



Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2012)

## SAFETY DATA SHEET

# KODAK C41 Developer Replenisher Part A

### SECTION 1: IDENTIFICATION

#### 1.1. Product identifier

**Trade name:** KODAK C41 Developer Replenisher Part A  
Obtain special instructions before use.

**Other names / Synonyms:**

**Product no.:** 5199005A

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses of the substance or mixture:** Photo chemical for developing color negative film.

**Uses advised against :** None known.

#### 1.3. Details of the supplier of the safety data sheet

**Company and address:** **Photo Systems Inc.**  
7190 Huron River Drive  
MI 48130 Dexter  
USA  
Tel: +1 (734) 424-9625  
Fax: +1-734-580-2199  
www.photosys.com

For further information about this product email EHS-Questions @photosys.com

**Manufacturer:** **Photo Systems Inc.**  
7190 Huron River Drive  
MI 48130 Dexter  
USA  
Tel: +1 (734) 424-9625  
Fax: +1-734-580-2199  
www.photosys.com

**Contact person:** Jake Bolt  
**E-mail:** jake@photosys.com

**SDS date:** 8/7/2024

**SDS Version:** 1.0

**Date of previous version:** 7/1/2024 (1.0)

#### 1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® (triage.webpoisoncontrol.org) to get specific guidance for your case  
See also section 4 "First aid measures".



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## SECTION 2: HAZARD(S) IDENTIFICATION

### OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

### 2.1. Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed.

Skin Irrit. 2; H315, Causes skin irritation.

Skin Sens. 1; H317, May cause an allergic skin reaction.

STOT SE 3; H335, May cause respiratory irritation.

### 2.2. Label elements

#### Hazard pictogram(s):



#### Signal word:

Warning

#### Hazard statement(s):

Harmful if swallowed. (H302)

Causes skin irritation. (H315)

May cause an allergic skin reaction. (H317)

May cause respiratory irritation. (H335)

#### Precautionary statement(s):

##### General:

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

##### Prevention:

Avoid breathing mist/vapour. (P261)

Wash hands and exposed skin thoroughly after handling. (P264)

Do not eat, drink or smoke when using this product. (P270)

Use only outdoors or in a well-ventilated area. (P271)

Wear eye protection/protective gloves/protective clothing. (P280)

##### Response:

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. (P301+P312)

IF ON SKIN: Wash with plenty of water and soap. (P302+P352)

Call a POISON CENTER/doctor if you feel unwell. (P312)

If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)

Take off contaminated clothing and wash it before reuse. (P362+P364)

##### Storage:

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

Store locked up. (P405)

##### Disposal:

Dispose of contents/container in accordance with local regulation (P501)

#### Additional labelling:

Not applicable.



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## 2.3. Other hazards

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Potassium Carbonate Liquid 47%	CAS No.: 584-08-7	60-80%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	
Dissolvine H-40	CAS No.: 139-89-9	5-10%	Acute Tox. 4, H302 Eye Dam. 1, H318	
Disodium disulphite	CAS No.: 7681-57-4	3-5%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Dam. 1, H318	
sodium bromide	CAS No.: 7647-15-6	<1%		

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

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### SECTION 4: FIRST-AID MEASURES

#### 4.1. Description of first aid measures

##### General information:

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

##### Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her. Get medical attention if symptoms occur.

##### Skin contact:

Immediately flush skin with plenty of water. Remove contaminated clothing. Get medical attention in if



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- Eye contact:** symptoms occur or in case of eczema or other skin disorders.  
If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.
- Ingestion:** Never give anything by mouth to an unconscious person. No NOT induce vomiting. Rinse mouth. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Get medical attention immediately.
- Burns:** Not applicable.

**4.2. Most important symptoms and effects, both acute and delayed**

Causes serious eye irritation.

Most important known symptoms and effects are described in the labeling (see Section 2.2 and in Section 11.)

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**Information to medics**

Bring this safety data sheet or the label from this product.

**SECTION 5: FIRE-FIGHTING MEASURES**

**5.1. Extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

**5.2. Special hazards arising from the substance or mixture**

In the event of fire, there are no incompatible materials. Hazardous decomposition products are Sulphur oxides, Carbon oxides, and Nitrogen oxides (NOx).

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

No unusual fire or explosion hazards noted

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Use personnel protective equipment and clothing recommended in Section 8.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

Contaminated areas may be slippery.

**6.2. Environmental precautions**

Prevent product from entering drains, water courses or onto the ground.



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Avoid discharge to lakes, streams, sewers, etc.  
Keep unauthorized persons away from the spill

**6.3. Methods and material for containment and cleaning up**

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

**6.4. Reference to other sections**

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

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**SECTION 7: HANDLING AND STORAGE**

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**7.1. Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get this material in contact with eyes. Do not taste or swallow. Avoid contact with skin and clothing. Avoid prolonged exposure. When using, Do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling.

