

SAFETY DATA SHEET

KODAK PROFESSIONAL Rapid Selenium Toner

SECTION 1: IDENTIFICATION Product identifier 1.1. **Trade name:** KODAK PROFESSIONAL Rapid Selenium Toner Obtain special instructions before use. Product no.: 1058536 1.2. Relevant identified uses of the substance or mixture and uses advised against Photographic chemical for processing black and white film Relevant identified uses of the substance or mixture: and paper. None known. Uses advised against : 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: 2/22/2024 **SDS Version:** 2.0 Date of previous version: 12/21/2023 (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. Eye Irrit. 2; H319, Causes serious eye irritation.
- 2.2. Label elements Hazard pictogram(s):



Signal word:	Warning
▼ Hazard statement(s):	Causes skin irritation. (H315) Causes serious eye irritation. (H319)
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:	Wash hands thoroughly after handling. (P264) Wear eye protection/protective gloves/protective clothing. (P280)
▼ Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) If eye irritation persists: Get medical advice/attention. (P337+P313)
Storage:	-
▼ Disposal:	-
Additional labelling:	Not applicable.
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

2.3.

Not applicable. This product is a mixture.

3.2. ▼Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Ammonium Thiosulfate 60% Solution	CAS No.: 7783-18-8	40-60%		



Sodium Sulfite	CAS No.: 7757-83-7	10-15%		
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 Hydroxide 50% Solution	CAS No.: 1310-73-2	1-3%	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318	
Sodium selenite	CAS No.: 10102-18-8	1-3%	Acute Tox. 2, H300 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 2, H330	

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 meas	ures
	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.

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. No unusual fire or explosion hazards noted

5.2. Special hazards arising from the substance or mixture

In the event of fire, incompatible materials are 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. 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. **v** 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

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.

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.

Recommended storage material:	Keep only in original packaging.
Storage temperature:	Dry, cool and well ventilated
Incompatible materials:	Strong acids Bases Sodium hypochlorite (bleach) Strong oxidizing agents Halogenated materials

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. **v** 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

Sodium Hydroxide 50% Solution Long term exposure limit (OSHA Table Z-1) (mg/m³): 2 Long term exposure limit (ACGIH TLV) (mg/m³): (Ceiling) 2 Ceiling value (NIOSH REL) (mg/m³): 2

Sodium selenite Long term exposure limit (OSHA Table Z-1) (mg/m³): 0.2 Long term exposure limit (ACGIH TLV) (mg/m³): 0.2 Long term exposure limit (NIOSH REL) (mg/m³): 0.2



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

8.2. **v** Exposure controls

Good ventilations (typically 10 air changes per hour) should be uses. 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	No specific requirements.

exposure:

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:

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

Skin protection:

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

Hand protection:



Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Gloves	-	-	EN374	
r	Chan danda			
Туре	Standards			
Safety glasses with side shields.	EN166			

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

		• •
	Physical state:	Liquid
	Colour:	Colourless
	Odour:	Ammonia odor
	Odour threshold (ppm):	Testing not relevant or not possible due to the nature of the product.
	pH:	9
	pH in solution:	8.66 (25%)
	Density (g/cm³):	Testing not relevant or not possible due to the nature of the product.
		-
	Relative density:	1.3
	Kinematic viscosity:	No data available
	Particle characteristics:	Not applicable - product is a liquid
Phase	e changes	
	Melting point (°F):	Not applicable - product is a liquid
	Softening point/range (waxes and pastes) (°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
	Evaporation rate (n-butylacetate = 100):	No data available
Data	on fire and explosion hazards	
	Flash point (°F):	Not applicable
	Flammability (°F):	The material is not combustible.



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

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

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

Keep away from heat. Mechanical influences (e.g. Shock, pressure, impact, friction). Fire, sparks or other ignition sources.

10.5. Incompatible materials 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 Sulphur oxides. Ammonia. Chloramine.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects Harmful if swallowed.

