

**SAFETY DATA SHEET**

MSDS No.16030706

MSDS Creation Date: February 29, 2016

Revision Date:

**1. Identification****Product Name:** FUJI SP BLUE 6611W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp**2. Hazards Identification****CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

**3. Composition/Information on Ingredients****Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Pigment Blue 15:6	None	3.0-6.0	147-14-8 205-685-1
2. Titanium Dioxide	None	5.0-10.0	13463-67-7 236-675-5
3. Aluminum Silicate	None	2.0-5.0	Registered Registered
4. Acrylic Resin	None	5.0-7.0	Registered Polymer
5. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
6. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
7. Water	None	70.0-85.0	7732-18-5 231-791-2

**4. First-Aid Measures****Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.

- Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15 minutes. If irritation persists, obtain medical advice immediately.
- Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.
- Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point, and high temperature below 50 degrees Celsius.

## 8. Exposure controls/Personal Protection

### Exposure Limits:

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Pigment Blue 15:6	3.0-6.0	3.5 mg/m <sup>3</sup>	5.5 mg/m <sup>3</sup>	not investigating	not investigating
2. Titanium Dioxide	5.0-10.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Aluminum Silicate	2.0-5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
4. Ethanol	1.0-3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
5. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask

## 9. Physical and Chemical Properties

Appearance: Blue liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0–10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100 degrees Celsius	Vapor Pressure: Not available
Melting Point: 0 degrees Celsius	Vapor Density: Not available
Specific Gravity: 1.2 (20 degrees Celsius)	Solubility in Water: ∞
Percent Volatile (wt%): 75.0–85.0	Viscosity at 25 degrees Celsius (mPa·s): < 100
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50 degrees Celsius  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Not available
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted

**UN Proper Shipping Name:** Not restricted

**Transport Hazard Class:** Not restricted

**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

**(EC) 2037/2000:** Not Required

**(EC) 304/2003:** Not Required

**2002/95/EC:** None

**REACH SVHC(-12<sup>th</sup> candidate list):** None

### (USA Information)

**SARA Title III § 302:** None

**§ 304:** None

**§ 313:** Isopropyl Alcohol (1.0%)

**California Proposition 65:** None

**HMIS Rating:** Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
- \* SDSs of raw materials

### Abbreviation

**EU:** European Union

**OSHA PEL:** PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).

**ACGIH TLV:** TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

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## SAFETY DATA SHEET

MSDS No.16030707

MSDS Creation Date: February 29, 2016

Revision Date:

### 1. Identification

**Product Name:** FUJI SP GREEN 7408W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp

### 2. Hazards Identification

**CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

### 3. Composition/Information on Ingredients

**Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Pigment Green 7	None	5.0-8.0	1328-53-6 215-524-7
2. Titanium Dioxide	None	5.0-10.0	13463-67-7 236-675-5
3. Aluminum Silicate	None	2.0-5.0	Registered Registered
4. Acrylic Resin	None	5.0-7.0	Registered Polymer
5. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
6. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
7. Water	None	70.0-85.0	7732-18-5 231-791-2

### 4. First-Aid Measures

**Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.

- Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15 minutes. If irritation persists, obtain medical advice immediately.
- Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.
- Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point and high temperature below 50 degrees Celsius.

## 8. Exposure controls/Personal Protection

### Exposure Limits:

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Pigment Green 7	5.0-8.0	3.5 mg/m <sup>3</sup>	5.5 mg/m <sup>3</sup>	not investigating	not investigating
2. Titanium Dioxide	5.0-10.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Aluminum Silicate	2.0-5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
4. Ethanol	1.0-3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
5. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask

## 9. Physical and Chemical Properties

Appearance: Green liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0–10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100 degrees Celsius	Vapor Pressure: Not available
Melting Point: 0 degrees Celsius	Vapor Density: Not available
Specific Gravity: 1.2 (20 degrees Celsius)	Solubility in Water: ∞
Percent Volatile (wt%): 75.0–85.0	Viscosity at 25 degrees Celsius (mPa·s): < 100
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50 degrees Celsius  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Not available
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted

