

SAFETY DATA SHEET

MSDS: 2013076010US
 Date Prepared: 2014/1/6
 Date Revised:

Product Name: Disperse Dye Ink Yellow

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

Product Name: Disperse Dye Ink Yellow
 Identification of the supplier: Konica Minolta, Inc.
 Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
 Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
 Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	30-40	7732-18-5
Ethylene glycol	25-45	107-21-1
Glycerin	5-25	56-81-5
Surfactant	1-15	---
Dye	1-15	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
 May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
 Skin Effects : May cause slight skin irritation.
 Ingestion Effects : May be harmful if swallowed.
 Inhalation Effects : No identified health effects.
 Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
 Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
 Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
 Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

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Product Name: Disperse Dye Ink Yellow

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.

Extinguishing Media to Avoid: No information.

Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment(See Section 8).

Environmental precautions: No information.

Methods and materials for containment and cleaning up: Absorb spill with inert material(e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.

Ventilation requirements: Use with adequate ventilation.

Precautions: No information.

Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances(See Section 10).

Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2013076010US
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Product Name: Disperse Dye Ink Yellow

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m3 [C]	None established	None established
Glycerin	None established	None established	15mg/m3 (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: No data.
 n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2013076010US
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Product Name: Disperse Dye Ink Yellow

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Skin sensitization: None (Data of similar product)
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse],
 LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m3/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Mutagenicity: Ames Test:Negative
 Carcinogenicity: IARC:Unlisted

Dye

Acute toxicity (oral): LD50: > 5000 mg/kg[rat]
 Skin corrosion/irritation: None P. I. I=0 [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity

Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]

Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2013076010US
 Date Prepared: 2014/1/6
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Product Name: Disperse Dye Ink Yellow

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN ---
 classification:
 UN number: ---
 Proper shipping ---
 name:
 Packing group: ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.

CERCLA(Comprehensive Environmental Response Compensation and Liability Act) : Ethylene glycol: Reportable Quantities 5000 lb(2270 kg)

SARA Title III (Superfund Amendments and Reauthorization Act) 302 Extreme Hazardous Substance :

311/312 Hazard Categories : None.

313 Reportable Ingredients : Ethylene glycol

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEETMSDS: 2013076020US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Light Yellow

1. Identification of the substance/mixture and of the company/undertakingProduct Name: Disperse Dye Ink Light Yellow
Identification of the supplier: Konica Minolta, Inc.
Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)**2. Composition/information on ingredients**Substance/Mixture: Mixture
Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	30-40	7732-18-5
Ethylene glycol	25-45	107-21-1
Glycerin	5-25	56-81-5
Surfactant	1-15	---
Dye	1-15	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
Skin Effects : May cause slight skin irritation.
Ingestion Effects : May be harmful if swallowed.
Inhalation Effects : No identified health effects.
Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2013076020US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Light Yellow

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.
Extinguishing Media to Avoid: No information.
Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment(See Section 8).
Environmental precautions: No information.
Methods and materials for containment and cleaning up: Absorb spill with inert material(e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.

Ventilation requirements: Use with adequate ventilation.

Precautions: No information.

Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances(See Section 10).

Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2013076020US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Yellow

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m3 [C]	None established	None established
Glycerin	None established	None established	15mg/m3 (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2013076020US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Yellow

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Skin sensitization: None (Data of similar product)
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse],
 LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m³/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Mutagenicity: Ames Test:Negative
 Carcinogenicity: IARC:Unlisted

Dye

Acute toxicity (oral): LD50: > 5000 mg/kg[rat]
 Skin corrosion/irritation: None P. I. I=0 [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity

Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]

Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2013076020US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Yellow

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN ---
 classification :
 UN number : ---
 Proper shipping name : ---
 Packing group : ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.
 CERCLA(Comprehensive Environmental Response Compensation and Liability Act) : Ethylene glycol: Reportable Quantities 5000lb(2270 kg)
 SARA Title III (Superfund Amendments and Reauthorization Act) 302 : None.
 Extreme Hazardous Substance :
 311/312 Hazard Categories : None.
 313 Reportable Ingredients : Ethylene glycol

