SAFETY DATA SHEET

Kodak alaris

1. Identification

Product identifier	Hypo Clearing Agent
Other means of identification	
SDS number	PCD 0515
Product code	1058312
Recommended use	Photographic processing chemical.
Recommended restrictions	For industrial use only.
Manufacturer/Importer/Supplie	er/Distributor information
Supplier	Kodak Alaris Inc
Address	336 Initiative Drive
	Rochester, NY 14624

e-mailEHS-Questions@Kodakalaris.comEmergency telephone1-800-424-9300OR +1 703-741-5970numberOROROR

2. Hazard(s) identification

Label elements

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Signal word	Danger
Hazard statement	Harmful if swallowed. Causes serious eye damage.
Precautionary statement	
Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection.
Response	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	Contact with acids liberates toxic gas.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Sodium sulphite		7757-83-7	75 - 80
Sodium metabisulphite		7681-57-4	15 - 20
Ethylenediaminetetraacetic acid tetrasodium salt		64-02-8	1 - 5

Chemical name	Common name and synonyms	CAS number	%
Sodium citrate		6132-04-3	1 - 5
All concentrations are in percent b secrets.	y weight. Chemical ranges are provided in lieu o	f exact percentages, which are	e withheld as trade
4. First-aid measures			
Inhalation	Move to fresh air. Call a physician if symptoms	s develop or persist.	
Skin contact	Wash off with soap and water. Get medical att	ention if irritation develops and	l persists.
Eye contact	Do not rub eyes. Immediately flush eyes with p contact lenses, if present and easy to do. Contact lenses, if present and easy to do.		
Ingestion	Rinse mouth. If vomiting occurs, keep head low Get medical advice/attention if you feel unwell		sn't get into the lungs.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include s vision. Permanent eye damage including blind tract, skin and eyes.		
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and trea under observation. Symptoms may be delayed		ı warm. Keep victim
General information	Ensure that medical personnel are aware of th protect themselves. Show this safety data she		e precautions to
5. Fire-fighting measures			
Suitable extinguishing media	Use extinguishing measures that are appropriate on the second sec	ate to local circumstances and	the surrounding
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this	s will spread the fire.	
Specific hazards arising from the chemical	During fire, gases hazardous to health may be	formed.	
Special protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and produce hazardous decomposition products.	protective clothing. Fire or exc	essive heat may
Fire fighting equipment/instructions	Use water spray to cool unopened containers.		
Specific methods	Use standard firefighting procedures and cons	ider the hazards of other invol	ved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.
	Large Spills: Wet down with water and dike for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water.
	Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene

practices.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. ACGIH Threshold Limit Components	t Values Type	Value
Sodium metabisulphite (CAS 7681-57-4)	TWA	5 mg/m3
US. NIOSH: Pocket Guide t	o Chemical Hazards	
Components	Туре	Value
Sodium metabisulphite (CAS 7681-57-4)	TWA	5 mg/m3
Biological limit values	No biological exposure limits noted for	or the ingredient(s).
Appropriate engineering controls	should be matched to conditions. If a or other engineering controls to main exposure limits have not been establ engineering measures are not suffici Occupational Exposure Limit (OEL), ground, cut, or used in any operation	air changes per hour) should be used. Ventilation rates pplicable, use process enclosures, local exhaust ventilation, tain airborne levels below recommended exposure limits. If ished, maintain airborne levels to an acceptable level. If ent to maintain concentrations of dust particulates below the suitable respiratory protection must be worn. If material is which may generate dusts, use appropriate local exhaust the recommended exposure limits. Provide eyewash station.
Individual protection measures	, such as personal protective equipm	ent
Eye/face protection	Wear safety glasses with side shield	s (or goggles) and a face shield.
Skin protection Hand protection	Wear appropriate chemical resistant	gloves.
Other	Wear appropriate chemical resistant	clothing.
Respiratory protection	In case of insufficient ventilation, wea	ar suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.
General hygiene considerations		ays observe good personal hygiene measures, such as nd before eating, drinking, and/or smoking. Routinely wash ent to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Powder.
Color	White
Odor	odorless
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or expl	osive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.

Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Appreciable.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Specific gravity	> 1
10. Stability and reactivity	
Reactivity	The product is stable and pop-reactive under pormal conditions of use, storage and transport

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Decomposes on heating.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Acids. Contact with strong acids may liberate sulphur dioxide.
Hazardous decomposition products	Carbon oxides. Sulfur oxides.

11. Toxicological information

Information on likely routes of exposure

information on intery routes of e	
Inhalation	Dust may irritate respiratory system. 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 difficulty breathing.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Causes serious eye damage.
Ingestion	Harmful if swallowed. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, stomach upset, hives, faintness, weakness and diarrhea.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity	Harmful if swallowed.		
Components	Species	Test Results	
Sodium citrate (CAS 613	2-04-3)		
<u>Acute</u>			
Dermal			
LD50	Rat	2000 mg/kg	
Oral			
LD50	Rat	> 5000 mg/kg	
Sodium metabisulphite (C	CAS 7681-57-4)		
<u>Acute</u>			
Oral			
LD50	Sheep	2.515 g/kg	

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.			
Serious eye damage/eye irritation	Causes serious eye damage.			
Respiratory or skin sensitizatio	n			
Respiratory sensitization	Not a respiratory sensitizer.			
Skin sensitization	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 0.1% are mutagenic or genotoxic.			
Carcinogenicity	Not classifiable as to carcinogenicity to humans.			
IARC Monographs. Overall	Evaluation of Carcinogenicity			
Sodium metabisulphite (Sodium sulphite (CAS 77 OSHA Specifically Regulate		e as to carcinogenicity to humans. e as to carcinogenicity to humans.		
Not regulated.	ogram (NTP) Report on Carcinogens			
Not listed.				
Reproductive toxicity	This product is not expected to cause reproduct	ive or developmental effects.		
Specific target organ toxicity - single exposure	Not classified.			
Specific target organ toxicity - repeated exposure	Not classified.			
Aspiration hazard	Not an aspiration hazard.			
Chronic effects	Prolonged inhalation may be harmful.			
12. Ecological information	1			
Ecotoxicity	Based on available data, the classification criter environment.	ia are not met for hazardous to the aquatic		
Components	Species	Test Results		
	Species cid tetrasodium salt (CAS 64-02-8)	Test Results		
	•	Test Results		
Ethylenediaminetetraacetic a	•	Test Results 472 - 500 mg/l, 96 hours		
Ethylenediaminetetraacetic a Aquatic	cid tetrasodium salt (CAS 64-02-8)LC50Bluegill (Lepomis macrochirus)			
Ethylenediaminetetraacetic a Aquatic Fish	cid tetrasodium salt (CAS 64-02-8)LC50Bluegill (Lepomis macrochirus)	472 - 500 mg/l, 96 hours		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04	cid tetrasodium salt (CAS 64-02-8)LC50Bluegill (Lepomis macrochirus)	472 - 500 mg/l, 96 hours		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3)	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3) EC50 Water flea (Ceriodaphnia dubia)	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea Persistence and degradability	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) -3) EC50 Water flea (Ceriodaphnia dubia) No data is available on the degradability of any	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea Persistence and degradability Bioaccumulative potential	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3) EC50 Water flea (Ceriodaphnia dubia) No data is available on the degradability of any No data available.	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours ingredients in the mixture.		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea Persistence and degradability Bioaccumulative potential Mobility in soil	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3) EC50 Water flea (Ceriodaphnia dubia) No data is available on the degradability of any No data available. No data available. No other adverse environmental effects (e.g. oz potential, endocrine disruption, global warming p	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours ingredients in the mixture.		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea Persistence and degradability Bioaccumulative potential Mobility in soil Other adverse effects	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3) EC50 Water flea (Ceriodaphnia dubia) No data is available on the degradability of any No data available. No data available. No other adverse environmental effects (e.g. oz potential, endocrine disruption, global warming p ns Collect and reclaim or dispose in sealed contain	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours ingredients in the mixture. cone depletion, photochemical ozone creation potential) are expected from this component.		