



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

SAFETY DATA SHEET

KODAK PROFESSIONAL Fixer Powder

SECTION 1: IDENTIFICATION

1.1. Product identifier

Trade name: KODAK PROFESSIONAL Fixer Powder
Obtain special instructions before use.

Product no.: 1058304

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

Relevant identified uses of the substance or mixture: Photographic processing chemical (developer/activator) for black and white film and paper.

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: 2/19/2024

SDS Version: 2.0

Date of previous version: 11/3/2023 (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

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

Skin Irrit. 2; H315, Causes skin irritation.

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

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

STOT SE 3; H335, May cause respiratory 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):

Causes skin irritation. (H315)

May cause an allergic skin reaction. (H317)

Causes serious eye irritation. (H319)

May cause respiratory irritation. (H335)

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:

Do not breathe dust. (P260)

Wash hands thoroughly after handling. (P264)

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

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

▼Response:

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)

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

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)

▼Storage:

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



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Disposal: Store locked up. (P405)
 Dispose of contents/container in accordance with local regulation (P501)

Additional labelling: Not applicable.

2.3. Other hazards

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

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
Sodium Thiosulfate	CAS No.: 7772-98-7	60-80%		
Aluminum ammonium sulfate dodecahydrate	CAS No.: 7784-26-1	10-15%	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	
Sodium acetate	CAS No.: 127-09-3	5-10%		
Disodium disulphite	CAS No.: 7681-57-4	5-10%	Acute Tox. 3, H301 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319	
diboron trioxide	CAS No.: 1303-86-2	1-3%	Eye Irrit. 2, H319 Acute Tox. 4, H332 Repr. 1B, H360FD	
Borax Pentahydrate	CAS No.: 12179-04-3	<1%	Eye Irrit. 2, H319 Repr. 1B, H360 (SCL: 6.50 %)	
Trisodium citrate dihydrate	CAS No.: 6132-04-3	<1%		
citric acid	CAS No.: 77-92-9	<1%	Eye Irrit. 2, H319	

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 symptoms occur or in case of eczema or other skin disorders.

Eye contact:

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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.

No unusual fire or explosion hazards noted

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, incompatible materials are Acids, Strong bases. Sodium hypochlorite



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(bleach). Halogenated materials. Oxidizing agents. Contact with strong acids may liberate ammonia, contact with sodium hypochlorite (bleach) may liberate hazardous materials. Hazardous decomposition products are Sulfuric oxides, Ammonia, and Chloramine.

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.

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.

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

Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust.

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

6.4. Reference to other sections

See Section 8 "Exposure controls/personal protection" for information on personal protection.

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

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.

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. ▼Conditions for safe storage, including any incompatibilities

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

Powder trickling out onto the floor or onto other containers must be prevented.

Recommended storage material: Keep only in original packaging.

Storage temperature: Dry, cool and well ventilated

▼Incompatible materials: Strong acids
Strong oxidizing agents



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Halogenated materials
Bases
Sodium hypochlorite (bleach)

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

diboron trioxide

Long term exposure limit (OSHA Table Z-1) (mg/m³): 15 (total dust)

Long term exposure limit (ACGIH TLV) (mg/m³): 10 Total dust

Long term exposure limit (NIOSH REL) (mg/m³): 10 (Total dust)

Borax Pentahydrate

Short term exposure limit (STEL) (ACGIH TLV) (ppm): 5

Long term exposure limit (OSHA Table Z-1) (mg/m³): 10

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

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: Apply standard precautions during use of the product. Avoid inhalation of gas or dust. Airborne gas and dust concentrations 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 emergency eyewash and showers are clearly marked. Airborne gas and dust concentrations must be kept at a minimum. Provide efficient mechanical ventilation. If not possible use suitable respiratory equipment.

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





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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	
SL	P3	White	EN149	
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:

Type	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

- Physical state:** Powder
- Colour:** White
- Odour:** None
- Odour threshold (ppm):** No data available
- pH:** Not applicable - product is a solid
- ▼pH in solution:** 4.2-4.6 (%)
- ▼Density (g/cm³):** Not applicable - product is a solid
- Relative density:** Not applicable - product is a solid
- Kinematic viscosity:** No data available



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Phase changes

Melting point (°F):	No data available
Boiling point (°F):	Not applicable - product is a solid
▼Vapour pressure:	Not applicable - product is a solid
▼Relative vapour density:	Not applicable - product is a solid
Decomposition temperature (°F):	No data available
Evaporation rate (n-butylacetate = 100):	Not applicable - product is a solid

Data on fire and explosion hazards

Flash point (°F):	No data available
Flammability (°F):	No data available
Auto-ignition temperature (°F):	No data available
▼Explosion limits (% v/v):	Not applicable

Solubility

Solubility in water:	Completely soluble
n-octanol/water coefficient (LogKow):	No data available
Solubility in fat (g/L):	No data available

9.2. Other information

Sensitivity to shock:	No
Dust explosion class:	St0 (No explosion)
Evaporation rate (n-butylacetate = 100):	Not applicable - product is a solid
VOC (g/L):	0
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

Incompatible with strong acids which may liberate sulphur dioxide.
Keep away from heat.

10.5. ▼Incompatible materials



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Acids, Strong bases. Sodium hypochlorite (bleach). Halogenated materials. Oxidizing agents. Contact with strong acids may liberate ammonia. Contact with sodium hypochlorite (bleach) may liberate hazardous materials.

10.6. ▼Hazardous decomposition products

Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas). Contact with strong acids may liberate sulphur dioxide. Contact with base liberates flammable material. Contact with base liberates ammonia.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

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

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

▼Respiratory sensitisation

Not a respiratory sensitizer.

▼Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

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

Carcinogenicity

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

▼Reproductive toxicity

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

▼STOT-single exposure

May cause respiratory irritation.

▼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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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



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possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.2. ▼Persistence and degradability

Not 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.

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	-	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



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LIMITED QUANTITY EXEMPTION
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

Product registration number
UFI: 1GGO-JVVS-GFOJ-6SYK

15.2. U.S. Federal regulations

TSCA (the non-confidential portion):
Sodium Thiosulfate is listed
Sodium acetate is listed
Disodium disulphite is listed
diboron trioxide is listed
citric acid 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
diboron trioxide is listed
Borax Pentahydrate is listed

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

—
diboron trioxide / Substance number: 0243

—
Borax Pentahydrate / 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

—
diboron trioxide is listed
diboron trioxide is regulated with a Treshold Reporting
Quantity (TRQ) of: 100 pounds



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▼ **Pennsylvania / Right To Know Act:** Disodium disulphite is listed
—
diboron trioxide is listed
—
Borax Pentahydrate is listed
—

NFPA

Health hazard: 3
Fire hazard: 1
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

H301, Toxic if swallowed.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H319, Causes serious eye irritation.
H332, Harmful if inhaled.
H335, May cause respiratory irritation.
H360, May damage fertility or the unborn child.
H360FD, May damage fertility. May damage the unborn child.

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



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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 blue 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 or 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