

# SAFETY DATA SHEET

Kodak Polychrome Graphics  
A Subsidiary of Kodak

## 4003 Positive Developer Concentrate

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

#### Identification of the substance or preparation

**Product name** : 4003 Positive Developer Concentrate **Nr. SDS** : 40042  
**Date of issue** : 2006-07-17.  
**Catalogue number** : 9046236; 9046210 **Version** : 4.11  
**Area of application** : Industrial applications. Graphic Arts product. Plate developer.

#### Company/undertaking identification

**Supplier** : Kodak Polychrome Graphics Europe S.A.  
 8, Avenue François Arago  
 Zone Industrielle BP 116  
 92164 Antony Cedex  
 France

**Emergency telephone number** : **Emergency telephone number: Int. + 31.30.2748888.**  
**(Dutch National Poison Information Centre) Only for physicians and medical specialists in case of an accidental poisoning.**

**For other EHS Information** : Kodak Polychrome Graphics EHS-Affairs EU/AF/AS/AU  
 P.O. Box 56, 3750 GB Bunschoten, The Netherlands  
 Phone: Int. +31 33 299 88 80  
 Fax: Int. +31 33 299 88 89  
 E-mail: EHS-EU@kpgraphics.com

**Sale Rep** :  
 Kodak Polychrome Graphics Ltd.  
 Axis 1, Rhodes Way,  
 Watford Herts, WD2 4FD, Great Britain  
 Phone: +44 1923 23 66 66  
 Fax: +44 1923 24 47 14

### 2. Composition/information on ingredients

**Substance/preparation** : Preparation

| Ingredient name             | CAS number | %      | EC number | Symbol / R-Phrases |
|-----------------------------|------------|--------|-----------|--------------------|
| Water                       | 7732-18-5  | 70-100 | 231-791-2 | Not classified.    |
| Potassium silicate          | 1312-76-1  | 10-15  | 215-199-1 | C; R34             |
| Tripotassium orthophosphate | 7778-53-2  | 10-15  | 231-907-1 | Xi; R38            |

See section 16 for the full text of the R Phrases declared above

Within the present knowledge of the supplier, this product does not contain any other hazardous ingredients in quantities requiring reporting in this section, in accordance with EU regulations or National regulations.

\* Occupational Exposure Limit(s), if available, are listed in section 8

### 3. Hazards identification

**Main hazards** : Corrosive  
**Human health hazards** : Causes burns.  
**Environmental hazards** : Not applicable.  
**Physical/chemical hazards** : Not applicable.  
**Classification** : C; R34

## 4. First aid measures

### First aid measures

- Inhalation** : Allow the victim to rest in a well-ventilated area. If irritation persists, get medical attention.
- Ingestion** : Do not induce vomiting. Have conscious person drink several glasses of water or milk. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If irritation persists, get medical attention. Wash contaminated clothing before reusing.
- Eye contact** : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

See section 11 for more detailed information on health effects and symptoms.

## 5. Fire-fighting measures

### Extinguishing media

- Suitable** : Use DRY chemicals, CO<sub>2</sub>, water spray or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : No specific hazard.
- Hazardous thermal decomposition products** : None.
- Special protective equipment for fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

## 6. Accidental release measures

- Personal precautions** : Face shield. Lab coat. Nitrile gloves. In case of insufficient ventilation, wear suitable respiratory equipment.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : Absorb with an inert material and put the spilled material in an appropriate waste disposal. Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

## 7. Handling and storage

- Handling** : Do not ingest. Do not get in eyes, on skin or on clothing. Avoid breathing vapors or spray mists. Ventilation is normally required when handling or using this product. Wash thoroughly after handling.
- Storage** : Corrosive materials should be stored in a separate safety storage cabinet or room. Keep container tightly closed. Keep container in a cool, well-ventilated area. Prevent from freezing.
- Packaging materials**
- Recommended** : Use original container.

## 8. Exposure controls/personal protection

| <u>Ingredient name</u> | <u>Occupational exposure limits</u> |
|------------------------|-------------------------------------|
| Europe                 |                                     |
| Not available.         |                                     |
| United Kingdom (UK)    |                                     |

### Exposure controls

- Occupational exposure controls** : Ventilation is normally required when handling or using this product. Ensure that eyewash stations and safety showers are close to the workstation location.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- Respiratory protection** : A respirator is not needed under normal and intended conditions of product use.

## 4003 Positive Developer Concentrate

**Hand protection** : Use chemical resistant gloves.  
In case of prolonged immersion or frequently repeated contact use gloves made of the materials:  
butyl rubber (thickness  $\geq$  0.36 mm, breakthrough time > 480 min),  
nitrile rubber (thickness  $\geq$  0.38 mm, breakthrough time > 480 min) or  
neoprene (thickness  $\geq$  0.65 mm, breakthrough time > 240 min).  
For intermittent splash protection corresponding gloves with breakthrough times > 60 min can be used.  
Avoid gloves made of: natural rubber.