**UN Proper Shipping Name:** Not restricted

**Transport Hazard Class:** Not restricted



**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

**(EC) 2037/2000:** Not Required

**(EC) 304/2003:** Not Required

**2002/95/EC:** None

**REACH SVHC(-12<sup>th</sup> candidate list):** None

### (USA Information)

**SARA Title III § 302:** None

**§ 304:** None

**§ 313:** Isopropyl Alcohol (1.0%)

**California Proposition 65:** None

**HMIS Rating:** Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
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**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

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**SAFETY DATA SHEET**

MSDS No.16030701

MSDS Creation Date: February 29, 2016

Revision Date:

**1. Identification****Product Name:** FUJI SP ORANGE 650W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp**2. Hazards Identification****CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

**3. Composition/Information on Ingredients****Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Pigment Orange 13	None	10.0-15.0	3520-72-7 222-530-3
2. Titanium Dioxide	None	5.0-10.0	13463-67-7 236-675-5
3. Aluminum Silicate	None	2.0-5.0	Registered Registered
4. Acrylic Resin	None	5.0-7.0	Registered Polymer
5. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
6. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
7. Water	None	65.0-75.0	7732-18-5 231-791-2

**4. First-Aid Measures****Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.

- Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15 minutes. If irritation persists, obtain medical advice immediately.
- Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.
- Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point and high temperature below 50 degrees Celsius.

## 8. Exposure controls/Personal Protection

### Exposure Limits:

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Pigment Orange 13	10.0-15.0	3.5 mg/m <sup>3</sup>	5.5 mg/m <sup>3</sup>	not investigating	not investigating
2. Titanium Dioxide	5.0-10.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Aluminum Silicate	2.0-5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
4. Ethanol	1.0-3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
5. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask

## 9. Physical and Chemical Properties

Appearance: Orange liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0–10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100 degrees Celsius	Vapor Pressure: Not available
Melting Point: 0 degrees Celsius	Vapor Density: Not available
Specific Gravity: 1.5 (20 degrees Celsius)	Solubility in Water: ∞
Percent Volatile (wt%): 70.0–80.0	Viscosity at 25°C (mPa·s): < 100
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50 degrees Celsius  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Not available
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted

**UN Proper Shipping Name:** Not restricted

**Transport Hazard Class:** Not restricted

**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

**(EC) 2037/2000:** Not Required

**(EC) 304/2003:** Not Required

**2002/95/EC:** None

**REACH SVHC(-12<sup>th</sup> candidate list):** None

### (USA Information)

**SARA Title III § 302:** None

**§ 304:** None

**§ 313:** Isopropyl Alcohol (1.0%)

**California Proposition 65:** None

**HMIS Rating:** Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
- \* SDSs of raw materials

### Abbreviation

**EU:** European Union

**OSHA PEL:** PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).

**ACGIH TLV:** TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

The information, data and recommendations set forth herein (the "information") are presented in good faith and are believed to be correct as of the date hereof. The company/manufacturer makes no representations as to the completeness or accuracy of the information and disclaims responsibility for any reliance thereon. The information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of

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**SAFETY DATA SHEET**

MSDS No.16030709

MSDS Creation Date: February 23, 2016

Revision Date:

**1. Identification****Product Name:** FUJI SP PINK 9467W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp**2. Hazards Identification****CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

**3. Composition/Information on Ingredients****Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Titanium Dioxide	None	20.0-25.0	13463-67-7 236-675-5
2. Aluminum Silicate	None	3.0-5.0	Registered Registered
3. Acrylic Resin	None	5.0-7.0	Registered Polymer
4. Styrene-Acrylonitrile Copolymer	None	<3.0	9003-54-7 Polymer
5. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
6. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
7. Water	None	55.0-65.0	7732-18-5 231-791-2

**4. First-Aid Measures****Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.



- Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15 minutes. If irritation persists, obtain medical advice immediately.
- Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.
- Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point and high temperature below 50 degrees Celsius.