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEET

MSDS: 2013076030US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Magenta

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

Product Name: Disperse Dye Ink Magenta
 Identification of the supplier: Konica Minolta, Inc.
 Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
 Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
 Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	30-40	7732-18-5
Ethylene glycol	20-25	107-21-1
Glycerin	5-25	56-81-5
Surfactant	1-15	---
Dye	1-15	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
 May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
 Skin Effects : May cause slight skin irritation.
 Ingestion Effects : May be harmful if swallowed.
 Inhalation Effects : No identified health effects.
 Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
 Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
 Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
 Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2013076030US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Magenta

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.
Extinguishing Media to Avoid: No information.
Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment (See Section 8).
Environmental precautions: No information.
Methods and materials for containment and cleaning up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.
Ventilation requirements: Use with adequate ventilation.
Precautions: No information.
Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances (See Section 10).
Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2013076030US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Magenta

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m ³ [C]	None established	None established
Glycerin	None established	None established	15mg/m ³ (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2013076030US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Magenta

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse], LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m3/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Acute toxicity (oral): LD50: > 40000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

Dye

Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity

Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]

Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2013076030US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Magenta

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste, containers or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN ---
 classification:
 UN number: ---
 Proper shipping ---
 name:
 Packing group: ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.
 CERCLA(Comprehensive Environmental Response Compensation and Liability Act) : Ethylene glycol: Reportable Quantities 5000lb(2270 kg)
 SARA Title III (Superfund Amendments and Reauthorization Act) 302 : None.
 Extreme Hazardous Substance :
 311/312 Hazard Categories : None.
 313 Reportable Ingredients : Ethylene glycol

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer
 The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEET

MSDS: 2013076040US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Magenta

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

Product Name: Disperse Dye Ink Light Magenta
 Identification of the supplier: Konica Minolta, Inc.
 Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
 Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
 Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	30-40	7732-18-5
Ethylene glycol	20-25	107-21-1
Glycerin	5-25	56-81-5
Surfactant	1-15	---
Dye	1-15	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
 May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
 Skin Effects : May cause slight skin irritation.
 Ingestion Effects : May be harmful if swallowed.
 Inhalation Effects : No identified health effects.
 Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
 Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
 Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
 Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2013076040US

Date Prepared: 2014/01/06

Date Revised:

Product Name: Disperse Dye Ink Light Magenta

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.

Extinguishing Media to Avoid: No information.

Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment (See Section 8).

Environmental precautions: No information.

Methods and materials for containment and cleaning up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.

Ventilation requirements: Use with adequate ventilation.

Precautions: No information.

Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances (See Section 10).

Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2013076040US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Magenta

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m ³ [C]	None established	None established
Glycerin	None established	None established	15mg/m ³ (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2013076040US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Magenta

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse], LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m3/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Acute toxicity (oral): LD50: > 40000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity

Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]

Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2013076040US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Magenta

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN ---
 classification:
 UN number: ---
 Proper shipping ---
 name:
 Packing group: ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.
 CERCLA(Comprehensive Environmental Response Compensation and Liability Act) : Ethylene glycol: Reportable Quantities 5000lb(2270 kg)
 SARA Title III (Superfund Amendments and Reauthorization Act) : 302
 Extreme Hazardous Substance :
 311/312 Hazard Categories : None.
 313 Reportable Ingredients : Ethylene glycol

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEET

MSDS: 2013076050US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Cyan

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

Product Name: Disperse Dye Ink Cyan
 Identification of the supplier: Konica Minolta, Inc.
 Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
 Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
 Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	30-40	7732-18-5
Ethylene glycol	25-45	107-21-1
Glycerin	5-25	56-81-5
Surfactant	1-15	---
Dye	1-15	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
 May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
 Skin Effects : May cause slight skin irritation.
 Ingestion Effects : May be harmful if swallowed.
 Inhalation Effects : No identified health effects.
 Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
 Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
 Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
 Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2013076050US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Cyan

