02895 Telephone: +1 800 356-5073

Emergency Phone: For Chemical Emergency

Call ChemTel (1-800-255-3924)

SDS Date of Preparation: 10/6/16

2. HAZARDS IDENTIFICATION

Classification in accordance with US OSHA Hazcom 2012 and Canada WHMIS 2015:

Carcinogen Category 2
Eye Damage Category 1
Germ Cell Mutagen Category 2
Skin Irritant Category 2
Skin Sensitizer Category 1B

Specific Target Organ Toxicity – Repeated Exposure Category 2

Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory Irritation)

GHS Label Elements:



Danger!

Statements of Hazard

Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
Suspected of causing genetic defects.
Suspected of causing cancer.
May cause respiratory irritation.
May cause damage to kidneys through

Precautionary Phrases

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe mist or vapors.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of

prolonged or repeated ingestion.

the workplace. Wear protective gloves, protective clothing, and eye protection.

IF exposed or concerned: Get medical attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor.

IF ON SKIN: Wash with plenty of water.

If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor if you feel unwell. Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Potassium Carbonate	584-08-7	15-25%
Diethylene Glycol	111-46-6	<5%
Hydroquinone	123-31-9	<5%

The exact concentration is being withheld as a trade secret.

4. FIRST AID MEASURES

Eye: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do then continue rinsing. Get immediate medical attention.

Skin: Remove contaminated clothing and shoes. Flush skin thoroughly with water for several minutes. Get medical attention if irritation or rash occurs. Launder clothing before re-use.

Ingestion: Seek immediate medical attention for large ingestions. Call local poison control center or go to an emergency department. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

Inhalation: Remove victim to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur and persist.

Most Important Symptoms: May cause serious eye irritation, redness, tearing and corneal damage. May cause moderate skin irritation. May cause skin sensitization. Inhalation may cause respiratory irritation. Suspected of causing genetic defects. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure. May cause damage to the kidneys through prolonged or repeated ingestion. May be absorbed through the skin. Prolonged overexposure may cause lung, liver and kidney damage.

Indication of immediate medical attention/special treatment: Immediate medical attention is required for eye contact and if product is ingested in large amounts.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use media appropriate for the surrounding environment.

Specific Hazards Arising From the Chemical: Fire may produce carbon dioxide, carbon monoxide, and sulfur oxide.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should wear NIOSH approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing for all fires involving chemicals. Contain water used in firefighting from entering sewers or natural waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Prevent contact with eyes, skin and clothing. Do not breathe mist or vapors. Wear personal protective as described in Section 8. Avoid releases to the environment.

Methods and Materials for Containment and Cleaning Up: Contain and collect using inert absorbent materials, such as sand and diatomaceous earth, and place in appropriate containers for disposal. Report releases as required by local, state and federal authorities.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Prevent contact with eyes, skin and clothing. Do not breathe mist or vapors. Wear protective clothing and equipment as described in Section 8. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Do not reuse containers. Empty containers retain product residues and contaminants which can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a cool, dry, well ventilated area away from heat and incompatible materials. Protect from physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

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Potassium Carbonate	None Established	
Diethylene Glycol	10 mg/m3 TWA (AIHA WEEL)	
Hydroquinone	1 mg/m3 TWA (ACGIH TLV)	
	2 mg/m3 TWA (OSHA PEL)	

Engineering Controls: Use with adequate ventilation to maintain exposure levels below the exposure limits.

Respiratory Protection: In operations where exposures limits are exceeded, an approved respirator with dust/mist cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Skin Protection: Wear butyl rubber, neoprene, or other impervious gloves where contact is likely. Contact your glove supplier for selection assistance.

Eye Protection: Chemical safety goggles should be worn where splashing is possible.

Other: None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Light brown liquid with a mild, sweet odor.

Physical State: Liquid	Odor Threshold: No data available	
Vapor Density: 0.6	Initial Boiling Point/Range: >100°C (>212°F)	
Solubility In Water: Soluble	Vapor Pressure: No data available	
Relative Density: 1.315 @20°C (68°F)	Evaporation Rate: Not applicable (Buac=1)	
Melting/Freezing Point: No data available	pH: 10.68	
VOC Content: Not determined	Octanol/Water Coefficient: No data available	
Solubility: No data available	Decomposition Temperature: Not available	
Viscosity: No data available	Flammability (solid, gas): Not applicable	
Flashpoint: No data available	Autoignition Temperature: Not data available	
Flammable Limits: LEL: Not applicable		
UEL: Not applicable		

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: None known. **Conditions to Avoid:** Avoid extreme temperatures.

Incompatible Materials: Acidic materials, strong oxidizers, metals and organic materials.

Hazardous Decomposition Products: Decomposition may yield carbon dioxide, carbon monoxide,

and sulfur oxide.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Eye: May cause serious eye irritation, redness, tearing and corneal damage.

Skin: May cause moderate skin irritation. May cause an allergic skin reaction (sensitizer).

Ingestion: May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects, including irregular eye movements, convulsions and coma.

