

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING**1.1 PRODUCT IDENTIFIER**

Product name: Dell MK991/MK993 Color High Yield Ink Cartridge
Part number: DELLMK991

1.2 IDENTIFIED USES AND USES ADVISED AGAINST

For use in: This mixture is an ink used in copiers/printers.

1.3 SUPPLIER DETAILS

Supplier: Clover Technologies Group
4200 Columbus Street.
Ottawa, IL 61350
United States
Phone number: 815-431-8100
Fax: 815-461-8583
Contact Hours: 08:00AM-05:00PM CST

1.4 EMERGENCY TELEPHONE NUMBERS

Supplier: N/A

* This document provides safety-related information about toner contained in print cartridge for use in laser printer

2. HAZARDS IDENTIFICATION**2.1 INFORMATION and CLASSIFICATION**

Overview: This product contains cyan (blue), magenta (red), and yellow liquids with a mild odor.

2.2 LABEL ELEMENTS

Applicable Pictograms:



Danger Indications: CYAN AND MAGENTA CAUTION! May cause eye and skin irritation. May be absorbed through the skin to cause effects similar to inhalation. Inhalation of vapors may cause irritation, headache, nausea and central nervous system effects. Prolonged overexposure may cause damage to the liver and kidneys. Harmful if swallowed. Aspiration during swallowing or vomiting may cause lung damage. YELLOW CAUTION! May cause mild eye and skin irritation. Inhalation of vapors or mists may cause irritation, headache, dizziness and other central nervous system effects. Swallowing may cause kidney damage.

Risk Phrases: N/A

Safety Phrases: N/A

2.3 OTHER HAZARDS

PBT or vPvB: N/A

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS number	Weight %	OSHA PEL	ACGIH TLV	Other
2-Pyrrolidone	616-45-5	Yellow: 1-10			
Glycerin	56-81-5	Yellow: 1-10			
1,4 Butanediol	110-63-4	Yellow: 1-10			
Surfactant	TRADE SECRET	Yellow: 1-5			
Diethylene Glycol	111-46-6	Cyan: 10-20, Magenta: 10-20			
Diethylene Glycol Monobutyl Ether	112-34-5	Cyan: 1-5, Magenta: 1-5			

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

The Data Shown is in accordance with the latest Directives.

This section provides composition information for the toner powder contained in specially designed container inside of the print cartridge.

4. FIRST-AID MEASURES

4.1 FIRST AID MEASURES

4.1.1 FIRST AID INSTRUCTIONS BY RELEVANT ROUTES OF EXPOSURE

- Inhalation: Remove victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get medical attention.
- Eye contact: Flush eyes with water for 15 minutes while lifting the upper and lower lids. Get medical attention.
- Skin contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation develops and persists. Launder contaminated clothing before reuse. Discard contaminated clothing such as shoes that cannot be decontaminated.
- Ingestion: Call a poison control center or doctor immediately for treatment advice. If conscious, give one 8 ounce glass of water to dilute. DO NOT induce vomiting unless directed by medical personnel. Do not give anything by mouth to or induce vomiting in a person who is unconscious or convulsing.

4.1.2 ADDITIONAL FIRST AID INFORMATION

- Additional first aid information: N/A
- Immediate Medical Attention Required: N/A

4.2 SYMPTOMS AND EFFECTS

- Acute Symptoms from Exposure: N/A
- Delayed Symptoms from Exposure: N/A

4.3 IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED

N/A

5. FIRE-FIGHTING MEASURES**5.1 EXTINGUISHING MEDIA**

Recommended Extinguishing Media: Use alcohol foam, carbon dioxide and dry chemical.
Extinguishing Media Not to be Used: None known.

5.2 SPECIAL HAZARD

Unusual Fire/Explosion Hazards: None known.
Extinguishing Media Not to be Used: None known.

5.3 ADVICE FOR FIRE FIGHTERS

Avoid inhalation of smoke. Wear protective clothing and wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES****6.1.1 PRECAUTIONS FOR NON-EMERGENCY PERSONNEL**

PERSONAL PROTECTIVE EQUIPMENT: Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.
PROTECTIVE CLOTHING: Use personal protective equipment to minimize exposure to skin and eye.