## 8. Exposure controls/Personal Protection

### Exposure Limits:

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Titanium Dioxide	20.0-25.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
2. Aluminum Silicate	3.0-5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Ethanol	1.0-3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
4. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask

## 9. Physical and Chemical Properties

Appearance: Pink liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0–10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100 degrees Celsius	Vapor Pressure: Not available
Melting Point: 0 degrees Celsius	Vapor Density: Not available
Specific Gravity: 1.5 (20 degrees Celsius)	Solubility in Water: ∞
Percent Volatile (wt%): 60.0–70.0	Viscosity at 25 degrees Celsius (mPa·s): < 100
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50 degrees Celsius  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Not available
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted

**UN Proper Shipping Name:** Not restricted

**Transport Hazard Class:** Not restricted

**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

(EC) 2037/2000: Not Required

(EC) 304/2003: Not Required

2002/95/EC: None

REACH SVHC(-12<sup>th</sup> candidate list): None

### (USA Information)

SARA Title III § 302: None

§ 304: None

§ 313: Isopropyl Alcohol (1.0%)

California Proposition 65: None

HMIS Rating: Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

NFPA Rating: Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
- \* SDSs of raw materials

### Abbreviation

**EU:** European Union

**OSHA PEL:** PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).

**ACGIH TLV:** TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

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same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulation. In no event will the company//manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

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**SAFETY DATA SHEET**

MSDS No.16030705

MSDS Creation Date: February 29, 2016

Revision Date:

**1. Identification****Product Name:** FUJI SP RED 5692W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp**2. Hazards Identification****CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

**3. Composition/Information on Ingredients****Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Pigment Red 170	None	10.0-14.0	2786-76-7 220-509-3
2. Titanium Dioxide	None	5.0-10.0	13463-67-7 236-675-5
3. Aluminum Silicate	None	2.0-5.0	Registered Registered
4. Acrylic Resin	None	5.0-7.0	Registered Polymer
5. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
6. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
7. Water	None	65.0-75.0	7732-18-5 231-791-2

**4. First-Aid Measures****Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.

- Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15 minutes. If irritation persists, obtain medical advice immediately.
- Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.
- Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point and high temperature below 50 degrees Celsius.

## 8. Exposure controls/Personal Protection

### Exposure Limits:

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Pigment Red 170	10.0-14.0	3.5 mg/m <sup>3</sup>	5.5 mg/m <sup>3</sup>	not investigating	not investigating
2. Titanium Dioxide	5.0-10.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Aluminum Silicate	2.0-5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
4. Ethanol	1.0-3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
5. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask

## 9. Physical and Chemical Properties

Appearance: Red liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0–10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100 degrees Celsius	Vapor Pressure: Not available
Melting Point: 0 degrees Celsius	Vapor Density: Not available
Specific Gravity: 1.2 (20 degrees Celsius)	Solubility in Water: ∞
Percent Volatile (wt%): 68.0–78.0	Viscosity at 25 degrees Celsius (mPa·s): < 100
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50 degrees Celsius  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Not available
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted

**UN Proper Shipping Name:** Not restricted

**Transport Hazard Class:** Not restricted

**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

**(EC) 2037/2000:** Not Required

**(EC) 304/2003:** Not Required

**2002/95/EC:** None

**REACH SVHC(-12<sup>th</sup> candidate list):** None

### (USA Information)

**SARA Title III § 302:** None

**§ 304:** None

**§ 313:** Isopropyl Alcohol (1.0%)

**California Proposition 65:** None

**HMIS Rating:** Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
- \* SDSs of raw materials

### Abbreviation

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**OSHA PEL:** PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).