**Eye protection** : Face shield

**Skin protection** : Lab coat

## 9. Physical and chemical properties

**Physical state** : Liquid.  
**Color** : Colorless.  
**Odor** : Odorless.  
**pH** : 13 [Basic.]  
**Boiling point** : >100°C  
**Melting point** : <0°C  
**Relative density** : 1.28 g/cm<sup>3</sup>  
**Vapor pressure** : Not available.  
**Vapor density** : Not available.  
**Flammability** : Non-flammable.  
**Solubility** : Easily soluble in cold water.

## 10. Stability and reactivity

**Stability** : The product is stable.  
**Conditions to avoid** : Not available.  
**Materials to avoid** : Incompatible with some strong acids.  
**Hazardous decomposition products** : None.

## 11. Toxicological information

### Potential acute health effects

**Inhalation** : Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath.  
**Ingestion** : May cause burns to mouth, throat and stomach.  
**Skin contact** : Corrosive to skin on contact. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.  
**Eye contact** : Corrosive to eyes on contact. Inflammation of the eye is characterized by redness, watering and itching.

### Acute toxicity

| <u>Ingredient name</u>      | <u>Test</u> | <u>Result</u> | <u>Route</u> | <u>Species</u> |
|-----------------------------|-------------|---------------|--------------|----------------|
| Potassium silicate          | LD50        | >2300 mg/kg   | Oral         | Rat            |
| Tripotassium orthophosphate | LD50        | 4640 mg/kg    | Oral         | Rat            |
|                             | LD50        | >4640 mg/kg   | Dermal       | Rabbit         |

### Potential chronic health effects

| <u>Ingredient name</u> | <u>Carcinogenic effects</u> | <u>Mutagenic effects</u> | <u>Developmental toxicity</u> | <u>Impairs fertility effects</u> |
|------------------------|-----------------------------|--------------------------|-------------------------------|----------------------------------|
|------------------------|-----------------------------|--------------------------|-------------------------------|----------------------------------|

**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Reproductive toxicity** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Inhalation** : Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.  
**Ingestion** : No known significant effects or critical hazards.  
**Skin** : Prolonged exposure may result in skin burns and ulcerations.  
**Other adverse effects** : Not available.

## 12. Ecological information

### Ecotoxicity data

| <u>Ingredient name</u>      | <u>Species</u> | <u>Period</u> | <u>Result</u> |
|-----------------------------|----------------|---------------|---------------|
| Tripotassium orthophosphate | Fish (LC50)    | 96 hour(s)    | 750 mg/l      |

### Other ecological information

#### Persistence/degradability

| <u>Ingredient name</u>           | <u>BOD<sub>5</sub></u>   | <u>COD</u>        | <u>ThOD</u>             |
|----------------------------------|--------------------------|-------------------|-------------------------|
|                                  |                          |                   |                         |
| <u>Ingredient name</u>           | <u>Aquatic half-life</u> | <u>Photolysis</u> | <u>Biodegradability</u> |
|                                  |                          |                   |                         |
| <u>Bioaccumulative potential</u> |                          |                   |                         |
| <u>Ingredient name</u>           | <u>LogP<sub>ow</sub></u> | <u>BCF</u>        | <u>Potential</u>        |
|                                  |                          |                   |                         |

**Mobility** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations




**Methods of disposal** : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Waste classification** : This product is listed as Hazardous by the EU Directive on hazardous waste. Dispose of according to all national and local applicable regulations.

**European waste catalogue (EWC)** : 09 01 02 + 15 01 10\*

## 14. Transport information

### International transport regulations

| Regulatory information | UN number | Proper shipping name  | Class | Packing group | Label   | Additional information                       |
|------------------------|-----------|---|-------|---------------|---|--|
| <b>ADR/RID Class</b>   | UN3266    | CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium silicate) | 8     | II            |  | <b>CEPIC Tremcard</b><br>80GC5-II            |
| <b>IMDG Class</b>      | UN3266    | CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium silicate) | 8     | II            |  | <b>Emergency schedules (EmS)</b><br>F-A, S-B |
| <b>IATA-DGR Class</b>  | UN3266    | CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium silicate) | 8     | II            |  |  |

## 15. Regulatory information

### EU Regulations

**Hazard symbol/symbols** :



Corrosive

**R-Phrases** : R34- Causes burns.

**S-Phrases** : S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Contains** : Potassium silicate

## 16. Other information

**Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)** : R34- Causes burns.  
R38- Irritating to skin.

**Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK)** : C - Corrosive  
Xi - Irritant

**Revision comments** : Section : 7; 8; 16

### History

**Date of printing** : 2006-07-17.

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**Version** : 4.11

**Prepared by** : Kodak Polychrome Graphics, EHS-EU/AF/AS/AU, Bunschoten, NL

### Notice to reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

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