

# Material Safety Data Sheet



Revision Date: 10/09/2007  
Z33000000474/Version: 1.1  
Print Date: 01/29/2009  
Page: 1/6

## 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** KODAK PHOTO-FLO 600 Solution

**Product code:** 1464528

**Supplier:** EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

**Synonyms:** PCD F1145

**Product Use:** photographic processing chemical

## 2. Hazards identification

**CONTAINS:** Ethylene glycol (107-21-1), p-tert-octylphenoxy polyethoxyethyl alcohol (9002-93-1)

**WARNING!**  
**HARMFUL OR FATAL IF SWALLOWED**  
**CAUSES EYE IRRITATION**  
**CAN CAUSE KIDNEY DAMAGE**  
**CAN CAUSE CNS EFFECTS**

**NFPA Hazard Ratings:** Health - 1, Flammability - 1, Instability - 0

NOTE: NFPA 704 (2007) hazard indexes involves data review and interpretation that may vary among companies. It is intended only for rapid, general identification of the magnitude of the potential hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

## 3. Composition/information on ingredients

Weight %	Components - (CAS-No.)
35 - 40	Ethylene glycol (107-21-1)
25 - 30	p-tert-octylphenoxy polyethoxyethyl alcohol (9002-93-1)

## 4. First aid measures

**Inhalation:** If inhaled, remove to fresh air. Get medical attention if symptoms occur.

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin:** Wash off with soap and water. Get medical attention if symptoms occur.

**Ingestion:** If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

# Material Safety Data Sheet



Revision Date: 10/09/2007  
Z33000000474/Version: 1.1  
Print Date: 01/29/2009  
Page: 2/6

## Notes to physician:

**Treatment:** Due to rapid absorption of material, evacuation of the stomach is effective only if performed immediately after ingestion.

## 5. Fire-fighting measures

**Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special Fire-Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing.

**Hazardous Combustion Products:** Carbon oxides

**Unusual Fire and Explosion Hazards:** None.

## 6. Accidental release measures

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

## 7. Handling and storage

**Personal precautions:** Avoid breathing mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

**Prevention of Fire and Explosion:** Keep from contact with oxidizing materials.

**Storage:** Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

## 8. Exposure controls / personal protection

### Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Ethylene glycol	ACGIH	Ceiling Limit Value	100 mg/m <sup>3</sup>

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

**Respiratory protection:** None should be needed under normal conditions of use. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: organic vapour/P95. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

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

## Material Safety Data Sheet

Revision Date: 10/09/2007  
Z33000000474/Version: 1.1  
Print Date: 01/29/2009  
Page: 3/6



**Hand protection:** Wear impervious gloves and protective clothing appropriate for the risk of exposure.

### 9. Physical and chemical properties

**Physical form:** liquid

**Colour:** colourless

**Odour:** odourless

**Specific gravity:** 1.0690

**Vapour pressure (at 20.0 °C (68.0 °F)) :** 24 mbar (18.0 mm Hg)

**Vapour density:** 0.6

**Volatile fraction by weight:** 75 %

**Boiling point/boilingrange:** > 100.0 °C (> 212.0 °F)

**Water solubility:** complete

**pH:** 8.0

**Flash point:** does not flash

### 10. Stability and reactivity

**Stability:** Stable under normal conditions.

**Incompatibility:** Strong oxidizing agents.

**Hazardous decomposition products:** None under normal conditions of use.

**Hazardous Polymerization:** Hazardous polymerisation does not occur.

### 11. Toxicological information

#### Effects of Exposure

#### General advice:

Contains: Ethylene glycol. Harmful or fatal if swallowed. Can cause kidney damage and CNS effects based on human data. May cause adverse reproductive effects following ingestion based on animal data.

**Inhalation:** Expected to be a low hazard for recommended handling.

**Eyes:** Causes eye irritation.

# Material Safety Data Sheet



Revision Date: 10/09/2007  
Z33000000474/Version: 1.1  
Print Date: 01/29/2009  
Page: 4/6

**Skin:** Expected to be a low hazard for recommended handling. Prolonged or repeated contact may cause drying, cracking, or irritation.

**Ingestion:** Harmful or fatal if swallowed.

## 12. Ecological information

The following properties are ESTIMATED from the components of the preparations.

### Potential Toxicity:

Toxicity to fish:	10 - 100 mg/l
Toxicity to daphnia:	10 - 100 mg/l
Toxicity to algae:	no data available
Toxicity to other organisms:	> 100 mg/l

**Persistence and degradability:** Readily biodegradable.

**Chemical Oxygen Demand (COD):** 500 g/l

**Biochemical Oxygen Demand (BOD):** 160 g/l

## 13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

Not regulated for all modes of transportation.

For more transportation information, go to: [www.kodak.com/go/ship](http://www.kodak.com/go/ship).

## 15. Regulatory information

### Notification status

Regulatory List	Notification status
EINECS	n (Negative listing)
TSCA	y (positive listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	n (Negative listing)

# Material Safety Data Sheet



Revision Date: 10/09/2007  
Z33000000474/Version: 1.1  
Print Date: 01/29/2009  
Page: 5/6

KECI (KR) y (positive listing)  
PICCS (PH) y (positive listing)  
INV (CN) y (positive listing)

A N (Negative listing) indicates one or more component is either not on the public Inventory or is subject to exemption requirements. If additional information is needed contact Kodak.

## Other regulations

American Conference of Governmental Industrial Hygienists (ACGIH):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
International Agency for Research on Cancer (IARC):	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
U.S. National Toxicology Program (NTP):	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
U.S. Occupational Safety and Health Administration (OSHA):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
California Prop. 65:	none
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Ethylene glycol, Water, p-tert-octylphenoxy polyethoxyethyl alcohol
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	No components are subject to the Massachusetts Right to Know Act.
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Ethylene glycol, Water, p-tert-octylphenoxy polyethoxyethyl alcohol
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	Ethylene glycol
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## 16. Other information

The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture.

### US/Canadian Label Statements:

## Material Safety Data Sheet

Revision Date: 10/09/2007  
Z33000000474/Version: 1.1  
Print Date: 01/29/2009  
Page: 6/6

---



**CONTAINS:** Ethylene glycol (107-21-1), p-tert-octylphenoxy polyethoxyethyl alcohol (9002-93-1)

**WARNING!**  
**HARMFUL OR FATAL IF SWALLOWED**  
**CAUSES EYE IRRITATION**  
**CAN CAUSE KIDNEY DAMAGE**  
**CAN CAUSE CNS EFFECTS**

Avoid prolonged or repeated breathing of mist or vapour.  
Avoid contact with eyes, skin, and clothing.  
Use only with adequate ventilation.  
Wash thoroughly after handling.

**FIRST AID:** If inhaled, remove to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. Wash off with soap and water. Get medical attention if symptoms occur. If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

**Notes to physician:** Due to rapid absorption of material, evacuation of the stomach is effective only if performed immediately after ingestion.

Keep out of reach of children.

Do not handle or use until safety precautions in Material Safety Data Sheet (MSDS) have been read and understood.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

**IN CASE OF FIRE:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**IN CASE OF SPILL:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

---

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment. The information relating to the working solution is for guidance purposes only, and is based on correct mixing and use of the product according to instructions.

---

R-1, S-2, F-1, C-0