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.
Extinguishing Media to Avoid: No information.
Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment (See Section 8).
Environmental precautions: No information.
Methods and materials for containment and cleaning up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.
Ventilation requirements: Use with adequate ventilation.
Precautions: No information.
Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances (See Section 10).
Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2013076050US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Cyan

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m3 [C]	None established	None established
Glycerin	None established	None established	15mg/m3 (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: No data.
 n-octanol/water:
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2013076050US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Cyan

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse], LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m³/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Acute toxicity (oral): LD50: > 40000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

Dye

Acute toxicity (oral): LD50: 5000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity

Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]

Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2013076050US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Cyan

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN classification: ---
 UN number: ---
 Proper shipping name: ---
 Packing group: ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.
 CERCLA (Comprehensive Environmental Response Compensation and Liability Act) : Ethylene glycol: Reportable Quantities 5000 lb(2270 kg)
 SARA Title III (Superfund Amendments and Reauthorization Act) 302 : None.
 Extreme Hazardous Substance :
 311/312 Hazard Categories : None.
 313 Reportable Ingredients : Ethylene glycol

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEET

MSDS: 2013076060US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Light Cyan

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

Product Name: Disperse Dye Ink Light Cyan
Identification of the supplier: Konica Minolta, Inc.
Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
Ingredients and Concentration

Ingredient Name	Concentration wt. %	CAS#
Water	30-40	7732-18-5
Ethylene glycol	25-45	107-21-1
Glycerin	5-25	56-81-5
Surfactant	1-15	---
Dye	1-15	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
Skin Effects : May cause slight skin irritation.
Ingestion Effects : May be harmful if swallowed.
Inhalation Effects : No identified health effects.
Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2013076060US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Light Cyan

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.
Extinguishing Media to Avoid: No information.
Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment (See Section 8).
Environmental precautions: No information.
Methods and materials for containment and cleaning up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.
Ventilation requirements: Use with adequate ventilation.
Precautions: No information.
Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances (See Section 10).
Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2013076060US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Cyan

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m ³ [C]	None established	None established
Glycerin	None established	None established	15mg/m ³ (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: No data.
 n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2013076060US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Cyan

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse], LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m³/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Acute toxicity (oral): LD50: > 40000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

Dye

Acute toxicity (oral): LD50: 5000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity
 Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]
 Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2013076060US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Cyan

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN ---
 classification:
 UN number: ---
 Proper shipping ---
 name:
 Packing group: ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.
 CERCLA(Comprehensive Environmental Response Compensation and Liability Act) : Ethylene glycol: Reportable Quantities 5000 lb(2270 kg)
 SARA Title III (Superfund Amendments and Reauthorization Act) 302 : None.
 Extreme Hazardous Substance :
 311/312 Hazard Categories : None.
 313 Reportable Ingredients : Ethylene glycol

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEET

MSDS: 2013076070US

Date Prepared: 2014/01/06

Date Revised:

Product Name: Disperse Dye Ink Black

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

Product Name: Disperse Dye Ink Black
 Identification of the supplier: Konica Minolta, Inc.
 Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
 Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
 Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	30-40	7732-18-5
Ethylene glycol	25-45	107-21-1
Glycerin	5-25	56-81-5
Surfactant	1-15	---
Dye	1-15	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
 May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
 Skin Effects : May cause slight skin irritation.
 Ingestion Effects : May be harmful if swallowed.
 Inhalation Effects : No identified health effects.
 Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
 Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
 Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
 Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2013076070US

Date Prepared: 2014/01/06

Date Revised:

Product Name: Disperse Dye Ink Black

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.

Extinguishing Media to Avoid: No information.

Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment(See Section 8).

Environmental precautions: No information.

Methods and materials for containment and cleaning up: Absorb spill with inert material(e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.

Ventilation requirements: Use with adequate ventilation.

Precautions: No information.

Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances(See Section 10).

Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2013076070US

Date Prepared: 2014/01/06

Date Revised:

Product Name: Disperse Dye Ink Black

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m3 [C]	None established	None established
Glycerin	None established	None established	15mg/m3 (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2013076070US

Date Prepared: 2014/01/06

Date Revised:

Product Name: Disperse Dye Ink Black

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Skin sensitization: None (Data of similar product)
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse], LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m3/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Acute toxicity (oral): LD50: > 40000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity
 Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]

Persistence and degradability: Readily biodegradable

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2013076070US

Date Prepared: 2014/01/06

Date Revised:

Product Name: Disperse Dye Ink Black

Dye

Ecotoxicity

Fish acute toxicity: 96hrLC50: >2.0mg/l[Rainbow trout]
 Daphnia acute toxicity: 48hrEC50: 24mg/l[Daphnia magna]
 Algae acute toxicity: EbC50 (96hr):0.100mg/l, ErC50 (0-24hr):0.375mg/l,
 NOEL:0.0503mg/l [Selenastrum capricornutum]

Persistence and degradability: Not biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN Class9
 classification
 UN number: UN3082
 Proper shipping name: Environmentally hazardous substance, liquid, n. o. s. (Dye)
 Packing group: III

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200: This product is NOT considered hazardous under this standard.

CERCLA (Comprehensive Environmental Response Compensation and Liability Act): Ethylene glycol: Reportable Quantities 5000 lb(2270 kg)

SARA Title III (Superfund Amendments and Reauthorization Act) 302

Extreme Hazardous Substance:

311/312 Hazard Categories: None.

313 Reportable Ingredients: Ethylene glycol

16. Other information

HMIS Hazard Rating: Health: 1, Flammability: 1, Reactivity: 0

Disclaimer

The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEET

MSDS: 2013076080US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Black

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

Product Name: Disperse Dye Ink Light Black
 Identification of the supplier: Konica Minolta, Inc.
 Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
 Charge section: (TEL: +81-42-589-3739, FAX: +81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
 Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	30-40	7732-18-5
Ethylene glycol	25-45	107-21-1
Glycerin	5-25	56-81-5
Surfactant	1-15	---
Dye	1-15	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
 May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
 Skin Effects : May cause slight skin irritation.
 Ingestion Effects : May be harmful if swallowed.
 Inhalation Effects : No identified health effects.
 Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
 Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
 Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
 Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2013076080US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Light Black

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.
Extinguishing Media to Avoid: No information.
Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment(See Section 8).
Environmental precautions: No information.
Methods and materials for containment and cleaning up: Absorb spill with inert material(e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.
Ventilation requirements: Use with adequate ventilation.
Precautions: No information.
Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances(See Section 10).
Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2013076080US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Black

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m3 [C]	None established	None established
Glycerin	None established	None established	15mg/m3 (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2013076080US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Black

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Skin sensitization: None (Data of similar product)
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse], LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m³/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Acute toxicity (oral): LD50: > 40000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity

Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]

Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2013076080US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Light Black

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

Dye

Ecotoxicity
 Fish acute toxicity: 96hrLC50: >2.0mg/l[Rainbow trout]
 Daphnia acute toxicity: 48hrEC50: 24mg/l[Daphnia magna]
 Algae acute toxicity: EbC50 (96hr):0.100mg/l, ErC50 (0-24hr):0.375mg/l,
 NOEL:0.0503mg/l [Selenastrum capricornutum]
 Persistence and degradability: Not biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN ---
 classification :
 UN number : ---
 Proper shipping name : ---
 name :
 Packing group : ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.
 CERCLA (Comprehensive Environmental Response Compensation and Liability Act) : Ethylene glycol: Reportable Quantities 5000 lb(2270 kg)
 SARA Title III (Superfund Amendments and Reauthorization Act) 302 : None.
 Extreme Hazardous Substance :
 311/312 Hazard Categories : None.
 313 Reportable Ingredients : Ethylene glycol

