Safety Data Sheet

according to 1907/2006/EC, Article 31 Printing date 2017/11/22 Version: 1 Revision: M2016 1122

1. Identification of the substance/preparation and of the company/undertaking

1.1 Product identifier

Trade name: **ProART FLEX INK**

1:2 Relevant identified uses of the substance or mixture and uses advised against.

Material of Use: Industrial applications: Inkjet ink for drop-on-demand digital printing process.

1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: Graphics Extra Large BV

Address:	Industrieweg 18c, 1613 KV, Grootebroek
Phone:	+31 6 18097675
e-mail:	msds@gel4u.nl

2. Hazards identification,

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



Acute lox. 4 H302 Harmful if swallowed.

Skin Irrit. H315 Causes skin irritation.

Eve Irrit. 2 H319 Causes serious eve irritation.

HMIS Ratings: Health: | Fire: 2 Physical Hazard: 1 Pers. Prot.: H

Hazard Scale: 0 = Minimal; I = <u>Slight; 2</u> = Moderate: 3 = Serious; 4 = Severe = Chronic hazard

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Harmful Xn: R20/21/22; R62 Xi: R36/37/38, R43 R52/53

R phrases: 22: Harmful if swallowed.

R phrases: 36: Irritating to eyes.

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 43 May cause sensitization by skin contact.

R 52/53 Harmful to aquatic organisms. may cause long-term adverse effects in the aquatic environment.

R 62 Possible risk of impaired fertility.

S 9 Keep container in a well-ventilated place.

S 25 Avoid contact with eyes.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S 36/37 Wear suitable protective clothing and gloves.

S 60 This material and its container must be disposed of as hazardous waste.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets. *Information concerning particular hazards for human and environment:* Not applicable.

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2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation. Hazard pictograms

Warning

Signal word: Warning

Hazard statements:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation,

Precautionary statements:

 $P305 + P351 + P338 \text{ IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenSes, if present and ender the several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes are several minutes are several minutes. The several minutes are several minutes. The several minutes are several minutes ar$

do. Continue rinsing.

2.3 Other hazards

Results of PBT and vPvB assessment PBT: Not applicable.

vPvB: Not applicable.

3. Composition/information on incredients chemical characterization: Mixture

FUV INK-C

Ingredients	CAS-Nu.	EINECS	Percent	Classification		
				Regulation (EC) No.	67/548/EEC	
				1272/2008 [CLP]		
Synthetic resin	Trade Secret	Trade Secret	I %-5%	—	—	
Acrylated amine synergist	Trade Secret	Trade Secret		I % - 5 %		
Carbon black	1333.86.4	215.609.9	1%.5%	_	_	
Hexarnethylene diacrylate	13048-33-4	235-921-9	5%-10%	H315, H319	R36/38	
				P305, P351. P338	520	
Tetrahydrofurfuryl Acrylate	2399-48-6	219-268-7	10%-20%	H315, H319	R36/38	
				P305, P351. P338	320	
Jaadaard Aamulata	1220 61 6	215 542 5	100/ 200/	H315, H319	R36/38	
Isouecyi Aciyiate	1550-01-0	215-542-5	10%-20%	P305 , P351. P338	S26	
Other photo sensitive	T 1 G	T 10	2504 4504	H315, H319	R36/38	
monomers	Trade Secret	Trade Secret	35%-45%	P305 . P351. P338	S26	
polymerization initiator	Trade Secret	Trade Secret	5%-15%	H317, H413	P280	
Surfactant	Trade Secret	Trade Secret	0.1%—1%	_	_	

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FUV	INK-LC	

Ingredients	CAS-Nu.	EINECS	Percent	Class	ification
				Regulation (EC) No.	67/548/EEC
				1272/2008 [CLP]	
Synthetic resin	Trade Secret	Trade Secret	I %-5%		—
Acrylated amine synergist	Trade Secret	Trade Secret		I % - 5 %	
Carbon black	1333.86.4	215.609.9	1%.5%	_	_
	12040 22 4	005 001 0	50/ 100/	H315, H319	R36/38
Hexarnethylene diacrylate	13048-33-4	235-921-9	P305, P351. P338	P305 , P351. P338	S26
Territoria de la ferría mila de mila de	2200 48 6	210 269 7	100/ 200/	H315, H319	R36/38
Tetranydrofurfuryl Acrylate	2399-48-6	219-268-7	10%-20%	P305 , P351. P338	S26
Teo de col A conducto	1220 (1 (215 542 5	100/ 200/	H315, H319	R36/38
Isodecyi Acrylate	1330-01-0	215-542-5	10%-20%	P305 , P351. P338	S26
Other photo sensitive	Trada Carrat	Trada Carrat	250/ 450/	H315, H319	R36/38
monomers	Trade Secret	Trade Secret	33%-43%	P305 . P351. P338	S26
polymerization initiator	Trade Secret	Trade Secret	5%-15%	H317, H413	P280
Surfactant	Trade Secret	Trade Secret	0.1%—1%	_	—

