Pitney Bowes

SAFETY DATA SHEET

SDS Number:	270, REV F PITNEY BOWES INC.	**Effective Date:** **Revised Date:**	April 25, 2005 May 24, 2013
Product Name:	Fluorescent Red Ink FA811 for K700	**Page:**	1 of 8

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name: Fluorescent Red Ink FA811 for K700
Reorder Number: 797-0, 797-M, 797-0E, 797-Q

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Printer Cartridge

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer:	Pitney Bowes Inc. 1 Elmcroft Road Stamford, CT 06926-0700 United States	Pitney Bowes Ltd The Pinnacles Harlow Essex, CM19 5BD
Information Phone Number:	800-243-7824	+44(0) 8705 252 525
E-mail:	ehs@pb.com	ehs@pb.com

1.4 Emergency Telephone Number

Emergency Spill Information	800-424-9300 *North America*	00-1-703-527-3887 *International* (collect call)

SDS Date of Preparation: May 24, 2013

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

CLP/GHS Classification (1272/2008): Not classified as hazardous.

EU Classification (67/548/EEC): Not classified as dangerous

2.2 Label Elements: None required.

2.3 Other Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Chemical Name	CAS#	EINECS#	EU Classification (67/548/EEC)	GHS Classification Regulation (EC) No 1272/2008	%
Water	7732-18-5	231-791-2	Not Applicable	Not Applicable	60-70
Glycerol	56-81-5	200-289-5	Not Applicable	Not Applicable	15-25

Diethylene Glycol	111-46-6	203-872-2	Xn R22	Acute Tox 4 (H302)	1-9
Dyes and Toners	Proprietary	Proprietary	Not Applicable	Not Applicable	1-5
Triethylene glycol mono-n-butyl ether	143-22-6	205-592-6	Xi R41	Eye Corr. 1 (H318)	< 3

See Section 16 for further information on EU and GHS Classification.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

Eyes: Flush eyes with plenty of cool water, holding eyelids open to assure thorough rinsing. Get medical attention if irritation develops or persists.

Skin: Wash with soap and water. Get medical attention if irritation develops or persists.

Inhalation: Remove to fresh air. Get medical attention if irritation develops or persists.

Ingestion: If small amounts are ingested, no first aid should be necessary. If large amounts are swallowed, do not induce vomiting unless directed by a medical professional. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get medical attention.

Notes to Physicians: Treat symptomatically.

4.2 Most Important symptoms and effects, both acute and delayed: May cause mild eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed:
Immediate medical treatment should not be required

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Use water spray, carbon dioxide, dry chemical or foam to extinguish fire.

5.2 Special Hazards Arising from the Substance or Mixture

Unusual Fire and Explosion Hazards: None known.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

5.3 Advice for Fire-Fighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid contact with eyes, skin and clothing.

6.2 Environmental Precautions:

It is recommended to keep away from drains; surface and ground water.

6.3 Methods and Material for Containment and Cleaning Up:

Large Spill: Not sold in large quantities.

Small Spill: Wipe up with absorbent material and place into a suitable container for disposal. Rinse area with a damp cloth to remove residue.

6.4 Reference to Other Sections:

Refer to Section 8 for protective equipment and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Avoid contact with eyes, skin, and clothing. Wash thoroughly after use.

7.2 Conditions for Safe Storage, Including any Incompatibilities:

Keep away from excessive heat and cold. Keep out of the reach of children.

7.3 Specific end use(s):

Printer Cartridge

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	Exposure Limits
Water	None Established
Glycerol	
United States	15 mg/m3 TWA (Total dust) OSHA PEL 5 mg/m3 TWA (Respirable fraction) OSHA PEL
Australia	10 mg/m3 TWA
Germany	50 mg/m3 TWA (Inhaleable); 100 mg/m3 STEL (Inhaleable)
Spain	10 mg/m3 TWA
United Kingdom	10 mg/m3 TWA
Diethylene Glycol	
United States	10 ppm TWA AIHA WEEL
Australia	23 ppm TWA
Germany	10 ppm TWA; 40 ppm STEL
United Kingdom	23 ppm TWA
Triethylene glycol mono-n-butyl ether	None Established
Dyes and Toners	None Established

8.2 Exposure Controls:

Engineering Controls: General ventilation sufficient to keep exposure below exposure limits.