**ACGIH TLV:** TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

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**SAFETY DATA SHEET**

MSDS No.16030710

MSDS Creation Date: February 29, 2016

Revision Date:

**1. Identification****Product Name:** FUJI SP VIOLET 9608W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp**2. Hazards Identification****CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

**3. Composition/Information on Ingredients****Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Pigment Violet 23	None	< 3.0	6358-30-1 228-767-9
2. Titanium Dioxide	None	5.0-10.0	13463-67-7 236-675-5
3. Aluminum Silicate	None	2.0-5.0	Registered Registered
4. Acrylic Resin	None	5.0-7.0	Registered Polymer
5. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
6. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
7. Water	None	75.0-85.0	7732-18-5 231-791-2

**4. First-Aid Measures****Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.

- Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15 minutes. If irritation persists, obtain medical advice immediately.
- Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.
- Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point and high temperature below 50 degrees Celsius.

## 8. Exposure controls/Personal Protection

### Exposure Limits:

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Pigment Violet 23	< 3.0	3.5 mg/m <sup>3</sup>	5.5 mg/m <sup>3</sup>	not investigating	not investigating
2. Titanium Dioxide	5.0-10.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Aluminum Silicate	2.0-5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
4. Ethanol	1.0-3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
5. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask

## 9. Physical and Chemical Properties

Appearance: Violet liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0–10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100 degrees Celsius	Vapor Pressure: Not available
Melting Point: 0 degrees Celsius	Vapor Density: Not available
Specific Gravity: 1.2 (20 degrees Celsius)	Solubility in Water: ∞
Percent Volatile (wt%): 80.0–90.0	Viscosity at 25 degrees Celsius (mPa·s): < 100
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50 degrees Celsius  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Not available
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted

**UN Proper Shipping Name:** Not restricted

**Transport Hazard Class:** Not restricted

**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

**(EC) 2037/2000:** Not Required

**(EC) 304/2003:** Not Required

**2002/95/EC:** None

**REACH SVHC(-12<sup>th</sup> candidate list):** None

### (USA Information)

**SARA Title III § 302:** None

**§ 304:** None

**§ 313:** Isopropyl Alcohol (1.0%)

**California Proposition 65:** None

**HMIS Rating:** Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
- \* SDSs of raw materials

### Abbreviation

**EU:** European Union

**OSHA PEL:** PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).

**ACGIH TLV:** TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

The information, data and recommendations set forth herein (the "information") are presented in good faith and are believed to be correct as of the date hereof. The company/manufacturer makes no representations as to the completeness or accuracy of the information and disclaims responsibility for any reliance thereon. The information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of

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**SAFETY DATA SHEET**

MSDS No.16030702

MSDS Creation Date: February 23, 2016

Revision Date:

**1. Identification****Product Name:** FUJI SP WHITIE 1184W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp**2. Hazards Identification****CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

**3. Composition/Information on Ingredients****Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Titanium Dioxide	None	27.0-30.0	13463-67-7 236-675-5
2. Aluminum Silicate	None	3.0-5.0	Registered Registered
3. Acrylic Resin	None	5.0-7.0	Registered Polymer
4. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
5. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
6. Water	None	55.0-65.0	7732-18-5 231-791-2

**4. First-Aid Measures****Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.**Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15

minutes. If irritation persists, obtain medical advice immediately.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2–4 cups of milk or water.

**Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point and high temperature below 50 degrees Celsius.

## 8. Exposure controls/Personal Protection

**Exposure Limits:**

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Titanium Dioxide	27.0–30.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
2. Aluminum Silicate	3.0–5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Ethanol	1.0–3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
4. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask



## 9. Physical and Chemical Properties

Appearance: White liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0–10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100 degrees Celsius	Vapor Pressure: Not available
Melting Point: 0 degrees Celsius	Vapor Density: Not available
Specific Gravity: 1.5 (20 degrees Celsius)	Solubility in Water: ∞
Percent Volatile (wt%): 60.0–70.0	Viscosity at 25 degrees Celsius (mPa·s): < 100
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50 degrees Celsius  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Not available
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class:** Not restricted