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEET

MSDS: 2000012032US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Orange

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

Product Name: Disperse Dye Ink Orange
 Identification of the supplier: Konica Minolta, Inc.
 Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
 Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
 Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	35-45	7732-18-5
Ethylene glycol	15-25	107-21-1
Glycerin	25-35	56-81-5
Surfactant	1-5	---
Dye	1-5	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
 May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
 Skin Effects : May cause slight skin irritation.
 Ingestion Effects : May be harmful if swallowed.
 Inhalation Effects : No identified health effects.
 Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
 Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
 Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
 Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2000012032US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Orange

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.
Extinguishing Media to Avoid: No information.
Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment (See Section 8).
Environmental precautions: No information.
Methods and materials for containment and cleaning up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.
Ventilation requirements: Use with adequate ventilation.
Precautions: No information.
Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances (See Section 10).
Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2000012032US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Orange

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m ³ [C]	None established	None established
Glycerin	None established	None established	15mg/m ³ (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: No data.
 Solubility: water : Completely soluble.
 Partition coefficient: n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2000012032US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Orange

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse], LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m3/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Mutagenicity: Ames Test:Negative
 Carcinogenicity: IARC:Unlisted

Dye

Acute toxicity (oral): LD50: > 5000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity
 Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
 Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]
 Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]
 Persistence and degradability: Readily biodegradable

SAFETY DATA SHEET

MSDS: 2000012032US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Orange

Glycerin

Ecotoxicity
 Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]
 Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]
 Persistence and degradability: Readily biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste, containers or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN ---
 classification :
 UN number : ---
 Proper shipping ---
 name :
 Packing group : ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.
 CERCLA(Comprehensive Environmental Response Compensation and Liability Act) : Ethylene glycol: Reportable Quantities 5000lb(2270 kg)
 SARA Title III (Superfund Amendments and Reauthorization Act) : 302
 Extreme Hazardous Substance :
 311/312 Hazard Categories : None.
 313 Reportable Ingredients : Ethylene glycol

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

SAFETY DATA SHEET

MSDS: 2000012022US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Violet

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

Product Name: Disperse Dye Ink Violet
Identification of the supplier: Konica Minolta, Inc.
Address: 2-7-2, Marunouchi, Chiyoda-ku, Tokyo, 100-7015, JAPAN
Charge section: (TEL:+81-42-589-3739, FAX:+81-42-589-3868)

2. Composition/information on ingredients

Substance/Mixture: Mixture
Ingredients and Concentration

Ingredient Name	Concentrationwt. %	CAS#
Water	40-50	7732-18-5
Ethylene glycol	1-10	107-21-1
Glycerin	35-45	56-81-5
Surfactant	1-5	---
Dye	1-5	---

3. Hazards identification

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
Skin Effects : May cause slight skin irritation.
Ingestion Effects : None currently known.
Inhalation Effects : No identified health effects.
Chronic Effects / Carcinogenicity : None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

4. First-aid measures

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Get medical attention immediately.
Skin Contact: Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.
Ingestion: Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

SAFETY DATA SHEET

MSDS: 2000012022US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Violet

5. Fire-fighting measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.
Extinguishing Media to Avoid: No information.
Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment(See Section 8).
Environmental precautions: No information.
Methods and materials for containment and cleaning up: Absorb spill with inert material(e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and storage

Handling

Technical Measures: Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Wash thoroughly after handling.
Ventilation requirements: Use with adequate ventilation.
Precautions: No information.
Precautions for safe handling: No information.

Storage

Storage Conditions: Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances(See Section 10).
Safety adequate container materials: No information.

8. Exposure controls/personal protection

Appropriate engineering controls: Use process enclosures or local exhaust ventilation.

SAFETY DATA SHEET

MSDS: 2000012022US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Violet

Control parameters

Ingredient Name	ACGIH		OSHA-PEL	
	TLV-TWA	TLV-STEL	TWA	STEL
Ethylene glycol	None established	100mg/m ³ [C]	None established	None established
Glycerin	None established	None established	15mg/m ³ (total dust)	None established
Surfactant	None established	None established	None established	None established
Dye	None established	None established	None established	None established

Personal Protective Equipment

Respiratory Protection: Not required under normal conditions.
 Hand protection: Impervious gloves should be worn.
 Eye/face protection: Splash goggles should be worn.
 Skin Protection: Not required under normal conditions.

