

Material Safety Data Sheet

May be used to comply with

OSHA's Hazard Communication Standard,

29 CFR 1910.1200. Standard must be

consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration

(Non-Mandatory Form)

Form Approved

OMB No.1218-0072

IDENTITY(As Used on Label and List)

DC3-600-001

YELLOW RIBBON-350M

Note :Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name

DAI NIPPON PRINTING CO.,LTD.

Emergency Telephone Number

04-2952-9666

Address:

2-5-1, Hirose-dai, Sayama,

Saitama, 350-1328

JAPAN

Telephone Number for information

04-2952-9666

Date prepared December 9, 2011

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(optional)
Polyethylene terephthalate film (CAS No. 25038-59-9)	---	---	---	(78~86%)
Coating layer substances				
Pigment Yellow 120(Trade secret)	---	---	---	(2~5%)
Pigment Yellow 180(Trade secret)	---	---	---	(2~5%)
Synthetic resin (Trade secret)	---	---	---	(5~10%)
Others	---	---	---	(1~4%)

Section III - Physical / Chemical Characteristic

Boiling Point	Not applicable	Specific Gravity (H2O=1)	About 1.2
Vapor Pressure (mmHg)	Not applicable	Melting Point	Not applicable
Vapor Density (AIR = 1)	Not applicable	Evaporation Rate (Butyl Acetate=1)	Negligible
Solubility in water			
Negligible			
Appearance and Odor			
Ink is green solid with slight odor.			

Section IV - Fire and Explosion Hazard Data

Flash point (Method Used)	Flammable Limits	LEL	UEL
Not applicable	Not applicable	Not applicable	Not applicable
Extinguishing Media			
CO2, Water, Dry Chemicals, Foam			
Special Fire fighting Procedures			
For large quantities (i.e. truckload or pallet) involved in a fire, firefighters should wear self-contained breathing apparatus and protective clothing.			
Unusual Fire and Explosion Hazards			
None			

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid None
	Stable	<input type="radio"/>	

Incompatibility (Materials to Avoid)

Strong acids and strong oxidizing agent.

Hazardous Decomposition or Byproducts

CO,CO₂,NOX and H₂O etc.

Hazardous Polymerization	May Occur		Conditions to Avoid None
	Will Not Occur	<input type="radio"/>	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation? No	Skin? No	Ingestion? possible but very unusual.
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Health Hazards(Acute and Chronic)

All the ingredients are negative mutagenic(Test species ;S. typhimurium)

Carcinogenicity:	NTP? No	IARC Monographs? No	OSHA Regulated? No
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Signs and Symptoms of Exposure

None

Medical Conditions

Generally Aggravated by Exposure None

Emergency and First Aid Procedures

Not applicable

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Not applicable

Waste Disposal Method

Dispose by the same method of ordinary plastic products in accordance with all applicable regulations. Any disposal practice must be in compliance with local, state and federal laws and regulations. If necessary, contact government office and ensure conformity with disposal regulations.

Precautions to Be Taken in Handling and Storing.

No special precautions for safety reason.

Other Precautions

None

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Not required

Ventilation	Local Exhaust No	Special No
	Mechanical(General) No	Other No

Protective Gloves

Not required

Eye Protection

Not required

Other Protective Clothing or Equipment

None

Work/Hygienic Practices

None

(Reproduce locally)

OSHA 174,Sept. 1985

December 9, 2011

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IDENTITY(As Used on Label and List)

DC3-601-001

MAGENTA RIBBON-350M

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Section I

Manufacturer's Name

DAI NIPPON PRINTING CO.,LTD.

Emergency Telephone Number

04-2952-9666

Address:

2-5-1, Hirosedai, Sayama,

Saitama, 350-1328

JAPAN

Telephone Number for information

04-2952-9666

Date prepared December 9, 2011

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(optional)
Polyethylene terephthalate film (CAS No. 25038-59-9)	---	---	---	(78~86%)
Coating layer substances				
Pigment Red (Trade secret)	---	---	---	(3~6%)
Pigment Violet(Trade secret)	---	---	---	(3~6%)
Synthetic resin (Trade secret)	---	---	---	(7~11%)
Others	---	---	---	(1~4%)

Section III - Physical / Chemical Characteristic

Boiling Point	Not applicable	Specific Gravity (H2O=1)	About 1.2
Vapor Pressure (mmHg)	Not applicable	Melting Point	Not applicable
Vapor Density (AIR = 1)	Not applicable	Evaporation Rate (Butyl Acetate=1)	Negligible
Solubility in water			
Negligible			
Appearance and Odor			
Ink is red solid with slight odor.			

Section IV - Fire and Explosion Hazard Data

Flash point (Method Used)	Flammable Limits	LEL	UEL
Not applicable	Not applicable	Not applicable	Not applicable
Extinguishing Media			
CO2, Water, Dry Chemicals, Foam			
Special Fire fighting Procedures			
For large quantities (i.e. truckload or pallet) involved in a fire, firefighters should wear self-contained breathing apparatus and protective clothing.			
Unusual Fire and Explosion Hazards			
None			

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid
			None
	Stable	<input type="radio"/>	

Incompatibility (Materials to Avoid)

Strong acids and strong oxidizing agent.