**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

**(EC) 2037/2000:** Not Required

**(EC) 304/2003:** Not Required

**2002/95/EC:** None

**REACH SVHC(-12<sup>th</sup> candidate list):** None

### (USA Information)

**SARA Title III § 302:** None

**§ 304:** None

**§ 313:** Isopropyl Alcohol (1.0%)

**California Proposition 65:** None

**HMIS Rating:** Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
- \* SDSs of raw materials

### Abbreviation

**EU:** European Union

**OSHA PEL:** PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).

**ACGIH TLV:** TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

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the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulation. In no event will the company/manufacture be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

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**SAFETY DATA SHEET**

MSDS No.16030704

MSDS Creation Date: February 29, 2016

Revision Date:

**1. Identification****Product Name:** FUJI SP YELLOW 4413W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp**2. Hazards Identification****CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

**3. Composition/Information on Ingredients****Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Pigment Yellow 14	None	8.0-11.0	5468-75-7 226-789-3
2. Titanium Dioxide	None	5.0-10.0	13463-67-7 236-675-5
3. Aluminum Silicate	None	2.0-5.0	Registered Registered
4. Acrylic Resin	None	5.0-7.0	Registered Polymer
5. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
6. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
7. Water	None	70.0-80.0	7732-18-5 231-791-2

**4. First-Aid Measures****Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.

- Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15 minutes. If irritation persists, obtain medical advice immediately.
- Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.
- Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point and high temperature below 50 degrees Celsius.

## 8. Exposure controls/Personal Protection

### Exposure Limits:

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Pigment Yellow 14	8.0-11.0	3.5 mg/m <sup>3</sup>	5.5 mg/m <sup>3</sup>	not investigating	not investigating
2. Titanium Dioxide	5.0-10.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Aluminum Silicate	2.0-5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
4. Ethanol	1.0-3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
5. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask

## 9. Physical and Chemical Properties

Appearance: Yellow liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0–10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100 degrees Celsius	Vapor Pressure: Not available
Melting Point: 0 degrees Celsius	Vapor Density: Not available
Specific Gravity: 1.2 (20 degrees Celsius)	Solubility in Water: ∞
Percent Volatile (wt%): 75.0–85.0	Viscosity at 25 degrees Celsius (mPa·s): < 100
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50 degrees Celsius  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Not available
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted

**UN Proper Shipping Name:** Not restricted

**Transport Hazard Class:** Not restricted

**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

**(EC) 2037/2000:** Not Required

**(EC) 304/2003:** Not Required

**2002/95/EC:** None

**REACH SVHC(-12<sup>th</sup> candidate list):** None

### (USA Information)

**SARA Title III § 302:** None

**§ 304:** None

**§ 313:** Isopropyl Alcohol (1.0%)

**California Proposition 65:** None

**HMIS Rating:** Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
- \* SDSs of raw materials

### Abbreviation

**EU:** European Union

**OSHA PEL:** PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).

**ACGIH TLV:** TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

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**SAFETY DATA SHEET**

MSDS No.16030708

MSDS Creation Date: February 23, 2016

Revision Date:

**1. Identification****Product Name:** FUJI SP BLACK 8137W**Recommended Use:** Water-based Stationery**Manufacture:** FUJI PIGMENT Co., Ltd.**Address:** 2-23-2, Obana, Kawanishi, Hyogo 666-0015 Japan**Telephone no.:** +81-72-759-8501**Facsimile no.:** +81-72-759-9008**Emergency no.:** +81-72-759-8501**E-mail:** lab@fuji-pigment.co.jp**2. Hazards Identification****CLP/GHS Classification:**

Health	Environmental	Physical
Not Classified or Out of category	Not Classified or Out of category	Not Classified or Out of category

**Pictograms by CLP/GHS:** None

<i>Hazard Statements</i>	<i>Precautionary Statements</i>
EUH208: Contains OIT and CMIT/MIT. May produce an allergic reaction.	P264: Wash hands thoroughly after handling P280: Wear protective gloves/protective clothing/eye protection/face protection P273: Avoid release to the environment

