Conforms to 91/155/EEC - 2001/58/EC

SAFETY DATA SHEET

Kodak Polychrome Graphics
A Subsidiary of Kodak

2000K Positive Developer Concentrate

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

Identification of the substance or preparation

Product name : 2000K Positive Developer Concentrate
Nr. SDS : 40312
Synonyms :
Date of issue : **2006-02-13.**
Catalogue number : 5270301; 5270293; 5270285
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
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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.
Sodium silicate	1344-09-8	15-20	215-687-4	C; R34 Xi; R37
Ethylene glycol	107-21-1	1-5	203-473-3	Xn; R22
Tetrasodium ethylenediamine tetraacetate	64-02-8	1-5	200-573-9	Xn; R22 Xi; R36 R52/53

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_2, water spray or foam.

Not suitable : Do not use water jet.

Special exposure hazards : No specific hazard.

Hazardous thermal decomposition products : These products are carbon oxides (CO, CO_2).

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 (typically 10 air changes per hour). 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

Ingredient name	Occupational exposure limits
Europe	
Ethylene glycol	**EU OEL (Europe, 6/2000). Skin** STEL: 104 mg/m^3 15 minute/minutes. TWA: 52 mg/m^3 8 hour(s).
United Kingdom (UK)	
Ethylene glycol	**EH40-WEL (United Kingdom (UK), 1/2005). Skin** STEL: 104 mg/m^3 15 minute/minutes. TWA: 52 mg/m^3 8 hour/hours.

Exposure controls

Occupational exposure controls : Ventilation is normally required when handling or using this product (typically 10 air changes per hour). Ensure that eyewash stations and safety showers are close to the work-station location.

Hygiene measures : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use.

Hand protection : Use chemical resistant gloves.
In case of prolonged immersion or frequently repeated contact use gloves made of the materials:
butyl rubber (thickness >= 0.36 mm, breakthrough time > 480 min),
nitrile rubber (thickness >= 0.38 mm, breakthrough time > 480 min) or
neoprene (thickness >= 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 : Yellow or brown. (Light.)

Odor : Odorless.

pH : 13 [Basic.]

Boiling point : >100°C (212°F)

Melting point : <0°C (32°F)

Vapor pressure : 2.4 kPa (18 mm Hg) (at 20°C)

Vapor density : 0.6 (Air = 1)

Flammability : Non-flammable.

Solubility : Easily soluble in cold water

VOC : 45 (g/l).

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 : These products are carbon oxides (CO, CO_2).

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

Ingredient name	Test	Result	Route	Species
Sodium silicate	LD50	1280 mg/kg	Oral	Rat
Ethylene glycol	LD50	4700 mg/kg	Oral	Rat
	LD50	9530 mg/kg	Dermal	Rabbit
Tetrasodium ethylenediamine tetraacetate	LD50	>1000 mg/kg	Oral	Rat

Potential chronic health effects

Ingredient name	Carcinogenic effects	Mutagenic effects	Developmental toxicity	Impairs fertility

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

Ingredient name	Species	Period	Result
Sodium silicate	Mosquitofish (Gambusia affinis) (LC50)	96 hour(s)	1800 mg/l
Ethylene glycol	Fish (LC50)	96 hour(s)	4900 mg/l
	Daphnia (EC50)	48 hour(s)	41100 mg/l
	Algae (IC50)	72 hour(s)	10000 mg/l
Tetrasodium ethylenediamine tetraacetate	Fish (LC50)	96 hour(s)	>500 mg/l
	Daphnia (EC50)	48 hour(s)	>100 mg/l
	Algae (IC50)	72 hour(s)	>10 mg/l

Other ecological information

Persistence/degradability

Ingredient name	BOD_5	COD	ThOD
Ethylene glycol	0.81 g O_2/g	1.29 g O_2/g	1.29 g O_2/g
Tetrasodium ethylenediamine tetraacetate	0.02 g O_2/g	0.57 g O_2/g	1.49 g O_2/g

Ingredient name	Aquatic half-life	Photolysis	Biodegradability
Ethylene glycol			Readily
Tetrasodium ethylenediamine tetraacetate			Not readily

Bioaccumulative potential

Ingredient name	$LogP_{ow}$	BCF	Potential
Not available.	-1.93		low
Not available.	-2.6		low

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
ADR/RID Class	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium silicate)	8	II		**CEFIC Tremcard 80GC5-II**
IMDG Class	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium silicate)	8	II		**Emergency schedules (EmS) F-A, S-B**
IATA-DGR Class	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium 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 : Sodium silicate

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK) : R22- Harmful if swallowed.
R34- Causes burns.
R36- Irritating to eyes.
R37- Irritating to respiratory system.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

Revision comments : Section : 8; 16

History

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Version : **4.11**

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

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