Respiratory Protection: None normally required.

Skin Protection: None normally required. Wear rubber gloves if needed to avoid skin contact.

Eye Protection: None normally required. Wear safety glasses if eye contact is possible.

Other: Not required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties:

Appearance: Ink cartridge containing a red liquid.	**Vapor Density:** Not determined
Odor: Slight odor	**Specific Gravity:** 1.0 -1.1
Odor Threshold: Not determined	**Water Solubility:** Soluble
pH: 7-9	**Octanol/Water Partition Coefficient:** Not determined
Melting Point/Freezing Point: < -5°C (23°F)	**Autoignition Temperature:** Not determined
Boiling Point: >100°C (212°F)	**Decomposition Temperature:** Not determined
Flash Point: Does not flash at 93.3°C (199.9°F) or lower.	**Viscosity:** 1-5 mPa s
Evaporation Rate: Not determined	**Explosion Properties:** Not determined
Flammable Limits: LEL: Not determined UEL: Not determined	**Oxidizing Properties:** Not determined
Vapor Pressure: Not determined	**VOC:** Not determined

9.2 Other Information:

None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

Not reactive under normal conditions of use.

10.2 Chemical Stability:

Stable.

10.3 Possibility of Hazardous Reactions:

None known.

10.4 Conditions to Avoid:

None known.

10.5 Incompatible Materials:

Avoid strong oxidizers and strong bases.

10.6 Hazardous Decomposition Products:

Carbon dioxide, and carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Eyes: May cause mild irritation with redness and tearing.
Skin: No adverse effects expected under normal use.
Ingestion: Swallowing large amounts may cause abdominal pain, headache, dizziness, drowsiness, nausea, vomiting and diarrhea.
Inhalation: No adverse effects expected during normal use. High vapor concentrations due to heating may cause coughing, sore throat, headache, dizziness, drowsiness and vomiting. Prolonged intentional inhalation may result in respiratory tract irritation.

Acute Toxicity Values:

Product	LD50: >2,000 mg/kg		Oral
Glycerol	LD50: 6,500 mg/kg	Rat	Oral
	LC50: > 570 mg/m3/ 1 hr	Rat	Inhalation
Diethylene Glycol	LD50: 15,600 mg/kg	Rat	Oral
	LC50: >2,000 mg/kg	Rat	Dermal
Triethylene glycol mono-n-butyl ether	LD50: 5,300 mg/kg	Rat	Oral
	LD50: 3,540 mg/kg	Rabbit	Dermal

Irritation: This product may cause mild eye irritation.

Corrosivity: Not classified as a corrosive product.

Sensitization: This product is not expected to cause sensitization. None of the components are respiratory or skin sensitizers.

Specific Target Organ Toxicity:
Single Exposure: No data available.
Repeat Exposure: Prolonged intentional inhalation may result in respiratory tract irritation. Prolonged overexposure to diethylene glycol may cause kidney and liver effects.

Carcinogen Status: None of the component of this product are classified as carcinogens by IARC, OSHA, NTP, ACGIH, or the EU Directives.

Germ Cell Mutagenicity: This product has been found to be negative in the AMES test for mutagenicity.

Toxicity for Reproduction: This product is not classifies as a reproductive hazard.
Diethylene Glycol: In a reproductive study with mice and rats, diethylene glycol was administered for 6-15 days. The NOEL was 559 mg/kg/day with the mouse and 1,118 mg/kg/day with the rat for maternal toxicity, and 2,795 mg/kg/day with mice and 1,118 mg/kg/day with rats for developmental toxicity (fetotoxicity).