▼ Acute toxicity

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

Skin corrosion/irritation



Prolonged skin contact may cause temporary irritation.

Serious eye damage/irritation

Direct contact with eyes may cause temporary irritation.

Respiratory sensitisation

Not a respiratory sensitizer.

Skin sensitisation

May cause an allergic reaction.

Germ cell mutagenicity

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

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Long term effects

May cause damage to organs (central nervous system, kidney, blood, liver) through prolonged or repeated exposure.

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

Other information

Sodium selenite has been classified by IARC as a group 3 carcinogen.

Group 3: The agent is not classifiable as to its carcinogenicity to humans This category is used most commonly when the evidence of carcinogenicity in humans is inadequate, the evidence of carcinogenicity in experimental animals is limited (or inadequate), and the mechanistic evidence is limited (or inadequate).

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** 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 warning 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*	1	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.
ΙΑΤΑ	-	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):	Ammonium Thiosulfate 60% Solution is listed Sodium Sulfite is listed Disodium disulphite is listed Sodium Hydroxide 50% Solution is listed Sodium selenite is listed
	Clean Air Act:	Sodium selenite is regulated as a hazardous air pollutant (HAPS)
	EPCRA Section 302:	Sodium selenite is regulated with a Treshold Planning Quantity (TPQ) of: 100/10000 pounds
	EPCRA Section 304:	Sodium selenite is regulated with a Reportable Quantity (RQ) of: 100 pounds
	EPCRA section 313:	Sodium selenite is listed
	CERCLA:	Sodium Hydroxide 50% Solution is regulated with a Reportable Quantity (RQ) of: 1000 pounds Sodium selenite is regulated with a Reportable Quantity (RQ) of: 100 pounds
State regulations		
	California / Prop. 65:	None of the components are listed
	Massachusetts / Right To Know Act:	Ammonium Thiosulfate 60% Solution is listed Disodium disulphite is listed Sodium Hydroxide 50% Solution is listed Sodium selenite is listed
	New Jersey / Right To Know Act:	Disodium disulphite / Substance number: 1708 Disodium disulphite is on the Special Health Hazard Substance List
		Sodium Hydroxide 50% Solution / Substance number: 1706 Sodium Hydroxide 50% Solution is on the Special Health Hazard Substance List
		 Sodium selenite / Substance number: 1727
	New York / Right To Know Act:	— Ammonium Thiosulfate 60% Solution is listed Ammonium Thiosulfate 60% Solution is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds
		 Disodium disulphite is listed Disodium disulphite is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds
		[—] Sodium Hydroxide 50% Solution is listed Sodium Hydroxide 50% Solution is regulated with a Reportable Quantity (RQ) of: 1000 pounds Sodium Hydroxide 50% Solution is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds
		 Sodium selenite is listed



Sodium selenite is regulated with a Reportable Quantity (RQ) of: 100 pounds Sodium selenite is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds Sodium selenite is regulated with a Treshold Planning Quantity (TPQ) of: 100*/10000 pounds *Quantity applies if the substance is present in the form of a fine powder (particle size less than 100 microns), molten or in solution, or reacts with water.

Pennsylvania / Right To Know Act: Ammonium Thiosulfate 60% Solution is listed Ammonium Thiosulfate 60% Solution is hazardous to the environment (E)

Disodium disulphite is listed

Sodium Hydroxide 50% Solution is listed Sodium Hydroxide 50% Solution is hazardous to the environment (E)

Sodium selenite is listed Sodium selenite is hazardous to the environment (E)

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

- H290, May be corrosive to metals.
- H300, Fatal if swallowed.
- H302, Harmful if swallowed.
- H314, Causes severe skin burns and eye damage.
- H315, Causes skin irritation.
- H317, May cause an allergic skin reaction.
- H318, Causes serious eye damage.



H319, Causes serious eye irritation. H330, Fatal if inhaled.

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 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