Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2016 *Version number 6* *Revision: 01.10.2015*

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

· **1.1 Product indentifier**

· **Range** **FLASH CURE ADDITIVE**
· **Product Codes** ZE833
· **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@fujifilmsis.com
· **1.4 Emergency telephone number:** +44 (0) 203 394 9886 (English)

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 4	H302	Harmful if swallowed.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Repr. 2	H361d	Suspected of damaging the unborn child.
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

GHS07 GHS08

· **Signal word** Warning

· **Hazard-determining components of labelling:**
1-Propanone,2-hydroxy-2-methyl-1-phenyl-
trimethylolpropane triacrylate
1-Butanone, 2-(domethylamino)-2[(4-methylphenyl)methyl]1-[4-(4-morpholinyl) phenyl]-
Glycerolpropoxytriacrylate
· **Hazard statements**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H361d Suspected of damaging the unborn child.
H412 Harmful to aquatic life with long lasting effects.
· **Precautionary statements**
P280 Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2016 *Version number 6* *Revision: 01.10.2015*

Range FLASH CURE ADDITIVE

(Contd. of page 1)

P273 Avoid release to the environment.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P308+P313 IF exposed or concerned: Get medical advice/attention.
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.
· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

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

· **Dangerous components:**

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	40-60%
CAS: 15625-89-5 EINECS: 239-701-3 Reg.nr.: 01-2119484737-22	trimethylolpropane triacrylate Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	20-40%
CAS: 119344-86-4 ELINCS: 438-340-0 Reg.nr.: 01-2120040688-50	1-Butanone, 2-(domethylamino)-2[(4-methylphenyl)methyl]1-[4-(4-morpholinyl) phenyl]- Repr. 2, H361d	10-30%
CAS: 52408-84-1 NLP: 500-114-5 Reg.nr.: 01-2119487948-12	Glycerolpropoxytriacrylate Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1A, H317	<1%

· **Additional information**
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.
· **After inhalation**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact** Immediately wash with soap and water and rinse thoroughly.
· **After eye contact**
Rinse open eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing** Call for a doctor immediately.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **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.
· **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2016 *Version number 6* *Revision: 01.10.2015*

Range FLASH CURE ADDITIVE

(Contd. of page 2)

· ***5.3 Advice for firefighters***
· ***Protective equipment:*** *No special measures required.*

SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures***
Not required.
· ***6.2 Environmental precautions:***
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*** *No special measures required.*
· ***Information about protection against explosions and fires:***
No special measures required.

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and containers:*** *Store in a cool location.*
· ***Information about storage in one common storage facility:*** *Not required.*
· ***Further information about storage conditions:*** *Keep container tightly sealed.*
· ***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/m3 (-) (Long Term)*
15625-89-5 trimethylolpropane triacrylate		
Dermal	*DNEL*	*0.8 mg/kg (-) (Long Term)*
Inhalation	*DNEL*	*16.2 mg/m3 (-) (Long Term)*
52408-84-1 Glycerolpropoxytriacrylate		
Dermal	*DNEL*	*1.92 mg/kg (-) (Long Term)*
Inhalation	*DNEL*	*16.2 mg/m3 (-) (Long Term)*

· ***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.
· ***Breathing equipment:*** *Not necessary if room is well-ventilated.*
· ***Protection of hands:***
Use of the following recommended:

Type	Rubber: Single Use	Rubber: Multi Use	Rubber: Heavy Duty (Gauntlets)	Nitrile: Single Use	Nitrile: Multi Use	Neoprene: Heavy Duty (Gauntlets)

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2016 *Version number 6* *Revision: 01.10.2015*

Range FLASH CURE ADDITIVE

(Contd. of page 3)

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.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Hands should be inspected on a regular basis for any signs of skin damage or inflammation

· ***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*

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/Melting range:	*undetermined*
Boiling point/Boiling range:	*80 °C*
· ***Flash point:***	*Not applicable*
· ***Flammability (solid, gaseous)***	*Not applicable.*
· ***Ignition temperature:***	
Decomposition temperature:	*Not determined.*
· ***Self igniting:***	*Product is not selfigniting.*
· ***Danger of explosion:***	*Product does not present an explosion hazard.*
· ***Explosion limits:***	
Lower:	*Not determined.*
Upper:	*Not determined.*
· ***Vapour pressure:***	*Not determined.*
· ***Density at 20 °C:***	*1.08 g/cm³*
· ***Relative density***	*Not determined.*
· ***Vapour density***	*Not determined.*
· ***Evaporation rate***	*Not determined.*
· ***Water:***	*Not miscible or difficult to mix*

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2016 *Version number 6* *Revision: 01.10.2015*

Range FLASH CURE ADDITIVE

(Contd. of page 4)

· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
dynamic:	Not determined.
kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	0.0 %
· **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.
· **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.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**
Harmful if swallowed.

· **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)
15625-89-5 trimethylolpropane triacrylate		
Oral	LD50	5200 mg/kg (rat)
Dermal	LD50	6300 mg/kg (Rabbit)
119344-86-4 1-Butanone, 2-(domethylamino)-2[(4-methylphenyl)methyl]1-[4-(4-morpholinyl)phenyl]-		
Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
	EC50	>100 mg/l (Bacteria)
52408-84-1 Glycerolpropoxytriacrylate		
Oral	LD50	10000 mg/kg (rat)
Dermal	LD50	5000 mg/kg (Rabbit)

· **Skin corrosion/irritation**
Causes skin irritation.
· **Serious eye damage/irritation**
Causes serious eye irritation.
· **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
· **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**
Suspected of damaging the unborn child.
· **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.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2016 *Version number 6* *Revision: 01.10.2015*

Range FLASH CURE ADDITIVE

(Contd. of page 5)

· ***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
15625-89-5 trimethylolpropane triacrylate	
LC50/96 h	*1-10 mg/l (Daphnia)*
EC50/48 h	*10-100 mg/l (Daphnia)*
EC50/72 h	*1-10 mg/l (Algae)*
119344-86-4 1-Butanone, 2-(domethylamino)-2[(4-methylphenyl)methyl]1-[4-(4-morpholinyl)phenyl]-	
EC50/48 h	*>100 mg/l (Daphnia)*
EC50/72 h	*>100 mg/l (Algae)*

· ***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.*
· ***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*

· ***Waste Hazard Classification:***
HP 10 - Toxic for reproduction
HP 4 - Irritant

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.04.2016 *Version number 6* *Revision: 01.10.2015*

Range FLASH CURE ADDITIVE

(Contd. of page 6)

· **Recommendation:** Dispose of product according to official regulations.

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

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.

An "*" in the left hand margin indicates an amendment from the previous version.

· **Relevant phrases**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H361d Suspected of damaging the unborn child.
H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:**
Product Safety Department - Fujifilm Speciality Ink Systems Limited
· **Contact:** product.safety@fujifilmsis.com

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.04.2016 *Version number 6* *Revision: 01.10.2015*

Range FLASH CURE ADDITIVE

(Contd. of page 7)

· ***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) 55th Edition 2014)
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, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Skin Sens. 1A: Sensitisation - Skin, Hazard Category 1A
Repr. 2: Reproductive toxicity, Hazard Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3