

Safety data sheet

according to 1907/2006/EC, Article 31 (as amended)

Printing date 16.03.2017

Version number 3

Revision: 19.05.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier** Flexo Printing Ink
- **Range** UVIVID FLEVO SLEEVE WHITE
- **Product Codes** JDSW1
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
The product should not be used for any purpose other than that specified in Section 1.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer:**
Fujifilm Speciality Ink Systems Limited
Pysons Road, Broadstairs, Kent. CT10 2LE.
Tel. +44 (0)1843 866668
- **Information department:**
Product Safety Department
Office hours +44(0)1843 866668 (0830 to 1700 GMT)
product.safety@fujifilm.com
- **1.4 Emergency telephone number:** +44 (0) 203 394 9886 (English)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Skin Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate
Silicone Acrylate
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-
Glycerolpropoxytriacylate
- **Hazard statements**
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

	Polyester Acrylate Oligomer - Polymer H315/319 Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-5%
CAS: 7473-98-5 EINECS: 231-272-0 Reg.nr.: 01-2119472306-39	1-Propanone, 2-hydroxy-2-methyl-1-phenyl- Acute Tox. 4, H302 Aquatic Chronic 3, H412	1-5%
CAS: 42978-66-5 EINECS: 256-032-2 Reg.nr.: 01-2119484631-34	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	1-5%
CAS: 125455-52-9 EC number: 603-070-6 Reg.nr.: Not Available	Silicone Acrylate Skin Sens. 1, H317	1-5%
CAS: 75980-60-8 EINECS: 278-355-8 Reg.nr.: 01-2119972295-29	Phosphine Oxide, Diphenyl (2,4,6-tri-Methylbenzoyl)- Repr. 2, H361F Aquatic Chronic 2, H411	1-5%
CAS: 162881-26-7 ELINCS: 423-340-5 Reg.nr.: 01-2119489401-38	Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)- Skin Sens. 1, H317 Aquatic Chronic 4, H413	<1%
CAS: 52408-84-1 NLP: 500-114-5 Reg.nr.: 01-2119487948-12	Glycerolpropoxytriacylate Eye Irrit. 2, H319; Skin Sens. 1A, H317	<1%
CAS: 71868-10-5 ELINCS: 400-600-6 Reg.nr.: 01-0000015054-80	*2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one Aquatic Chronic 2, H411 Acute Tox. 4, H302	<1%

· **Additional information**

*For additional information please refer to section 11
For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information**
Never make an unconscious person vomit or drink fluids.
Immediately remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact**
Immediately wash with soap and water and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact**
Rinse open eye for several minutes under running water. Then consult a doctor.
- **After swallowing**
Give patient copious amounts of water to drink and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**
Cool endangered containers with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**



Refer to the protective measures stated in Sections 7 and 8. Keep unprotected personnel away.

Ensure adequate ventilation

- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities if seepage into water course or sewage system occurs.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to section 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Store in cool, dry place in tightly sealed containers.
Keep away from heat and direct sunlight.
Ensure good ventilation and extraction at the workplace.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:** Store in accordance with current national regulations.
- **Requirements to be met by storerooms and containers:** Store between 5 - 30 °C.
- **Information about storage in one common storage facility:**
Do not store together with oxidising and acidic materials.
Do not store together with alkalis (caustic solutions).
- **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
- **DNELs**
worker:

7473-98-5 1-Propanone, 2-hydroxy-2-methyl-1-phenyl-		
Dermal	DNEL	1.25 mg/kg (-) (Long Term)
Inhalation	DNEL	3.5 mg/m ³ (-) (Long Term)
42978-66-5 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate		
Dermal	DNEL	2.77 mg/kg (-) (Long Term)
Inhalation	DNEL	24.48 mg/m ³ (-) (Long Term)
75980-60-8 Phosphine Oxide, Diphenyl (2,4,6-tri-Methylbenzoyl) -		
Dermal	DNEL	1 mg/kg (-) (Long Term)
Inhalation	DNEL	3.5 mg/m ³ (-) (Long Term)
162881-26-7 Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl) -		
Dermal	DNEL	3.3 mg/kg (-) (Long Term)
Inhalation	DNEL	7.8 mg/m ³ (-) (Long Term)
52408-84-1 Glycerolpropoxytriacylate		
Dermal	DNEL	1.92 mg/kg (-) (Long Term)
Inhalation	DNEL	16.2 mg/m ³ (-) (Long Term)