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea Persistence and degradability Bioaccumulative potential Mobility in soil Other adverse effects 13. Disposal consideratio	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3) EC50 Water flea (Ceriodaphnia dubia) No data is available on the degradability of any No data available. No data available. No other adverse environmental effects (e.g. oz potential, endocrine disruption, global warming p ns Collect and reclaim or dispose in sealed contain material under controlled conditions in an appro	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours ingredients in the mixture. cone depletion, photochemical ozone creation potential) are expected from this component. hers at licensed waste disposal site. Incinerate the wed incinerator. Dispose of contents/container in onal regulations.		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea Persistence and degradability Bioaccumulative potential Mobility in soil Other adverse effects 13. Disposal consideratio Disposal instructions	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3) EC50 Water flea (Ceriodaphnia dubia) No data is available on the degradability of any No data available. No data available. No other adverse environmental effects (e.g. oz potential, endocrine disruption, global warming potential, endocrine disruption, global warming potential under controlled conditions in an approaccordance with local/regional/national/internati Dispose in accordance with all applicable regula D002: Waste Corrosive material [pH <=2 or =>	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours ingredients in the mixture. cone depletion, photochemical ozone creation potential) are expected from this component. hers at licensed waste disposal site. Incinerate the wed incinerator. Dispose of contents/container in onal regulations. ations.		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea Persistence and degradability Bioaccumulative potential Mobility in soil Other adverse effects 13. Disposal consideratio Disposal instructions	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3) EC50 Water flea (Ceriodaphnia dubia) No data is available on the degradability of any No data available. No data available. No other adverse environmental effects (e.g. oz potential, endocrine disruption, global warming potential, endocrine disruption, global warming potential under controlled conditions in an approaccordance with local/regional/national/internati Dispose in accordance with all applicable regular D002: Waste Corrosive material [pH <=2 or => The waste code should be assigned in discussion	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours ingredients in the mixture. cone depletion, photochemical ozone creation potential) are expected from this component. hers at licensed waste disposal site. Incinerate the wed incinerator. Dispose of contents/container in onal regulations. 12.5, or corrosive to steel] on between the user, the producer and the waste Empty containers or liners may retain some		
Ethylenediaminetetraacetic a Aquatic Fish Sodium citrate (CAS 6132-04 Aquatic Crustacea Persistence and degradability Bioaccumulative potential Mobility in soil Other adverse effects 13. Disposal consideratio Disposal instructions Local disposal regulations Hazardous waste code	cid tetrasodium salt (CAS 64-02-8) LC50 Bluegill (Lepomis macrochirus) 3) EC50 Water flea (Ceriodaphnia dubia) No data is available on the degradability of any No data available. No data available. No other adverse environmental effects (e.g. oz potential, endocrine disruption, global warming potential, endocrine disruption, global warming potential under controlled conditions in an appro accordance with local/regional/national/internati Dispose in accordance with all applicable regular D002: Waste Corrosive material [pH <=2 or =>) The waste code should be assigned in discussion disposal company. Dispose of in accordance with local regulations. product residues. This material and its contained Disposal instructions).	472 - 500 mg/l, 96 hours 655 - 825.9 mg/l, 48 hours ingredients in the mixture. cone depletion, photochemical ozone creation potential) are expected from this component. hers at licensed waste disposal site. Incinerate the wed incinerator. Dispose of contents/container in onal regulations. 12.5, or corrosive to steel] on between the user, the producer and the waste Empty containers or liners may retain some r must be disposed of in a safe manner (see: sidue, follow label warnings even after container is		

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication
	Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard
categoriesAcute toxicity (any route of exposure)
Serious eye damage or eye irritation

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	07-12-2019
Version #	
HMIS® ratings	01 Health: 3 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 3 Flammability: 0 Instability: 0
NFPA ratings	300
List of abbreviations	 IARC Monographs. Overall Evaluation of Carcinogenicity CAS: Chemical Abstract Service. PBT: Persistent, bioaccumulative, toxic. vPvB: very Persistent, very Bioaccumulative. DNEL: Derived No Effect Level. PNEC: Predicted No Effect Concentration. TWA: Time Weighted Average. STEL: Short-term Exposure Limit. LD50: Lethal Dose 50%. LC50: Lethal Concentration 50%.
Disclaimer	Kodak Alaris cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.
Revision information	Product and Company Identification: Product and Company Identification Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties HazReg Data: Pacific Rim GHS: Classification