Hazardous Decomposition or Byproducts

CO,CO2,NOX and H2O etc.

Hazardous Polymerization	May Occur		Conditions to Avoid
			None
	Will Not Occur	<input type="radio"/>	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	No	No	possible but very unusual.

Health Hazards(Acute and Chronic)

All the ingredients are negative mutagenic(Test species ;S. typhimurium)

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	No	No	No

Signs and Symptoms of Exposure

None

Medical Conditions

Generally Aggravated by Exposure None

Emergency and First Aid Procedures

Not applicable

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Not applicable

Waste Disposal Method

Dispose by the same method of ordinary plastic products in accordance with all applicable regulations. Any disposal practice must be in compliance with local, state and federal laws and regulations. If necessary, contact government office and ensure conformity with disposal regulations.

Precautions to Be Taken in Handling and Storing.

No special precautions for safety reason.

Other Precautions

None

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Not required

Ventilation	Local Exhaust	Special
	No	No
	Mechanical(General)	Other
	No	No

Protective Gloves

Not required

Eye Protection

Not required

Other Protective Clothing or Equipment

None

Work/Hygienic Practices

None

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DC3-602-001

CYAN RIBBON-350M

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Section I

Manufacturer's Name

DAI NIPPON PRINTING CO.,LTD.

Emergency Telephone Number

04-2952-9666

Address:

2-5-1, Hirose-dai, Sayama,

Saitama, 350-1328

JAPAN

Telephone Number for information

04-2952-9666

Date prepared December 9, 2011

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(optional)
Polyethylene terephthalate film (CAS No. 25038-59-9)	---	---	---	(78~86%)
Coating layer substances				
Pigment Blue(Trade secret)	---	---	---	(5~7%)
Synthetic resin (Trade secret)	---	---	---	(7~11%)
Others	---	---	---	(2~6%)

Section III - Physical / Chemical Characteristic

Boiling Point	Not applicable	Specific Gravity (H2O=1)	About 1.2
Vapor Pressure (mmHg)	Not applicable	Melting Point	Not applicable
Vapor Density (AIR = 1)	Not applicable	Evaporation Rate (Butyl Acetate=1)	Negligible
Solubility in water			
Negligible			
Appearance and Odor			
Ink is blue solid .			

Section IV - Fire and Explosion Hazard Data

Flash point (Method Used)	Flammable Limits	LEL	UEL
Not applicable	Not applicable	Not applicable	Not applicable
Extinguishing Media			
CO2, Water, Dry Chemicals, Foam			
Special Fire fighting Procedures			
For large quantities (i.e. truckload or pallet) involved in a fire, firefighters should wear self-contained breathing apparatus and protective clothing.			
Unusual Fire and Explosion Hazards			
None			

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid
			None
	Stable	<input type="radio"/>	

Incompatibility (Materials to Avoid)

Strong acids and strong oxidizing agent.

Hazardous Decomposition or Byproducts

CO,CO₂,NOX and H₂O etc.

Hazardous Polymerization	May Occur		Conditions to Avoid
			None
	Will Not Occur	<input type="radio"/>	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	No	No	possible but very unusual.

Health Hazards(Acute and Chronic)

All the ingredients are negative mutagenic(Test species ;S. typhimurium)

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	No	No	No

Signs and Symptoms of Exposure

None

Medical Conditions

Generally Aggravated by Exposure None

Emergency and First Aid Procedures

Not applicable

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Not applicable

Waste Disposal Method

Dispose by the same method of ordinary plastic products in accordance with all applicable regulations. Any disposal practice must be in compliance with local, state and federal laws and regulations. If necessary, contact government office and ensure conformity with disposal regulations.

Precautions to Be Taken in Handling and Storing.

No special precautions for safety reason.

Other Precautions

None

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Not required

Ventilation	Local Exhaust	Special
	No	No
	Mechanical(General)	Other
	No	No

Protective Gloves

Not required

Eye Protection

Not required

Other Protective Clothing or Equipment

None

Work/Hygienic Practices

None

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IDENTITY(As Used on Label and List)

DC3-604-001

RED RIBBON-350M

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Section I

Manufacturer's Name

DAI NIPPON PRINTING CO.,LTD.

Emergency Telephone Number

04-2952-9666

Address:

2-5-1, Hirosedai, Sayama,

Saitama, 350-1328

JAPAN

Telephone Number for information

04-2952-9666

Date prepared December 9, 2011

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(optional)
Polyethylene terephthalate film (CAS No. 25038-59-9)	---	---	---	(78~86%)
Coating layer substances				
Pigment Red (Trade secret)	---	---	---	(4~7%)
Pigment Violet(Trade secret)	---	---	---	(2~4%)
Synthetic resin (Trade secret)	---	---	---	(7~11%)
Others	---	---	---	(1~4%)

Section III – Physical / Chemical Characteristic

Boiling Point	Not applicable	Specific Gravity (H2O=1)	About 1.2
Vapor Pressure (mmHg)	Not applicable	Melting Point	Not applicable
Vapor Density (AIR = 1)	Not applicable	Evaporation Rate (Butyl Acetate=1)	Negligible
Solubility in water			
Negligible			
Appearance and Odor			
Ink is red solid with slight odor.			