9. Physical and chemical properties

Product

Physical state: Liquid
 Form: Liquid
 Color: Colored
 Odor: Slight characteristic odor
 Odor threshold: No data.
 pH: No data.
 Melting point/freezing point: No data.
 Initial boiling point and boiling range: No data.
 Flash point: None
 Auto-ignition temperature: No data.
 Upper/lower flammability or explosive limits: No data.
 Vapour pressure: No data.
 Vapour density: No data.
 Evaporation rate: No data.
 Specific Gravity: Unknown
 Solubility: water : Completely soluble.
 Partition coefficient: n-octanol/water: No data.
 Decomposition temperature: No data.

SAFETY DATA SHEET

MSDS: 2000012022US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Violet

10. Stability and reactivity

Chemical stability: Stable.
 Possibility of hazardous reactions: No Information.
 Conditions to avoid: No Information.
 Incompatible materials: Oxidizers
 Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. Toxicological information

Product

Acute toxicity (oral): LD50: > 2000 mg/kg[rat]
 Mutagenicity: Ames Test:Negative

Ingredient

Ethylene glycol

Acute toxicity (oral): LD50: 4700 mg/kg[rat], LD50: 7500 mg/kg[mouse]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Glycerin

Acute toxicity (oral): LD50: 12600 mg/kg[rat], LD50: 4090 mg/kg[mouse], LD50: 27000 mg/kg[rabbit], LD50: 7750 mg/kg[guinea pig]
 Acute toxicity (inhalation): LC50: > 570 mg/m3/1h[rat]
 Skin corrosion/irritation: Mild [rabbit]
 Serious eye damage/irritation: Minimal [rabbit]
 Mutagenicity: Ames Test:Negative, Chromosomal aberration test:Negative

Surfactant

Acute toxicity (oral): LD50: > 40000 mg/kg[rat]
 Skin corrosion/irritation: None [rabbit]
 Serious eye damage/irritation: None [rabbit]
 Mutagenicity: Ames Test:Negative

Dye

Acute toxicity (oral): LD50: > 5000 mg/kg[mouse]
 Skin corrosion/irritation: Moderate [rabbit]
 Serious eye damage/irritation: Mild [rabbit]
 Mutagenicity: Ames Test:Negative

SAFETY DATA SHEET

MSDS: 2000012022US
 Date Prepared: 2014/01/06
 Date Revised:

Product Name: Disperse Dye Ink Violet

12. Ecological information

Product

No Data

Ingredient

Ethylene glycol

Ecotoxicity

Fish acute toxicity: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]

Daphnia acute toxicity: 48hrEC50: 10000mg/l[Daphnia magna]

Algae acute toxicity: 1g/l No effect [Scenedesmus subspicatus]

Persistence and degradability: Readily biodegradable

Glycerin

Ecotoxicity

Fish acute toxicity: 24hrLC50:>5000mg/l[Goldfish]

Daphnia acute toxicity: 24hrEC50:>10000mg/l[Daphnia magna]

Persistence and degradability: Readily biodegradable

13. Disposal considerations

Disposal methods: When disposing of the waste, containers or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

UN Class UN ---
 classification:
 UN number: ---
 Proper shipping name: ---
 Packing group: ---

15. Regulatory information

OSHA Hazard Communication Standard, 29CFR 1910.1200 : This product is NOT considered hazardous under this standard.

CERCLA(Comprehensive Environmental Response

Compensation and Liability Act) :

SARA Title III (Superfund

Amendments and Reauthorization Act) 302

Extreme Hazardous

Substance :

311/312 Hazard Categories : None.

313 Reportable

Ingredients : Ethylene glycol

SAFETY DATA SHEET

MSDS: 2000012022US
Date Prepared: 2014/01/06
Date Revised:

Product Name: Disperse Dye Ink Violet

16. Other information

HMIS Hazard Rating : Health : 1, Flammability : 1, Reactivity : 0

Disclaimer

The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.