**7.2. Conditions for safe storage, including any incompatibilities**

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

**Recommended storage material:** Always store in containers of the same material as the original container.

**Storage conditions:** Dry, cool and well ventilated

**Incompatible materials:** No specific requirements

**7.3. Specific end use(s)**

This product should only be used for applications quoted in section 1.2.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**8.1. Control parameters**

Occupational Exposure Limits

Disodium disulphite

Long term exposure limit (ACGIH TLV) (mg/m<sup>3</sup>): 5 mg/m<sup>3</sup>

Long term exposure limit (NIOSH REL) (mg/m<sup>3</sup>): 5 mg/m<sup>3</sup>

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

**8.2. Exposure controls**

Good ventilations (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits.

Compliance with the given occupational exposure limits values should be controlled on a

regular basis.

**General recommendations:** Smoking, drinking and consumption of food is not allowed in the work area.

**Exposure scenarios:** There are no exposure scenarios implemented for this product.

**Exposure limits:** Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

**Appropriate technical measures:** The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Apply standard precautions during use of the product. Avoid inhalation of vapours.


**Hygiene measures:** Take off contaminated clothing and wash it before reuse.

**Measures to avoid environmental exposure:** No specific requirements.


**Individual protection measures, such as personal protective equipment**

**Generally:** Use only protective equipment with a recognized certification mark, e.g. the UL mark.


**Respiratory Equipment:**

Type	Class	Colour	Standards	
Respiratory protection is not needed in the event of adequate ventilation.				
Self contained breathing apparatus			EN137, EN139	

**Skin protection:**

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	


**Hand protection:**

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Gloves	-	-	EN374	

**Eye protection:**



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Type	Standards	
Safety glasses with side shields.	EN166	

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>Physical state:</b>	Liquid
<b>Colour:</b>	Colourless
<b>Odour:</b>	None
<b>Odour threshold (ppm):</b>	No data available
<b>pH:</b>	11.3
<b>pH in solution:</b>	10.2 (11.9%)
<b>Density (g/cm<sup>3</sup>):</b>	Testing not relevant or not possible due to the nature of the product. -
<b>Relative density:</b>	1.42
<b>Kinematic viscosity:</b>	No data available
<b>Particle characteristics:</b>	Not applicable

#### Phase changes

<b>Melting point (°F):</b>	Not applicable
<b>Softening point/range (°F):</b>	Does not apply to liquids.
<b>Boiling point (°F):</b>	212
<b>Boiling point (°C):</b>	100
<b>Vapour pressure:</b>	18 mmHg
<b>Relative vapour density:</b>	No data available
<b>Decomposition temperature (°F):</b>	No data available

#### Data on fire and explosion hazards

<b>Flash point (°F):</b>	Not applicable
<b>Flammability (°F):</b>	No data available
<b>Auto-ignition temperature (°F):</b>	No data available
<b>Explosion limits (% v/v):</b>	Testing not relevant or not possible due to the nature of the product.

#### Solubility

<b>Solubility in water:</b>	Completely soluble
<b>n-octanol/water coefficient (LogKow):</b>	Testing not relevant or not possible due to the nature of the product.
<b>Solubility in fat (g/L):</b>	Testing not relevant or not possible due to the nature of the product.



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## 9.2. Other information

**Evaporation rate (n-butylacetate = 100):** No data available

**Other physical and chemical parameters:** No data available.

**Oxidizing properties:** Not applicable

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

This product is stable and non-reactive under normal conditions of use, storage and transport. Hazardous polymerization does not occur.

### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

### 10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

No specific requirements

### 10.6. Hazardous decomposition products

Hazardous decomposition products are: Sulphur oxides, Carbon oxides. Nitrogen oxides (NOx).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Acute toxicity

Prolonged inhalation may be harmful. Expected to be a low hazard for recommended handling. Causes skin irritation. Causes serious eye irritation. Expected to be a low ingestion hazard. Irritation effects: this product contains substances, which may cause irritation upon exposure to skin, eyes, or lungs.

#### Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

#### Serious eye damage/irritation

Causes eye irritation.

#### Respiratory sensitisation

Not a respiratory sensitizer.

#### Skin sensitisation

This product is not expected to cause skin sensitization.

#### Germ cell mutagenicity

No data available to indicate product or any components present at greater than 1% are mutagenic or genotoxic.

#### Carcinogenicity

Not classified as to carcinogenicity to humans.





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### **Reproductive toxicity**

This product is not expected to cause reproductive or developmental effects.

### **STOT-single exposure**

Not classified.

### **STOT-repeated exposure**

Not classified

### **Aspiration hazard**

Based on available data, the classification criteria are not met.

