



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

SAFETY DATA SHEET

KODAK C41 Developer Replenisher Part C

SECTION 1: IDENTIFICATION

1.1. Product identifier

Trade name: Obtain special instructions before use.

Product no.: 5199005C

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: 8/9/2024

SDS Version: 1.0

Date of previous version: 6/17/2024 (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".

SECTION 2: HAZARD(S) IDENTIFICATION



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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

Met. Corr. 1; H290, May be corrosive to metals.

Acute Tox. 4; H302, Harmful if swallowed.

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

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s):



Signal word:

Warning

Hazard statement(s):

May be corrosive to metals. (H290)

Harmful if swallowed. (H302)

May cause an allergic skin reaction. (H317)

Causes serious eye irritation. (H319)

May cause damage to organs through prolonged or repeated exposure. (H373)

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:

Keep only in original packaging. (P234)

Do not breathe vapour/mist. (P260)

Wash hands thoroughly after handling. (P264)

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

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

Get medical advice/attention if you feel unwell. (P314)

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

If eye irritation persists: Get medical advice/attention. (P337+P313)

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

Absorb spillage to prevent material damage. (P390)

Storage:

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Disposal:

Dispose of contents/container in accordance with local regulation



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(P501)

Additional labelling: Not applicable.

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
N4-ETHYL-N4-(2-HYDROXYETHYL)-2-METHYL-1,4-PHENYLENEDIAMINE SULFATE SALT	CAS No.: 25646-77-9	10-15%	Acute Tox. 3, H301 Skin Sens. 1, H317 Skin Sens. 1A, H317 STOT RE 2, H373	
Disodium disulphite	CAS No.: 7681-57-4	1-3%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Dam. 1, H318	

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



- Eye contact:** symptoms occur or in case of eczema or other skin disorders.
If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. 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

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and slurred vision. Skin irritation. May cause redness and pain. May cause an allergic reaction. Dermatitis. Rash. Edema. Prolonged exposure may cause chronic effects.
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

If eye irritation persists: Get medical advice/attention.

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.

5.2. Special hazards arising from the substance or mixture

Incompatible materials are strong oxidizing agents. Metals. Contact with strong acids may liberate sulphur dioxide.

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.

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

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.

Contaminated areas may be slippery.



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6.2. Environmental precautions

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

SECTION 7: HANDLING AND STORAGE

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.

Store in a container with a resistant inner liner.

Recommended storage material: Keep only in original packaging.
Container with a resistant inner liner.

Storage conditions: Dry, cool and well ventilated

Incompatible materials: Incompatible materials are Strong oxidizing agents.
Metals. Contact with strong acids may liberate sulphur dioxide.

7.3. Specific end use(s)

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational Exposure Limits

Disodium disulphite

Long term exposure limit (ACGIH TLV) (mg/m³): 5 mg/m³

Long term exposure limit (NIOSH REL) (mg/m³): 5 mg/m³

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:** In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.
- Measures to avoid environmental exposure:** Keep damming materials near the workplace. If possible, collect spillage during work.


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.				
organic vapor/P95	P95			


Skin protection:

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


Hand protection:



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

Eye protection:

Type	Standards	
Wear vapor-tight chemical goggle and a face shield.		

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Clear Light Yellow
Odour:	sharp sulfur dioxide
Odour threshold (ppm):	No data available
pH:	2.2
Density (g/cm³):	Testing not relevant or not possible due to the nature of the product.
	-
Relative density:	1.06
Kinematic viscosity:	No data available
Particle characteristics:	Not applicable

Phase changes

Melting point (°F):	No data available
Softening point/range (°F):	Does not apply to liquids.
Boiling point (°F):	212
Boiling point (°C):	100
Vapour pressure:	18 mmHg
Relative vapour density:	0.6
Decomposition temperature (°F):	No data available

Data on fire and explosion hazards

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

Solubility



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Solubility in water:	Completely soluble
n-octanol/water coefficient (LogKow):	Testing not relevant or not possible due to the nature of the product.
Solubility in fat (g/L):	Testing not relevant or not possible due to the nature of the product.
9.2. Other information	
Dust explosion class:	St0 (No explosion)
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

May be corrosive to metals.

10.2. Chemical stability

This product is stable and non-reactive under normal conditions of use, storage and transport.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. Conditions to avoid

May be corrosive to metals.

10.5. Incompatible materials

Strong oxidizing agents

Metal

Contact with strong acids liberates sulphur dioxide.

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

May cause damage to organs by inhalation. May cause damage to organs through prolonged or repeated exposure by inhalation. Expected to be a low hazard for recommended handling. In contact with strong acids or if heated, sulphites may liberate sulphur dioxide gas. Sulphur dioxide gas is irritating to the respiratory tract. Some asthmatics or hypersensitive individuals may experience breathing difficulties.

Toxic if swallowed. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness, and diarrhea.

Acute toxicity

Harmful if swallowed.

Skin corrosion/irritation

Causes skin irritation.



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Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Not a respiratory sensitizer.

Skin sensitisation

May cause an allergic reaction.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

May cause damage to organs (kidney).

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

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

Long term effects

May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation can be harmful.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

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

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

12.6. Other adverse effects

None known.



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SECTION 13: DISPOSAL CONSIDERATIONS

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.

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	2922	UN2922 Corrosive liquid, toxic, n.o.s. (4-(N-ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine sulfatate)	Transport hazard class: 8, 6.1 Label: 8+6.1 Classification code: CT1 	III	No	Limited quantities: 1L Tunnel restriction code: (C/D) See below for additional information.
IMDG	2922	UN2922 Corrosive liquid, toxic, n.o.s. (4-(N-ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine sulfatate)	Transport hazard class: 8, 6.1 Label: 8+6.1 Classification code: CT1 	III	No	Limited quantities: 1L See below for additional information.
IATA	2922	UN2922 Corrosive liquid, toxic, n.o.s. (4-(N-ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine sulfatate)	Transport hazard class: 8, 6.1 Label: 8+6.1 Classification code: CT1 	III	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

LIMITED QUANTITY EXEMPTION

NOT REGULATED AS A DANGEROUS GOOD - Due to Limited Quantity Exemptions. This product is packaged in less than 1 L bottles.

14.6. Special precautions for user



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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):

N4-ETHYL-N4-(2-HYDROXYETHYL)-2-METHYL-1,4-PHENYLENEDIAMINE SULFATE SALT is listed
Disodium disulphite 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

New Jersey / Right To Know Act:

Disodium disulphite / Substance number: 1708
Disodium disulphite is on the Special Health Hazard Substance List

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

NFPA

Health hazard: 3

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



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

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

H301, Toxic if swallowed.

H302, Harmful if swallowed.

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H373, May cause damage to organs through prolonged or repeated exposure.

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

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



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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.

Country-language: US-en