- **Additional information:**
The instructions and information provided by the manufacturer of the personal protective equipment on use, storage, maintenance and replacement must always be followed.

- **8.2 Exposure controls**
- **General protective and hygienic measures**
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Store protective clothing separately.
Keep away from foodstuffs, beverages and feed.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**
Use of the following recommended:

Type	Rubber			Nitrile		Neoprene
	Single Use	Multi Use	Heavy Duty (Gauntlets)	Single Use	Multi Use	Heavy Duty (Gauntlets)
Preparation	X	Y	X	X	Y	X
Print Shop						
Solvent Inks	Y	Y	Y	Y	Y	Y
UV Inks	X	X	X	Y	Y	Y
Reclaim	X	X	Y	X	X	Y

Y = recommended X = not recommended

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The selection of single or multi-use gloves is dependent upon the level of exposure. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Always ensure that gloves are free from defects and that they are stored and used correctly.
Hands should be inspected on a regular basis for any signs of skin damage or inflammation

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Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Single use disposable nitrile gloves (short duration exposure of few minutes, or where only splashes likely). Not to be reused when removed.

Minimum 0.4mm thick neoprene or nitrile gloves (longer duration exposure or mechanical handling activities). To be replaced immediately when punctured or degraded.

Heavy duty unlined neoprene gloves (when using solvents). To be replaced immediately when punctured or degraded.

- **Penetration time of glove material**

The exact break through time has to be obtained from the manufacturer of the protective gloves and must be observed.

- **Eye protection:** Safety glasses

- **Body protection:**

Acrylates, like any other organic solvent, are skin and/or eye irritants. Since acrylates do not evaporate, they will remain on the skin or clothes for extended periods. This long term exposure, caused by the non volatility, can give rise to dermatitis. It is essential that the measures given above are always followed. Protective work clothing; disposable overalls are preferable.

- **COSHH Essentials for Printers Control Guidance Sheet:**

Guidance is provided by the Health and Safety executive (HSE) concerning COSHH (Control of Substances Hazardous to Health) for printers.

See COSHH Essentials for Printers on the HSE website:

www.hse.gov.uk and enter 'COSHH Essentials for printers' in the search bar.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Fluid
Colour: According to product specification

- **Odour:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/freezing point: undetermined

Initial boiling point and boiling range: 109 °C

- **Flash point:** Not applicable

- **Flammability (solid, gaseous)** Not determined.

- **Ignition temperature:** Not applicable

- **Decomposition temperature:** Not determined.

- **Self igniting:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Density at 20 °C:** 1.6 g/cm³

- **Water:** Not miscible or difficult to mix

- **Viscosity:**

dynamic: Not determined.

kinematic: Not determined.

- **Solvent content:**

Organic solvents: 0.0 %

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- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Stable until:** 50 °C
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

7473-98-5 1-Propanone, 2-hydroxy-2-methyl-1-phenyl-		
Oral	LD50	1694 mg/kg (rat)
42978-66-5 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate		
Oral	LD50	6800 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (Rabbit)
125455-52-9 Silicone Acrylate		
Oral	LD50	> 2000 mg/kg (rat)
75980-60-8 Phosphine Oxide, Diphenyl (2,4,6-tri-Methylbenzoyl) -		
Oral	LD50	> 5000 mg/kg (rat)
162881-26-7 Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl) -		
Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
52408-84-1 Glycerolpropoxytriacylate		
Oral	LD50	10000 mg/kg (rat)
Dermal	LD50	5000 mg/kg (Rabbit)
71868-10-5 *2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one		
Oral	LD50	1984 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)