**PBT substance and vPvB substance:**

No component of this ink a PBT or vPvB substance under Regulation (ec) 1907/2006

**3. Composition/Information on Ingredients****Chemical Name:** Mixture**Common Name:** Water-Based Pigment Dispersion

Component	CLP/GHS Classification	Weight percent	CAS No. EC No.
1. Carbon Black	None	5.0-10.0	1333-86-4 215-609-9
2. Aluminum Silicate	None	2.0-5.0	Registered Registered
3. Acrylic Resin	None	5.0-7.0	Registered Polymer
4. Ethanol	Flam. Liq. 2	1.0-3.0	64-17-75 200-578-6
5. Isopropyl Alcohol	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	< 2.0	67-63-0 200-661-7
6. Water	None	75.0-85.0	7732-18-5 231-791-2

**4. First-Aid Measures****Inhalation:** None**Skin Contact:** Wash with water and soap or mild detergent. If irritation persists, obtain medical advice immediately.**Eye Contact:** Immediately flash eyes with generous amounts of water for at least 15

minutes. If irritation persists, obtain medical advice immediately.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2–4 cups of milk or water.

**Note to Physicians:** None

## 5. Fire-fighting Measures

**Extinguishing Media:** Water Fog, Dry Chemical, Form or Carbon Dioxide

**Special Fire Fighting Precautions:** Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**List Hazardous Decomposition Products:** CO, CO<sub>2</sub>, NO<sub>x</sub>

## 6. Accidental Release Measures

**Personal Precautions:** Avoid contact with skin, eyes and clothing. Avoid breathing vapor and mist. (Also see Section 8). Do not touch damaged container or leakage thing if you do not wear appropriate protective clothes.

**Environmental Precautions:** Do not release to sewer, surface water or ground water.

**Method and Materials for Containment and Clean up:** After it is made to absorb to cloth or sand, it flushes with bags of water. In this case, it is noted that a thick liquid doesn't flow out to the river and drainage, etc.

## 7. Handling and Storage

**Precautions for Safe Handling:** The worker wears an appropriate protection tool, and avoids contact and the inhalation into eyes and the skins (Also see Section 8).

**Conditions for Stable Storage:** The storage container must closely stop it, and be grounded and bonded. Store away from low temperature less than its melting point and high temperature below 50°C.

## 8. Exposure controls/Personal Protection

**Exposure Limits:**

Component	Wt %	ACGIH 2002-TWA	OSHA PEL	EU-ILV	DFG MAK
1. Carbon Black	5.0–10.0	15 mg/m <sup>3</sup> (as dust)	10 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
2. Aluminum Silicate	2.0–5.0	10 mg/m <sup>3</sup> (as dust)	80 mg/m <sup>3</sup> (as dust)	not investigating	not investigating
3. Ethanol	1.0–3.0	1000 ppm	1000ppm	140 ppm(8h, Skin) 1000 ppm(15min., Skin)	500 ppm
4. Isopropyl Alcohol	< 2.0	200 ppm	400 ppm	not investigating	200 ppm

**Equipment Measures:** Facial cleansing shower and washroom equipment, etc.

**Protection Tool:** The worker has to wear following protection tools for personal safe.

**Eye Protection:** Chemical safety glasses with side-shields or goggles

**Skin Protection:** Neoprene glove, boots, and/or full body protection

**Ingestion Protection:** Face shield or mask

## 9. Physical and Chemical Properties

Appearance: Black liquid	Auto Ignition Temperature: Not applicable
Odor: Alcoholic Smell	Upper Flammability Limits: Not applicable
pH: 8.0~10.0 (100%)	Lower Flammability Limits: Not applicable
Boiling Point: 100°C	Vapor Pressure: Not available
Melting Point: 0 °C	Vapor Density: Not available
Specific Gravity: 1.1 (20 °C)	Solubility in Water: ∞
Percent Volatile (wt%): 82.0	Viscosity at 25°C (mPa·s): < 50
Flash Point: Not applicable	Octanol/Water Partition Coefficient: Not available