Section IV - Fire and Explosion Hazard Data

Flash point (Method Used)	Flammable Limits	LEL	UEL
Not applicable	Not applicable	Not applicable	Not applicable
Extinguishing Media			
CO2, Water, Dry Chemicals, Foam			
Special Fire fighting Procedures			
For large quantities (i.e. truckload or pallet) involved in a fire, firefighters should wear self-contained breathing apparatus and protective clothing.			
Unusual Fire and Explosion Hazards			
None			

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	<input type="radio"/>	None
Incompatibility (Materials to Avoid) Strong acids and strong oxidizing agent.			
Hazardous Decomposition or Byproducts CO,CO2,NOX and H2O etc.			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	<input type="radio"/>	None

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	No	No	possible but very unusual.
Health Hazards(Acute and Chronic) All the ingredients are negative mutagenic(Test species ;S. typhimurium)			
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	No	No	No
Signs and Symptoms of Exposure None			
Medical Conditions Generally Aggravated by Exposure None			
Emergency and First Aid Procedures Not applicable			

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled Not applicable
Waste Disposal Method Dispose by the same method of ordinary plastic products in accordance with all applicable regulations. Any disposal practice must be in compliance with local, state and federal laws and regulations. If necessary, contact government office and ensure conformity with disposal regulations.
Precautions to Be Taken in Handling and Storing. No special precautions for safety reason.
Other Precautions None

Section VIII - Control Measures

Respiratory Protection (Specify Type) Not required		
Ventilation	Local Exhaust No	Special No
	Mechanical(General) No	Other No
Protective Gloves Not required	Eye Protection Not required	
Other Protective Clothing or Equipment None		
Work/Hygienic Practices None		

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OMB No.1218-0072

IDENTITY(As Used on Label and List)

DC3-608-001

WHITE RIBBON-350M

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Section I

Manufacturer's Name

DAI NIPPON PRINTING CO.,LTD.

Emergency Telephone Number

04-2952-9666

Address:

2-5-1, Hirose-dai, Sayama,

Saitama, 350-1328

JAPAN

Telephone Number for information

04-2952-9666

Date prepared December 9, 2011

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(optional)
Polyethylene terephthalate film (CAS No. 25038-59-9)	---	---	---	(72~82%)
Coating layer substances				
Inorganic Pigment(Trade secret)	---	---	---	(12~17%)
Synthetic resin (Trade secret)	---	---	---	(4~9%)
Others	---	---	---	(2~6%)

Section III - Physical / Chemical Characteristic

Boiling Point	Not applicable	Specific Gravity (H2O=1)	About 1.2
Vapor Pressure (mmHg)	Not applicable	Melting Point	Not applicable
Vapor Density (AIR = 1)	Not applicable	Evaporation Rate (Butyl Acetate=1)	Negligible
Solubility in water	Negligible		
Appearance and Odor	Ink is white solid .		

Section IV - Fire and Explosion Hazard Data

Flash point (Method Used)	Flammable Limits	LEL	UEL
Not applicable	Not applicable	Not applicable	Not applicable
Extinguishing Media	CO2, Water, Dry Chemicals, Foam		
Special Fire fighting Procedures	For large quantities (i.e. truckload or pallet) involved in a fire, firefighters should wear self-contained breathing apparatus and protective clothing.		
Unusual Fire and Explosion Hazards	None		

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid
			None
	Stable	<input type="radio"/>	

Incompatibility (Materials to Avoid)

Strong acids and strong oxidizing agent.

Hazardous Decomposition or Byproducts

CO,CO₂,NOX and H₂O etc.

Hazardous Polymerization	May Occur		Conditions to Avoid
			None
	Will Not Occur	<input type="radio"/>	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	No	No	possible but very unusual.

Health Hazards(Acute and Chronic)

All the ingredients are negative mutagenic(Test species ;S. typhimurium)

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	No	No	No

Signs and Symptoms of Exposure

None

Medical Conditions

Generally Aggravated by Exposure None

Emergency and First Aid Procedures

Not applicable

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Not applicable

Waste Disposal Method

Dispose by the same method of ordinary plastic products in accordance with all applicable regulations. Any disposal practice must be in compliance with local, state and federal laws and regulations. If necessary, contact government office and ensure conformity with disposal regulations.

Precautions to Be Taken in Handling and Storing.

No special precautions for safety reason.

Other Precautions

None

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Not required

Ventilation	Local Exhaust	Special
	No	No
	Mechanical(General)	Other
	No	No

Protective Gloves

Not required

Eye Protection

Not required

Other Protective Clothing or Equipment

None

Work/Hygienic Practices

None

(Reproduce locally)

OSHA 174,Sept. 1985

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