Inhalation: Inhalation of vapors or mists may cause mucous membrane and respiratory irritation. High vapor concentrations may produce headache, nausea, dizziness and irregular eye movements.

Chronic: Prolonged overexposure may cause lung, liver and kidney damage. Prolonged exposure to Diethylene Glycol may damage kidneys.

Sensitization: This product is classified as a skin sensitizer. Hydroquinone is classified as a skin sensitizer.

Carcinogenicity: Hydroquinone was tested by the NTP in 2 year gavage studies with rats and mice. There was some evidence of carcinogenic activity of hydroquinone for male F344/N rats, as shown by marked increase in tubular cell adenomas of the kidney. For the female F344/N rats, there was some evidence of carcinogenic activity as shown by increases in mononuclear cell leukemia. There was no evidence of carcinogenic for male B6C3F1 mice administered 50 or 100 mg/kg in water by gavage. There was some evidence of carcinogenic activity for female B6C3F1 mice which were increases in hepatocellular neoplasms, mainly adenomas. Administration of hydroquinone was associated with thyroid follicular cell hyperplasia in both male and female mice and anisokaryosis, multinucleated hepatocytes, and basophilic foci of the liver in male mice. Hydroquinone is a confirmed animal carcinogen with unknown relevance to humans. Hydroquinone is listed by IARC as Unclassifiable as to Carcinogenicity in Human (group 3). None of the other components present are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA.

Germ Cell Mutagenicity: This product is suspected of causing genetic defects. Hydroquinone is classified as a mutagen.

Reproductive Toxicity: This product is not classified as toxic to reproduction.

Numerical Measures of Toxicity:

Product ATE: >5000 mg/kg (oral)

Potassium Carbonate: Oral rat LD₅₀: >2000 mg/kg, Inhalation rat LC₅₀: >4.96 mg/L/4.5 hr, Skin rabbit

LD₅₀: >2000 mg/kg

Diethylene Glycol: Oral rat LD₅₀: 12,565 mg/kg; Skin rabbit LD₅₀: 11,890 mg/kg

Hydroquinone: Oral rat LD₅₀: 367 mg/kg, Skin rabbit LD₅₀: > 2000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Potassium Carbonate: 96hr LC₅₀ Oncorhynchus mykiss: 68 mg/L

Diethylene Glycol: 96hr LC₅₀ Lepomis macrochirus (Bluegill fish): 1,000 mg/L

Hydroquinone: 96 hr LC₅₀ Rainbow trout: 0.638 mg/L, 48 hr EC₅₀ Daphnia magna: 0.134 mg/L, 48 hr NOEC Daphnia magna: 0.095 mg/L, 21 day NOEC Daphnia magna: 0.0057 mg/L (M-factor acute:10, M-factor chronic: 1)

This product is very toxic to aquatic life and toxic to aquatic life with long lasting effects. Releases to the environment should be avoided.

Persistence and Degradability:

Diethylene glycol is readily biodegradable -90% in 28 days.

Hydroquinone: Readily biodegradable 70% in 14 days

Bioaccumulative Potential: Diethylene glycol is not expected to bioaccumulate in aquatic organisms.

Mobility in Soil: Diethylene glycol is expected to have a high rate of mobility in soil.

Other Adverse Effects: No data available.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local and national environmental regulations. RCRA Waste Code: Not regulated.

14. TRANSPORT INFORMATION

DOT Hazardous Materials Description: Proper Shipping Name: Not Regulated

UN Number: Not applicable

Hazard Class/Packing Group: Not applicable

Labels Required: Not applicable

IMDG Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Hydroquinone)

UN Number: UN3082

IMDG Hazard Class/Packing Group: 9, PG III

IMDG Hazard Labels Required: Class 9, Marine Pollutant

IATA Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Hydroquinone)

UN Number: None

IATA Hazard Class/Packing Group: 9, PG III

IATA Hazard Labels Required: Class 9, Marine Pollutant

15. REGULATORY INFORMATION

CERCLA 103 Reportable Quantity: This product has an RQ of 2,000 based on the RQ of Hydroquinone of 100 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Hazard Category for Section 311/312: Acute Health, Chronic Health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Component	CAS No.	Amount
Hydroquinone	123-31-9	<5%

Section 302 Extremely Hazardous Substances (TPQ): Hydroquinone 500/10,000 lbs

STATE REGULATIONS:

California Proposition 65: This product can expose you to chemicals including Ethylene Glycol, 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.

INTERNATIONAL CHEMICAL INVENTORY STATUS:

United States TSCA: All the components are listed.

Canada DSL: All the components are listed.

16. OTHER INFORMATION

NFPA Rating: Health = 3 Flammability = 1 Instability = 0

HMIS Rating: Health = 3^* Flammability = 1 Physical Hazard = 0

*Chronic Health Hazard

Date of Current Revision: 10/6/16 **Revision Summary:** New SDS **Date of Previous Revision:** None

NOTICE

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Sprint Systems of Photography, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.