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

1.1. Product identifier: Kodak DTG Dark Pretreatment

Product code: 7463300

Synonyms: None.

1.2. Relevant identified uses of the substance or mixture and uses advised against:

1.2.1. Identified uses: ink or inkjet chemical

1.3. Details of the supplier of the safety data sheet: KODAK LIMITED, Building 8, Croxley Green

Business Park, Hatters Lane, Watford, WD18 8PX, Great Britain

For further information about this product, telephone 0870-2430270 or email kes@kodak.com.

1.4. Emergency telephone number:

IN EMERGENCY, telephone: 844 892 0111.

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP):

Hazard class / Hazard category Hazard statements Route of exposure

Eye Dam. 1 H318 --

2.2. Label elements:

Labelling according to 1272/2008/EC [CLP/GHS]:

Contains: nitric acid, ammonium calcium salt

Symbol(s):



Signal word: Danger

Hazard statements:

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Causes serious eye damage.

Precautionary statements:

Prevention

Wear eye protection/ face protection.

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

2.3. Other hazards

None known.

3. Composition/information on ingredients

Weight percent	Component	CAS-No. EC No. REACH Reg. No.	Classification according to 1272/2008/EC	Reason for disclosure	
3 - 20	nitric acid, ammonium calcium salt				
		15245-12-2 239-289-5 not applicable	Acute Tox. 4 H302 Eye Dam. 1 H318	hazardous	

4. First aid measures

4.1. Description of first aid measures

- **4.1.1. Inhalation:** If symptomatic, move to fresh air. Get medical attention if symptoms persist.
- **4.1.2. Skin:** Wash off immediately with soap and plenty of water. Get medical attention if symptoms occur.
- **4.1.3. Eyes:** Immediately flush the contaminated eye(s) with water for at least 60 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. Contact a physician or poison control center immediately. Continue flushing the eye(s) until the physician advises to stop. If necessary, continue flushing during transport to an emergency care facility.
- **4.1.4.** Ingestion: If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur.
- **4.2. Most important symptoms and effects, both acute and delayed:** Serious Eye Damage: Signs/symptoms may include localized redness, swelling, lachrymation, itching, intense pain, ulceration, tissue destruction and loss of vision.

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Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

4.3. Indication of any immediate medical attention and special treatment needed: No information available.

5. Firefighting measures

- 5.1. Extinguishing Media: Water spray, Dry chemical, Carbon dioxide (CO2), Foam.
- 5.2. Special hazards arising from the substance or mixture
 - **5.2.1.** Hazardous Combustion Products: Carbon oxides, Nitrogen oxides (NOx)
 - **5.2.2. Unusual Fire and Explosion Hazards:** Fire or high temperatures may cause decomposition.
- **5.3.** Advice for firefighters: Wear self-contained breathing apparatus and protective suit. Fire or excessive heat may produce hazardous decomposition products.

6. Accidental release measures

- **6.1. Personal precautions, protective equipment and emergency procedures:** Refer to protective measures listed in sections 7 and 8.
- **6.2. Environmental precautions:** Prevent runoff from entering drains, sewers, or streams.
- **6.3. Methods and materials for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.
- **6.4. Reference to other sections:** See Section 8 for recommendations on the use of personal protective equipment.

7. Handling and storage

7.1. Precautions for safe handling

- **7.1.1. Personal precautions:** Do not get in eyes, on skin, or on clothing. Do not breathe vapours or spray mist. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
- **7.1.2. Prevention of Fire and Explosion:** Keep from contact with oxidizing materials.
- **7.1.3. Ventilation:** Good general ventilation should be used. Ventilation rates should be matched to conditions.

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- **7.2. Conditions for safe storage, including any incompatibilities:** Keep in a dry, cool and well-ventilated place. Cool conditions (5 30°C). Keep container tightly closed. Keep away from food, drink and animal feeding stuffs. Keep away from incompatible substances (see Incompatibility section.)
- **7.3.** Specific end use(s): No information available.

8. Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure controls: Not established

8.2. Exposure controls

- **8.2.1.** Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.
- 8.2.2. Individual protection measures, such as personal protective equipment

Eye protection: Wear safety glasses with side shields (or goggles) and a face shield.

Hand protection: Using the information provided in Section 2, seek the advice of the glove supplier as to the most suitable glove material. Avoid skin contact when mixing or handling the substance/preparation or a mixture by wearing impervious gloves and protective clothing appropriate to the risk of exposure.

Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact:

Material	Thickness	Breakthrough time
Nitrile rubber	>= 0.38 mm	> 480 min
Neoprene	>= 0.65 mm	> 240 min
butyl-rubber	>= 0.36 mm	> 480 min

Avoid natural rubber gloves.

The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374. This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.

Respiratory protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

General health and safety measures: Safety shower, eye wash, washing facilities as appropriate to condition of use.

8.2.3. Environmental exposure controls: No information available.

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9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: liquid

Colour: milky white

Odour: odourless

Odour Threshold: No data available - testing not performed

pH: 5.5 - 6.0

Melting point/freezing point: No data available - testing not performed

Initial boiling point and boiling range: No data available - testing not performed

Flash point: > 93 °C(> 199.4 °F)

Evaporation rate: No data available - testing not performed

Flammability (Solid; gas): No data available - testing not performed

Upper explosion limit: No data available - testing not performed

Lower explosion limit: No data available - testing not performed

Vapour pressure: No data available

Vapour density: No data available

Specific gravity: No data available

Water solubility: soluble

Partition coefficient: n-octanol/water: No data available - testing not performed

Auto-ignition temperature: No data available - testing not performed

Decomposition temperature: No data available - testing not performed

Viscosity: No data available - testing not performed

Explosive properties: No data available - testing not performed

Oxidizing properties: No data available - testing not performed

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10. Stability and reactivity

- 10.1. Reactivity: No data available
- **10.2.** Chemical stability: Stable under normal conditions.
- 10.3. Possibility of hazardous reactions: Hazardous polymerisation does not occur.
- 10.4. Conditions to avoid: No data available
- **10.5. Incompatible materials:** Strong acids and strong bases, Strong oxidizing agents, strong reducing agents.
- 10.6. Hazardous decomposition products: Carbon oxides, Nitrogen oxides (NOx)

11. Toxicological information

Effects of Exposure

11.1. Toxicokinetics, metabolism and distribution

No data available

11.2. Acute toxicity

No data available

11.3. Corrositivity and irritation

Eye irritation: strong

11.4. Sensitisation

No data available

11.5. CMR effects

11.5.1. Germ cell mutagenicity

No information available.

11.5.2. Carcinogenicity

No information available.

11.5.3. Reproductive toxicity

No information available.

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11.6. Specific target organ toxicity - single exposure

No information available.

11.7. Specific target organ toxicity - repeated exposure

No information available.

11.8. Aspiration hazard

No information available.

11.9. Information on likely routes of exposure

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

Eyes: Causes serious eye damage.

Skin: Expected to be a low hazard for recommended handling.

Ingestion: May cause burns of the gastrointestinal tract if swallowed.

Data for nitric acid, ammonium calcium salt (CAS 15245-12-2):

Acute Toxicity Data:

Oral LD50 (Rat): 2,000 mg/kg

Oral LD50 (Rat): 300 - 2,000 mg/kg (in water)

Dermal LD50 (Rat): > 2,000 mg/kg (no deaths occurred)

Eye irritation: strong

12. Ecological information

This product has not been tested for environmental effects.

12.1. Toxicity

Toxicity to fish (LC50): No data available

Toxicity to daphnia (EC50): No data available

12.2. Persistence and degradability

Persistence and degradability: No data available

12.3. Bioaccumulative potential

No data available

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12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

Additional ecological information:

Environmental data are not available.

13. Disposal considerations

13.1. Waste treatment methods

Dispose according to the local regulations or guidelines that apply to the category of waste. Ensure the use of properly authorised waste management companies.