## 10. Stability and Reactivity

**Reactivity:** None

**Chemical Stability:** No decomposition, if used according to specifications.

**Possibility of Hazardous Reactions:** None are known.

**Conditions to Avoid:** Do not reserve with high temperature up to 50°C  
Do not freeze the liquid.

**Materials to Avoid:** Strong acid and alkali.

**Hazardous Decomposition Products:** None are known.

## 11. Toxicological Information

**Acute Toxicity:**

Inhalation:	Not available
Ingestion:	Not available
Eyes:	May cause irritation transiently.
Skin:	Will be weakly harmful.

**Sensitization:** No data

**Mutagenicity:** No data

**Reproductive Toxicity:** No data

**Carcinogenicity:** No data

**Other Information:** No data

## 12. Ecological Information

<b>Toxicity:</b>	Titanium oxide is classified Cat.4 of aquatic chronic. Avoid release to the environment
<b>Persistence /Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Not expected to accumulate in biological organisms.
<b>Mobility:</b>	Not mobile soil. Pigment does not dissolve in water.
<b>PBT and vPvB:</b>	No component in this ink a PBT or vPvB substance.
<b>Ozone Depleting Substances:</b>	Not contained
<b>Other advice Effects:</b>	Not available

## 13. Disposal Considerations

Waste must be disposal of in accordance with federal, state and local regulations.

## 14. Transport Information

**UN Number:** Not restricted

**UN Proper Shipping Name:** Not restricted

**Transport Hazard Class:** Not restricted

**Packing Group:** Not restricted

**Environmental Hazards:** Not restricted

**Special Precautions for User:** Wear protection tools for personal safe in Section 8.

**Transport according to Annex II of MARPOL 73/78 and the IBC Code:**

Not Hazard Item, Not restricted

## 15. Regulatory Information

**Inventory Status:** All components are listed on ENCS, TSCA, DSL/NDSL, ECL, ECN, IECSC, PICCS and EINECS/ELINCS.

### (EU Information)

**(EC) 2037/2000:** Not Required

**(EC) 304/2003:** Not Required

**2002/95/EC:** None

**REACH SVHC (~12<sup>th</sup> candidate list):** None

### (USA Information)

**SARA Title III § 302:** None

**§ 304:** None

**§ 313:** Isopropyl Alcohol (1.0%)

**California Proposition 65:** None

**HMIS Rating:** Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: C

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## 16. Other Information

### Literature References:

- \* ACGIH Threshold Limit Values for Chemicals Substances and Physical Agents and Biological Exposure Indices.
- \* ILO Occupational Safety and Health Series 37 "occupational Exposure Limits for Airborne Toxic Substances"
- \* World Health Organization International Agency for Research on cancer, IARC Monographs on the Carcinogenic Risk of Chemicals to humans
- \* EU Directive 76/769/EEC, 67/548/EEC, 1999/45/EEC, 2009/2/EC
- \* EU Regulation (EC)2037/2000, (EC)304/2003, (EC) 1272/2008
- \* JIS Z 7252: 2009 JIS Z 7253: 2012
- \* GHS Database of National Institute of Technology and Evaluation (Japan)
- \* SDSs of raw materials

### Abbreviation

**EU:** European Union

**OSHA PEL:** PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA).

**ACGIH TLV:** TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

**EU ILV:** Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

**DFG MAK:** MAK (Maximalc Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft.

**TWA:** Time Weighted Average

**STEL:** Short Term Exposure Limit

**IARC:** International Agency for Research on Cancer

**NTP:** National Toxicology Program(USA)

**PBT:** Persistent Bio-accumulative and Toxic

**vPvB:** very Persistent and very Bio-accumulative

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