

SAFETY DATA SHEET

Kodak Polychrome Graphics
A Subsidiary of Kodak

C41/42 Correction Pen for Negative Plates

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

Identification of the substance or preparation

Product name : C41/42 Correction Pen for Negative Plates
Nr. SDS : 00022
Date of issue : 2006-07-25.
Catalogue number : 9046301; 9046293
Version : 5.1
Area of application : Industrial applications. Graphic Arts product. Correction material / agent.

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	40-70	231-791-2	Not classified.
Cyclohexanone	108-94-1	25-40	203-631-1	R10 Xn; R20
1-Methyl-2-pyrrolidone	872-50-4	20-25	212-828-1	Xi; R36/38
Hydrofluoric acid	7664-39-3	1-5	231-634-8	T+; R26/27/28 C; R35

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 : Toxic
Human health hazards : Toxic by inhalation, in contact with skin and if swallowed.
 Causes burns.
Environmental hazards : Not applicable.
Physical/chemical hazards : Flammable.
Classification : R10
 T; R23/24/25
 C; R34

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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. SEEK IMMEDIATE MEDICAL ATTENTION.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. SEEK IMMEDIATE 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. SEEK IMMEDIATE MEDICAL ATTENTION.
- Notes to physician** : Eye exposure to hydrofluoric acid requires continuous irrigation and immediate ophthalmologist referral. Medical treatment for dermal exposure may include the topical use of 2.5% calcium gluconate gel, benzalkonium chloride (Zephiran) solution (1:750) soaks, and/or 10% calcium gluconate intradermally. Electrocardiographic monitoring is necessary after ingestion, inhalation or significant dermal exposure due to potential for hypocalcemia and resultant cardiac dysrhythmias.

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

5. Fire-fighting measures

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) 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, CO₂), nitrogen oxides (NO, NO₂...). halogenated compounds
- 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. Butyl 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 sodium carbonate. 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. Do not breathe vapor or mist. Use only with adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Wash thoroughly after handling. DO NOT BREAK PEN APART.
- Storage** : Keep pens tightly closed. Keep away from heat.
- Packaging materials**
- Recommended** : -

8. Exposure controls/personal protection

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
Europe	
Cyclohexanone	EU OEL (Europe, 2/2006). Skin STEL: 81.6 mg/m ³ 15 minute/minutes. TWA: 40.8 mg/m ³ 8 hour/hours.
Hydrofluoric acid	EU OEL (Europe, 2/2006). STEL: 2.5 mg/m ³ 15 minute/minutes. TWA: 1.5 mg/m ³ 8 hour/hours.
United Kingdom (UK)	

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Cyclohexanone	EH40-WEL (United Kingdom (UK), 1/2005). Skin STEL: 20 ppm 15 minute/minutes. TWA: 10 ppm 8 hour/hours.
1-Methyl-2-pyrrolidone	EH40-WEL (United Kingdom (UK), 1/2005). Skin STEL: 309 mg/m ³ 15 minute/minutes. TWA: 103 mg/m ³ 8 hour/hours.
Hydrofluoric acid	EH40-WEL (United Kingdom (UK), 1/2005). STEL: 2.5 mg/m ³ 15 minute/minutes. Form: As F TWA: 1.5 mg/m ³ 8 hour/hours. Form: As F

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 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.
Hand protection	: Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of butyl rubber (thickness >= 0.76 mm, breakthrough time > 360 min). Avoid gloves made of: neoprene.
Eye protection	: Face shield.
Skin protection	: Lab coat.

9. Physical and chemical properties

Physical state	: Liquid.
Color	: Yellowish.
Odor	: Aromatic.
pH	: <1
Boiling point	: Not available.
Melting point	: Not available.
Specific gravity	: 0.993 (Water = 1)
Vapor pressure	: Not available.
Vapor density	: Not available.
Flammability	: FLAMMABLE.
Flash point	: Closed cup: 44°C
Solubility	: Partially soluble in cold water.

10. Stability and reactivity

Stability	: The product is stable.
Conditions to avoid	: Not available.
Materials to avoid	: Incompatible with strong oxidizing agents. Incompatible with some alkalis.
Hazardous decomposition products	: These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...), halogenated compounds

11. Toxicological information

Potential acute health effects

Inhalation	: Toxic by inhalation. Corrosive to the respiratory system. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.
Ingestion	: Toxic if swallowed. May cause burns to mouth, throat and stomach.
Skin contact	: Toxic in contact with skin. Corrosive to the skin. Skin contact may produce burns.
Eye contact	: Corrosive to eyes. Eye contact can result in corneal damage or blindness.

Acute toxicity

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Cyclohexanone	LD50	1535 mg/kg	Oral	Rat
	LD50	948 mg/kg	Dermal	Rabbit
	LC50	8000 mg/l (4 hour(s))	Inhalation	Rabbit
1-Methyl-2-pyrrolidone	LD50	3914 mg/kg	Oral	Rat
	LD50	8000 mg/kg	Dermal	Rabbit
	LC50	>5.1 mg/l (4 hour(s))	Inhalation	Rat

Potential chronic health effects

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[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 : Toxic by inhalation. Corrosive to the respiratory system. Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath.

Ingestion : Toxic if swallowed. May cause burns to mouth, throat and stomach.

Skin : Toxic in contact with skin. Corrosive to the skin. Skin contact may produce burns.

Other adverse effects : Not available.

12. Ecological information

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
Cyclohexanone	Fish (LC50)	96 hour(s)	536 mg/l
	Daphnia (EC50)	48 hour(s)	820 mg/l
1-Methyl-2-pyrrolidone	Golden Orfe (LC50)	96 hour(s)	4000 mg/l
	Daphnia (EC50)	48 hour(s)	5000 mg/l

Other ecological information

Persistence/degradability

<u>Ingredient name</u>	<u>BOD₅</u>	<u>COD</u>	<u>ThOD</u>
Cyclohexanone	0.8336 g O ₂ /g	2.605 g O ₂ /g	2.605 g O ₂ /g

<u>Ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
Cyclohexanone	-	-	Inherent
1-Methyl-2-pyrrolidone	-	-	Readily

Bioaccumulative potential

<u>Ingredient name</u>	<u>LogP_{ow}</u>	<u>BCF</u>	<u>Potential</u>
Cyclohexanone	Not available.	Not available.	Not available.

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 99 + 15 01 10*

14. Transport information

International transport regulations

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>Packing group</u>	<u>Label</u>	<u>Additional information</u>
ADR/RID Class	Not regulated.			-		-
IMDG Class	Not regulated.			-		-
IATA-DGR Class	Not regulated.			-		-

15. Regulatory information

EU Regulations

Hazard symbol/symbols :



Toxic

R-Phrases :

R10- Flammable.
R23/24/25- Toxic by inhalation, in contact with skin and if swallowed.
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 :

Hydrofluoric acid

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)

: R10- Flammable.
R26/27/28- Very toxic by inhalation, in contact with skin and if swallowed.
R23/24/25- Toxic by inhalation, in contact with skin and if swallowed.
R20- Harmful by inhalation.
R34- Causes burns.
R35- Causes severe burns.
R36/38- Irritating to eyes and skin.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK)

: T+ - Very toxic
T - Toxic
C - Corrosive
Xn - Harmful
Xi - Irritant

Revision comments :

Section : 7; 8; 9; 11; 12; 13; 16

History

Date of printing :

2006-07-25.

Date of issue :

2006-07-25.

Date of previous issue :

2006-01-23.

Version :

5.1

Prepared by :

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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.