

## SAFETY DATA SHEET

### 1. Identification

**Product identifier** KODAK FLEXICOLOR Fixer and Replenisher

**Other means of identification**

**Product code** 6600027  
**SDS No.** PCD 5542

**Recommended use of the chemical and restrictions on use**

**Recommended use** Photographic processing chemical. (fixer).  
**Restrictions on use** For industrial use only.

**Details of manufacturer or importer**

**Supplier** Kodak Alaris Australia Pty Limited  
**Address** Ground Floor, 2 Domville Avenue  
Hawthorn, Victoria 3122  
Australia  
**e-mail** EHS-Questions@Kodakalaris.com  
**Emergency telephone number** (02) 90372994

### 2. Hazard(s) identification

**Classification of the hazardous chemical**

**Physical hazards** Not classified.  
**Health hazards** Acute toxicity, oral Category 4  
**Environmental hazards** Not classified.

**Label elements, including precautionary statements**

**Hazard symbol(s)**



Exclamation mark

**Signal word** Warning

**Hazard statement(s)** Harmful if swallowed.

**Precautionary statement(s)**

**Prevention** Wash thoroughly after handling. Do not eat, drink or smoke when using this product.  
**Response** IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth.  
**Storage** Store away from incompatible materials.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards which do not result in classification** None known.

**Supplemental information** None.

### 3. Composition/information on ingredients

**Mixture**

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Ammonium thiosulphate	7783-18-8	50 - 55
Sodium hydrogensulfite	7631-90-5	1 - 5

## 4. First-aid measures

### Description of necessary first aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

**Personal protection for first-aid responders** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

**Symptoms caused by exposure** Direct contact with eyes may cause temporary irritation.

**Medical attention and special treatment** Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

## 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** Water spray. Dry chemicals. Carbon dioxide (CO<sub>2</sub>). Foam.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical** During fire, gases hazardous to health may be formed. Carbon oxides. Nitrogen oxides (NO<sub>x</sub>). Sulphur oxides.

**Special protective equipment and precautions for fire fighters** Wear self-contained breathing apparatus and protective clothing. Fire or excessive heat may produce hazardous decomposition products.

**Fire fighting equipment/instructions** Move containers from fire area if you can do so without risk.

**Hazchem code** None.

**General fire hazards** No unusual fire or explosion hazards noted.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

**Methods and materials for containment and cleaning up** Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: 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.

## 7. Handling and storage

**Precautions for safe handling** Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store in original tightly closed container.

## 8. Exposure controls and personal protection

**Control parameters** Follow standard monitoring procedures.

## Occupational exposure limits

### Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value
Sodium hydrogensulfite (CAS 7631-90-5)	TWA	5 mg/m3

### Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value
Sodium hydrogensulfite (CAS 7631-90-5)	TWA	5 mg/m3

### US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium hydrogensulfite (CAS 7631-90-5)	TWA	5 mg/m3

### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Sodium hydrogensulfite (CAS 7631-90-5)	TWA	5 mg/m3

## Biological limit values

No biological exposure limits noted for the ingredient(s).

## Appropriate engineering controls

Good general ventilation (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. If exposure limits have not been established, maintain airborne levels to an acceptable level.

## Individual protection measures, for example personal protective equipment (PPE)

**Eye/face protection** Wear safety glasses with side shields (or goggles).

### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

## Hygiene measures

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Liquid.

**Colour** light yellow

**Odour** odorless

**Odour threshold** Not available.

**pH** 6.1

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** > 100 °C (> 212 °F)

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	18 mm Hg
<b>Vapour density</b>	0.6
<b>Relative density</b>	1.36
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Complete
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other physical and chemical parameters</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation can occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidising agents. Acids. Strong bases. Sodium hypochlorite (bleach). Halogenated materials. Contact with strong acids may liberate sulphur dioxide. Contact with sodium hypochlorite (bleach) may form chloramine (toxic gas). Contact with base liberates flammable material. Contact with base liberates ammonia.
<b>Hazardous decomposition products</b>	Ammonia. Chloramine. Nitrogen oxides (NOx). Sulphur oxides. Carbon oxides.

## 11. Toxicological information

### Information on possible routes of exposure

<b>Inhalation</b>	Expected to be a low hazard for recommended handling.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Harmful if swallowed.
<b>Symptoms related to exposure</b>	Direct contact with eyes may cause temporary irritation.

**Acute toxicity** Harmful if swallowed.

Components	Species	Test Results
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Sodium hydrogensulfite (CAS 7631-90-5)

#### Acute

##### Oral

LD50	Rat	2 g/kg
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**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/irritation** Direct contact with eyes may cause temporary irritation.

### Respiratory or skin sensitisation

**Respiratory sensitisation** Not a respiratory sensitizer.

**Skin sensitisation** This product is not expected to cause skin sensitisation.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### Carcinogenicity

#### ACGIH Carcinogens

TRADE SECRET (CAS Proprietary)

A4 Not classifiable as a human carcinogen.

## IARC Monographs. Overall Evaluation of Carcinogenicity

TRADE SECRET (CAS Proprietary)

3 Not classifiable as to carcinogenicity to humans.  
3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

<b>Ecotoxicity</b>	The 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.
<b>Persistence and degradability</b>	Not readily biodegradable.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available for this product.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal methods</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### ADG

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

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

## 15. Regulatory information

### Safety, health and environmental regulations

**National regulations** This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

#### Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix B

TRADE SECRET (CAS Proprietary)

#### Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix E

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

#### Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix H**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix I**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix J**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Appendix K**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 10**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 2**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 3**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 4**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 5**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 6**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 7**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 8**

Poisons schedule number not allocated.

**Australia Medicines & Poisons Schedule 9**

Poisons schedule number not allocated.

**High Volume Industrial Chemicals (HVIC)**

TRADE SECRET (CAS Proprietary)

10000 - 99999 TONNES See the regulation for additional information.

**Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)**

Not listed.

**National Pollutant Inventory (NPI) substance reporting list**

Not listed.

**Prohibited Carcinogenic Substances**

Not regulated.

**Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)**

Not listed.

**Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)**

Not listed.

**Restricted Carcinogenic Substances**

Not regulated.

**International regulations**

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto Protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

**Country(s) or region**

Australia

**Inventory name**

Australian Inventory of Chemical Substances (AICS)

**On inventory (yes/no)\***

Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
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)	Yes
Korea	Existing Chemicals List (ECL)	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

<b>Issue date</b>	09-January-2017
<b>Revision date</b>	17-December-2018
<b>Disclaimer</b>	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.
<b>Revision information</b>	Product and Company Identification: Product and Company Identification Identification: Restrictions on use Composition / Information on Ingredients: Ingredients Accidental release measures: Methods and materials for containment and cleaning up Exposure controls and personal protection: Hand protection Stability and reactivity: Possibility of hazardous reactions Toxicological information: Ingestion Toxicological information: Inhalation