6.1.2 ADDITIONAL FIRST AID INFORMATION

Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Use with adequate ventilation. Remove and launder contaminated clothing before re-use. Wash thoroughly after handling and before eating, drinking, smoking or using toilet facilities.

6.1.3 PERSONAL PROTECTION

Wear personal protective equipment as described in Section 8.

6.2 ENVIRONMENTAL PRECAUTIONS

Regulatory Information: Keep product out of sewers and watercourses.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANUP

Spill or Leak Cleanup Procedures: Wear appropriate protective clothing as described in Section 6.1.1. Dike spill and absorb with an inert material. Collect into closable containers for proper disposal. Report spill as required by local and federal regulations.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Recommendations for Handling: No special precautions when used as intended. Keep containers closed, avoid creating dust. Keep away from ignition sources.

Advice on General Hygiene: Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

7.2 CONDITIONS FOR SAFE STORAGE

Avoid high temperatures, >100°F/32°C

7.3 SPECIFIC END USES

Printing devices

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release in order to maintain airborne concentrations of the product below OSHA PELs (See Section 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

8.2 EXPOSURE CONTROLS

Respiratory protection:

IMPROPER USE OF RESPIRATORS IS DANGEROUS. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134 and 1910.137) and, if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given work conditions, levels of airborne contamination, and sufficient levels of oxygen.

Eye/Face Protection:

Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Hand/Skin Protection:

For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. WARNING! Air purifying respirators do not protect worker in oxygen deficient atmospheres.

Additional Protection:

N/A

Protective Clothing and Equipment:

Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear splash-proof chemical goggles and face shield when working with liquid, unless full face piece respiratory protection is worn.

Safety Stations:

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment:

Separate contaminated work clothes from street clothes. Launder before reuse. Remove material from your shoes and clean personal protective equipment. Never take home contaminated clothing.

Comments:

Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 DETAIL INFORMATION**

Physical state:	APPEARANCE: Cyan, Magenta, and Yellow liquids.
Color:	Tri-Color
Odor:	Mild odor
Odor threshold:	N/A
Boiling point:	212°F
Melting point:	N/A
Flash point:	None
Explosion limits:	N/A
Relative density:	N/A
Auto-ignition temperature:	N/A

9.2 OTHER INFORMATION

SPECIFIC GRAVITY (H₂O=1): 1.00 - 1.10 VAPOR PRESSURE: 17.5 mmHg VAPOR DENSITY (Air=1): Heavier than air SOLUBILITY IN WATER: Complete FREEZING POINT: Not available COEFFICIENT of WATER/OIL: Not available EVAPORATION RATE: < Butyl Acetate pH: 5.5 - 8.0

10. CHEMICAL STABILITY AND REACTIVITY**10.1 Reactivity:**

Reactivity Hazards:	None
Data on Mixture Substances:	None

10.2 Chemical Stability:	The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
10.3 Hazardous Polymerization:	Stable under conditions of normal use.
10.4 Conditions to Avoid:	Keep away from heat, flame, sparks and other ignition sources.
10.5 Incompatible Materials:	Strong oxidising materials
10.6 Hazardous Decomposition:	Will not occur.