- **Skin corrosion/irritation**
Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Additional toxicological information:**
Substance with CAS number 71868-10-5 is subject to evaluation by the European Chemicals Agency (ECHA), following a proposal for harmonised classification & labelling as a reprotoxin. The proposal for the addition of R60/61 follows a reprotoxicity study undertaken by a supplier of the material (the corresponding CLP classification is Repr 1B H360FD). This new classification is in addition to the harmful if swallowed (R22) and aquatic toxicity (R51/53) rating of the material, which is currently identified in Section 3 of this safety data sheet. We await the decision of ECHA, following which we will review our safety data sheets and labels, noting that the overall classification of this product will not be affected. The supplier informs us that there has been no compositional change to this ingredient; the classification change is due to the inherent properties of the substance and not caused by any impurities or difference in quality.

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- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity**
Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**
Based on available data, the classification criteria are not met.
- **STOT-single exposure**
Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:	
7473-98-5 1-Propanone,2-hydroxy-2-methyl-1-phenyl-	
LC50/96 h	160 mg/l (Fish)
EC/LC50 72 h	0.64 mg/l (Algae)
IC50	3 mg/l (Sewage sludge)
	3 mg/l (Bacteria)
BOD28	(-)
	59% - biodegradable but not readily biodegradable
42978-66-5 (1-methyl-1,2-ethanediy1)bis[oxy(methyl-2,1-ethanediy1)] diacrylate	
LC50/96 h	1-10 mg/l (Fish)
EC50/48 h	10-100 mg/l (Daphnia)
75980-60-8 Phosphine Oxide, Diphenyl (2,4,6-tri-Methylbenzoyl) -	
LC50/96 h	10 - 100 mg/l (Fish)
EC50	> 500 mg/dm ³ (Bacteria)
EC50/48 h	1 - 10 mg/l (Daphnia)
EC50/72 h	10 - 100 mg/l (Algae)
162881-26-7 Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl) -	
LC50/96 h	>0.09 mg/l (Brachydanio rerio)
EC50/48 h	>1.175 mg/l (Daphnia)
EC50/72 h	0.26 mg/l (Algae)
IC50	>100 mg/l (Sewage sludge)
71868-10-5 *2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	
LC50/96 h	9 mg/l (Brachydanio rerio) (OECD 203)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

There are no data on the preparation itself.

The preparation has been assessed following the conventional method of the CLP Directive 1272/2008/EC and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. Also refer to Section 2.



Do not allow product to reach ground water, water course or sewage system.

· **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation



Must not be disposed together with household rubbish. Do not allow product to reach sewage system.

- European waste catalogue

08 03 12*	waste ink containing hazardous substances
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- Waste Hazard Classification: HP 13 - Sensitising
- Recommendation:
Dispose of product according to official regulations.
Also see Section 16 'Other Information'

SECTION 14: Transport information

- | | |
|---|--|
| · 14.1 UN-Number | |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · UN "Model Regulation": | Void |

SECTION 15: Regulatory information

- Chemical Safety Assessment Chemical Safety Assessment not applicable
- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- National regulations
- Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57
Does not contain a SVHC according to REACH, Article 57

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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- **Relevant phrases**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H361f Suspected of damaging fertility.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

- **Recommended restriction of use**

The product should not be used for any purpose other than that specified in Section 1.

- **Department issuing SDS:**

Product Safety Department - Fujifilm Speciality Ink Systems Limited

- **Contact:** product.safety@fujifilm.com

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association (IATA Dangerous Goods Regulation (DGR) 57th Edition 2016)

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

Skin Sens. 1: Skin sensitisation - Category 1

Skin Sens. 1A: Skin sensitisation - Category 1A

Repr. 2: Reproductive toxicity - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard - Category 4