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

No data available for product.
Glycerol: LC50 Daphnia magna (Water flea) >10000 mg/L/ 24 hr;

LC50 Goldfish >5000 mg/L/ 24 hr
Diethylene Glycol: LC50 Lepomis macrochirus (Bluegill fish) 1,000 mg/L/ 96 hr
Triethylene glycol mono-n-butyl ether: LC50 Pimephales promelas (Fathead minnow) 2400 mg/L/96 hr
LC50 Daphnia magna (Water flea) 2210 mg/L/48 hr

12.2 Persistence and Degradability:
No data available for product.
Glycerol: Biodegradation rate constants of 0.258/day and 0.200/day in respirometric test systems employing activated sludge have been reported, corresponding to 68% and 78% degradation, respectively.
Diethylene glycol is readily biodegradable (90% in 28 days)
Triethylene glycol mono-n-butyl ether: The theoretical BODs for triethylene glycol monobutyl ether are 0, 5, and 24% for 5 days, 10 days, and 20 days, respectively, indicating that it will be partially removed from biological wastewater treatment plants.

12.3 Bioaccumulative Potential:
No data available for product.
Glycerol: An estimated BCF of 3 was calculated in fish for glycerin, using a log Kow of -1.76 and a regression-derived equation. According to a classification scheme, this BCF suggests the potential for bioconcentration in aquatic organisms is low.
Diethylene glycol is expected to have a high rate of mobility in soil.
Triethylene glycol mono-n-butyl ether: An estimated BCF of 3 was calculated in fish for triethylene glycol monobutyl ether(SRC), using an estimated log Kow of 0.02 and a regression-derived equation. According to a classification scheme(, this BCF suggests the potential for bioconcentration in aquatic organisms is low.

12.4 Mobility in Soil:
No data available for product.
Glycerol: is expected to have very high mobility in soil
Diethylene glycol is expected to have a high rate of mobility in soil.
Triethylene glycol mono-n-butyl ether: According to a classification scheme, this estimated Koc value suggests that triethylene glycol monobutyl ether is expected to have very high mobility in soil.

12.5 Results of PBT and vPvB Assessment:
Not required.

12.6 Other Adverse Effects:
None.

SECTION 13: DISPOSAL INFORMATION

13.1 Waste Treatment Methods
Dispose in accordance with local, state or provincial and federal or national regulations.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not regulated for transport	None	None	No
EU ADR/RID	None	Not regulated for transport	None	None	No
IATA:	None	Not regulated for transport	None	None	No
IMDG	None	Not regulated for transport	None	None	No

14.6 Special Precautions for User:
None

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:
Not applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

International Inventories:
US EPA TSCA Inventory: This product is considered a manufactured article and not subject to the TSCA inventory.
EU Inventory: This product is considered a manufactured article and not subject to the EINECS inventory.
Australian Regulations: This product is considered a manufactured article and not subject to the Australian AICS inventory.
Chinese Regulations: This product is considered a manufactured article and not subject to the Chinese IECSC inventory.

U.S. REGULATIONS
CERCLA: Spills of this product are not required to be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.
EPA SARA 311 Hazard Classification: None
EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313: Triethylene Glycol n-butyl ether: CAS# 143-22-6 (Glycol Ethers)

California Proposition 65: This product contains the following chemicals which are known to the State of California to cause cancer, reproductive toxicity or birth defects: None.

INTERNATIONAL REGULATIONS

WHMIS Classification: This product is considered a manufactured article and not subject to CEPA WHMIS.
German WGK: Not determined.

15.2 Chemical Safety Assessment:
Not required

SECTION 16: OTHER INFORMATION

NFPA Codes:	**Health: 0**	**Fire:**	**0**	**Instability: 0**
HIMS Codes:	**Health: 0**	**Fire:**	**0**	**Physical Hazard: 0**

GHS Phrases for Reference (See Section 2 and 3):
Eye Corr. 1 – Eye Corrosion Category 1
Acute Tox 4 – Acute Toxicity Category 4
H302 Harmful if swallowed
H318 Causes serious eye damage

EU Classes and Risk Phrases for Reference (See Sections 2 and 3):
Xi Irritant
Xn Harmful
R22 Harmful if swallowed
R41 Risk of serious damage to eyes.

SDS Prepared By: Chemical Review Board
WHMIS Reviewed May 24, 2013

Revision Summery: Change in classification: Sections 2, 3, 4, 8, 11, 15, and 16.