### **Long term effects**

Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

### **Other information**

None known

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## **SECTION 12: ECOLOGICAL INFORMATION**

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### **12.1. Toxicity**

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### **12.2. Persistence and degradability**

Readily biodegradable

### **12.3. Bioaccumulative potential**

Based on available data, the classification criteria are not met.

### **12.4. Mobility in soil**

No data available.

### **12.5. Results of PBT and vPvB assessment**

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

### **12.6. Other adverse effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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## **SECTION 13: DISPOSAL CONSIDERATIONS**

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### **Waste treatment methods**

Waste Treatment Methods: Product waste material must be disposed of in accordance with the national and local regulations. handle uncleaned containers like the product itself.

### **RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)**

None of the components are listed

### **Specific labelling**

### **Contaminated packing**

Packaging containing residues of the product must be disposed of similarly to the product.



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**SECTION 14: TRANSPORT INFORMATION**

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
DOT	-	Not regulated as dangerous goods entry		-	No	See below for additional information.
IMDG	-	Not regulated as dangerous goods entry		-	No	See below for additional information.
IATA	-	Not regulated as dangerous goods entry		-	No	See below for additional information.

\* Packing group

\*\* Environmental hazards

**Additional information**

Not dangerous goods according to DOT, IATA and IMDG.

**14.6. Special precautions for user**

Not applicable.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available.

**SECTION 15: REGULATORY INFORMATION**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**15.2. U.S. Federal regulations**

**TSCA (the non-confidential portion):**

Potassium Carbonate Liquid 47% is listed  
 Dissolvine H-40 is listed  
 Disodium disulphite is listed  
 sodium bromide is listed

**Clean Air Act:**

None of the components are listed

**EPCRA Section 302:**

None of the components are listed

**EPCRA Section 304:**

None of the components are listed

**EPCRA section 313:**

None of the components are listed

**CERCLA:**

None of the components are listed

**State regulations**

**California / Prop. 65:**

None of the components are listed

**Massachusetts / Right To Know Act:**

Disodium disulphite is listed



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**New Jersey / Right To Know Act:** Disodium disulphite / Substance number: 1708  
Disodium disulphite is on the Special Health Hazard Substance List

—  
sodium bromide / Substance number:

**New York / Right To Know Act:** Disodium disulphite is listed  
Disodium disulphite is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds

**Pennsylvania / Right To Know Act:** Disodium disulphite is listed

—  
sodium bromide is listed

**NFPA**

Health hazard: 2  
Fire hazard: 0  
Instability hazard: 0

**15.4. Restrictions for application**

No special.

**15.5. Demands for specific education**

No specific requirements.

**15.6. Additional information**

Not applicable.

**15.7. Chemical safety assessment**

No

**15.8. Sources**

OSHA Hazard Communication Standard (29 CFR 1910.1200)

**SECTION 16: OTHER INFORMATION**

**Full text of H-phrases as mentioned in section 3**

- H302, Harmful if swallowed.
- H315, Causes skin irritation.
- H317, May cause an allergic skin reaction.
- H318, Causes serious eye damage.
- H319, Causes serious eye irritation.
- H335, May cause respiratory irritation.

**The full text of identified uses as mentioned in section 1**

None known.

**Abbreviations and acronyms**

- ACGIH = American Conference of Governmental Industrial Hygienists
- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate



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BCF = Bioconcentration Factor  
CAS = Chemical Abstracts Service  
CERCLA = Comprehensive Environmental Response Compensation and Liability Act  
DOT = Department of Transportation  
EINECS = European Inventory of Existing Commercial chemical Substances  
EPCRA = Emergency Planning and Community Right-To-Know Act  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
HCIS = Hazardous Chemical Information System  
HNOC = Hazards Not Otherwise Classified  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
NFPA = National Fire Protection Association  
NIOSH = National Institute for Occupational Safety and Health  
OECD = Organisation for Economic Co-operation and Development  
OSHA = Occupational Safety and Health Administration  
PBT = Persistent, Bioaccumulative and Toxic  
RCRA = Resource Conservation and Recovery Act  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
RRN = REACH Registration Number  
SARA = Superfund Amendments and Reauthorization Act  
SCL = A specific concentration limit.  
STEL = Short-term exposure limits  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
TSCA = The Toxic Substances Control Act  
TWA = Time weighted average  
UN = United Nations  
UVBC = Unknown or variable composition, complex reaction products or of biological materials  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

### **Additional information**

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

### **The safety data sheet is validated by**

Validated by Photo Systems Inc./cf

### **Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

DISCLAIMER: The information contained in this Safety Data Sheet is correct to the best of our knowledge and experience at the time of publication. However, no warranty is expressed or implied regarding the accuracy of this data nor the results to be obtained from the use thereof. It is the user's responsibility to assure the proper use, storage, and disposal of these materials to ensure the safety and health of the user and to protect the environment.



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Country-language: US-en