11. INFORMATION ON TOXICOLOGICAL EFFECT

Mixtures:	N/A
Acute Toxicity:	N/A
Skin Corrosion/Irritation:	Contact may cause mild skin irritation.
Serious Eye Damage:	May cause mild irritation with redness and tearing.
Inhalation:	Vapors or mists may cause respiratory irritation with headache, dizziness, nausea, drowsiness, incoordination, euphoria, visual disturbances, fatigue and unconsciousness.
Sensitization:	N/A
Mutagenicity:	N/A
Carcinogenicity:	None of the components of this product are listed as a carcinogen by NTP, IARC or OSHA.
Reproductive Toxicity:	N/A
STOT - Single Exposure:	Individuals with chronic skin, respiratory, kidney and liver disorders may be at increased risk from exposure to this material.
STOT - Multiple Exposure:	Prolonged exposure may cause dermatitis. Prolonged or repeated over exposure may cause damage to the kidneys or liver. Diethylene glycol has been found to be positive in the Ames Assay for mutagenicity. 2-pyrrolidione was found to cause birth defects in studies with laboratory animals.
Ingestion:	Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea, severe metabolic acidosis, and damage to the kidneys and liver. Aspiration into the lungs during swallowing or vomiting may cause lung damage.
Hazard Class Information:	N/A
Mixture on Market Data:	N/A
Symptoms:	N/A
Delayed/Immediate Effects:	N/A
Test Data on Mixture:	N/A
Not Meeting Classification:	N/A
Routes of Exposure:	N/A
Interactive Effects:	N/A
Absence of Specific Data:	N/A
Mixture vs Substance Data:	N/A

12. ECOLOGICAL INFORMATION

12.1 Eco toxicity:	N/A
12.2 Degradability:	N/A
12.3 Bioaccumulation Potential:	N/A
12.4 Mobility in Soil:	N/A
12.5 PBT & vPvB Assessment:	N/A
12.6 Other Adverse Effects:	N/A

13. DISPOSAL CONSIDERATIONS**Disposal Information:**

Dispose as a solid waste in accordance with local authority regulations.
Empty container retains product residue.

Physical/Chemical Properties that affect Treatment:

Symbol: This product is not classified as dangerous

Risk Phrases: This product is not classified according to the federal, state and local environmental regulations.

Waste Treatment Information:

Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Finely dispersed particles may form explosive mixtures in air. Dispose of in compliance with federal, state, and local regulations.

Personal Protection Required:

N/A

14. TRANSPORT INFORMATION

- 14.1 **ID Number:** N/A
- 14.2 **Shipping Name:** Not Regulated
- 14.3 **Hazard Class:** HMIS Rating: Health = 1 Fire = 0 Reactivity = 0
- 14.4 **Packing Group:** N/A
- 14.5 **Environmental Hazards:** N/A
- 14.6 **User Precautions:** N/A
- 14.7 **Bulk Transport:** N/A

15. REGULATORY INFORMATION

- 15.1 **Regulatory Information:** OSHA HAZARD CLASSIFICATION: Irritant, target organ effects

EPA Regulatory Information: N/A

CERCLA Reportable Quantity: N/A

- 15.2 **Superfund Information:**

Hazard Categories:

Immediate: N/A

Delayed: N/A

Fire: NFPA Rating: Health = 1 Fire = 0 Reactivity = 0

Pressure: N/A

Reactivity: N/A

Section 302 - Extremely Hazardous: N/A

Section 311 - Hazardous: Acute health.

- 15.3 **State Regulations:** CALIFORNIA PROPOSITION 65 INFORMATION: This product contains no California Proposition 65 regulated chemicals.

- 15.4 **Other Regulatory Information:** CERCLA HAZARDOUS SUBSTANCE (40CFR 116): Not applicable WHMIS CLASSIFICATION: Class D - Division 2 - Subdivision B (Toxic material causing other chronic effects)



16. OTHER INFORMATION

General Comments: This information is based on our current knowledge. It should not therefore be construed as guaranteeing specific properties of the products as described or their suitability for a particular application

Creation Date of this SDS: 05/18/2015



SAFETY DATA SHEET

Key to Abbreviations and Acronyms used in this sheet:

ACGIH = American Conference of Governmental Industrial Hygienists	NIOSH = National Institute for Occupational Safety and Health
CERCLA = Comprehensive Environmental Response Compensation and Liability Act	OSHA = Occupational Health and Safety Administration
CLP = Classification, Labeling, and Packaging	PEL = Permissible Exposure Limit
DSD = Dangerous Substances Directive	SCBA = Self Contained Breathing Apparatus
EPA = Environmental Protection Agency	STOT = Specific Target Organ Toxicity
GHS = Globally Harmonized System	TLV = Threshold Limit Value
N/A = Not Applicable	UK = United Kingdom
NFPA = National Fire Protection Association	UN = United Nations

Ref:**DISCLAIMER**

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