Waste material: Waste material is currently classified as hazardous waste under Directive 2008/98/EC, as amended. European Waste Catalogue EWC: 08 03 13 Waste ink other than those mentioned in 08 03 12

Product containers: If thoroughly cleaned, preferably by rinsing at least three times with small quantities of water, waste product packaging may be consigned for recovery or disposal as non hazardous waste. Whenever possible, minimize waste by using the rinsing water to make up the working solution. The European Waste Catalogue Code is 15 01 02 plastic packaging.

Dispose of contents/container in accordance with local regulation. The product does not need to be labelled in accordance with EC directives or respective national laws.

14. Transport information

Not regulated for all modes of transportation.

For more transportation information, go to: www.kodak.com/go/ship.

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

1907/2006/EC Article 59(1) - Candidate List of Substances Subject to Authorisation

This mixture contains no ingredient which is subject to an authorisation according to Regulation (EC) No. 1907/2006 (REACH).

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1907/2006/EC - Annex XIV - Substances Subject to Authorization

This mixture does not contain substances which are subject to an authorization according to Regulation (EC) No. 1907/2006 (REACH).

1907/2006/EC - Potential Substances of Very High Concern

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

1907/2006/EC - Annex XVII - Restrictions on Certain Dangerous Substances

This mixture does not contain ingredients which are subject to restrictions according to Regulation (EC) No. 1907/2006 (REACH)

Detergents Regulation (648/2004) - Derogations and Banned or Restricted Detergent Surfactants

This mixture does not contain substances listed in Detergents Regulation (648/2004) - Derogations and Banned or Restricted Detergent Surfactants

Notification status

Regulatory List	Notification status	
TSCA	All listed	
DSL	Not all listed	
NDSL	Listed	
EINECS	All listed	
ELINCS	None listed	
NLP	None listed	
AICS	Not all listed	
IECS	Not all listed	
ENCS	Not all listed	
ECI	All listed	
NZIoC	All listed	
PICCS	Not all listed	
TCSI	All listed	

[&]quot;Not all listed" 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.

15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

16. Other information

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16.1. Indication of changes

Corrected/updated:

European Waste Catalogue

Minor changes may be present due to component or regulatory data updates

Review Safety Data Sheet before using product.

16.2. Key or legend to abbreviations and acronyms used in the safety data sheet

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS = Australian Inventory of Chemical Substances; CAS = Chemical Abstracts Service; CLP = Classification, Labelling, and Packaging; DSL = Canada Domestic Substances List; EC = European Commission; EC50 = Effective Concentration 50%; ECI = Korea Existing Chemicals list; EH40 = EH40/2005 Workplace Exposure Limits; EINECS = European Inventory of Existing Commercial chemical Substances; ELINCS = European List of Notified Chemical Substances; ENCS = Japan Existing and New Chemical Substances; GHS = Globally Harmonized System of Classification and Labelling of Chemicals; HSA = Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents); IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; IC50 = Inhibitory Concentration 50%; IECS = China Inventory of Existing Chemical Substances; IMDG = International Maritime Dangerous Goods; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; mg/Kg = milligrams per Kilogram; mg/L = milligrams per Liter; mg/m3 = milligrams per Cubic Meter; NDSL = Canada Non-Domestic Substances List; NLP = Europe No Longer Polymers; NZIoC = New Zealand Inventory of Chemicals; PBT = Persistent, Bioaccumulative and Toxic substances; PICCS = Philippines Inventory of Chemicals and Chemical Substances; ppm = parts per million; REACH= Registration, Evaluation and Authorization of Chemicals; RID = European Agreement concerning the International Carriage of Dangerous Goods by Rail; TSCA = Toxic Substances Control Act; vPvB = very Persistent, very Bioaccumulative substances

16.3. Key literature references and sources for data

Available upon request.

16.4. Methods used for classification of mixture according to Regulation (EC) No 1272/2008

The determination of classifications is derived via expert judgment and/or weight of evidence.

16.5. Relevant R- and H-phrases

H302 Harmful if swallowed.

H318 Causes serious eye damage.

16.6. Training advice

Review Safety Data Sheet before using product.

16.7. Further information

This Safety Data Sheet has been compiled and is solely intended for this product. The information is based upon the present state of our knowledge.