FUV INK-M

Ingredients	CAS-Nu.	EINECS	Percent	Classification		
				Regulation (EC) No.	67/548/EEC	
				1272/2008 [CLP]		
Synthetic resin	Trade Secret	Trade Secret	I %-5%	—	_	
Acrylated amine synergist	Trade Secret	Trade Secret		I % - 5 %		
Carbon black	1333.86.4	215.609.9	1%.5%	_	_	
I I arrow at hallow a dia arralata	12049 22 4	225 021 0	50/ 100/	H315, H319	R36/38	
Hexarnethylene diacrylate	15048-55-4	P305, P351. P338	P305 , P351. P338	S26		
Tatrahudrofurfurul Agrilata	2200 48 6	210 269 7	100/ 200/	H315, H319	R36/38	
Tetranydrofurfuryi Acrylate	2399-48-0	219-208-7	10%-20%	P305 , P351. P338	S26	
Teo Jesuit Assumble	1220 (1 (215 542 5	100/ 200/	H315, H319	R36/38	
Isodecyl Acrylate	1330-01-0	215-542-5	10%-20%	P305 , P351. P338	S26	
Other photo sensitive	Trada Carrat	Trada Carrat	250/ 450/	H315, H319	R36/38	
monomers	Trade Secret	Trade Secret	33%-43%	P305 . P351. P338	S26	
polymerization initiator	Trade Secret	Trade Secret	5%-15%	H317, H413	P280	
Surfactant	Trade Secret	Trade Secret	0.1%—l%		_	

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Ingredients	CAS-Nu.	EINECS	Percent	Class	ification
				Regulation (EC) No.	67/548/EEC
				1272/2008 [CLP]	
Synthetic resin	Trade Secret	Trade Secret	I %-5%	—	_
Acrylated amine synergist	Trade Secret	Trade Secret		I % - 5 %	
Carbon black	1333.86.4	215.609.9	1%.5%	_	_
II	12049 22 4	225 021 0	50/ 100/	H315, H319	R36/38
Hexarnethylene diacrylate	13048-33-4	255-921-9	3%-10%	P305 , P351. P338	S26
	0000 40 6	010 0(0 7	100/ 200/	H315, H319	R36/38
Tetrahydrofurfuryl Acrylate	2399-48-6	219-268-7	10%-20%	P305 , P351. P338	S26
T 1 1 A 1 /	1220 (1 (015 540 5	100/ 200/	H315, H319	R36/38
Isodecyi Acrylate	1330-61-6	215-542-5	10%-20%	P305 , P351. P338	S26
Other photo sensitive	T 1 0 /	T 1 0 /	250/ 450/	H315, H319	R36/38
monomers	Trade Secret	Trade Secret	35%-45%	P305 . P351. P338	S26
polymerization initiator	Trade Secret	Trade Secret	5%-15%	H317, H413	P280
Surfactant	Trade Secret	Trade Secret	0.1%—l%	_	_

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FUV INK-Y

Ingredients	Ingredients CAS-Nu. EINECS Percent		Percent	Classification		
				Regulation (EC) No.	67/548/EEC	
				1272/2008 [CLP]		
Synthetic resin	Trade Secret	Trade Secret	1 %-5%	_	—	
Acrylated amine synergist	Trade Secret	Trade Secret	1 %-5%	_	—	
Carbon black	1333.86.4	215.609.9	1%.5%		_	
Harrow ethnion a dia amilata	12049 22 4	225 021 0	50/ 100/	H315, H319	R36/38	
Hexarnethylene diacrylate	13048-33-4	255-921-9	3%-10%	P305, P351. P338	S26	
	2399-48-6	219-268-7	10%-20%	H315, H319	R36/38	
Tetranydrofurfuryl Acrylate				P305 , P351. P338	S26	
Jaadaard Aamdata	1220 61 6	215 542 5	100/ 200/	H315, H319	R36/38	
Isodecyl Acrylate	1330-01-0	215-542-5	10%-20%	P305 , P351. P338	S26	
Other photo sensitive	Trada Carrat	Trada Carrat	250/ 450/	H315, H319	R36/38	
monomers	Trade Secret	Trade Secret	33%-43%	P305 . P351. P338	S26	
polymerization initiator	Trade Secret	Trade Secret	5%-15%	H317, H413	P280	
Surfactant	Trade Secret	Trade Secret	0.1%—1%	_	_	

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FUV INK-K

Ingredients	CAS-No.	EINECS	Percent	Class	ification
				Regulation (EC) No.	67/548/EEC
				1272/2008 [CLP]	
Synthetic resin	Trade Secret	Trade Secret	1 %-5%	—	_
Acrylated amine synergist	Trade Secret	Trade Secret	1%-5%	—	—
Carbon black	1333.86.4	215.609.9	1%.5%	—	_
Howennetherland disconsists	12049 22 4	225 021 0	50/ 100/	H315, H319	R36/38
Hexarnethylene diacrylate	15048-55-4	255-921-9	3%-10%	P305, P351. P338	S26
Tetushudushuhumi Asmilata	2200 48 6	210 269 7	100/ 200/	H315, H319	R36/38
Tetranydrofurfuryl Acrylate	2399-48-0	219-208-7	10%-20%	P305, P351. P338	S26
Too doord A amilata	1220 61 6	215 542 5	100/ 200/	H315, H319	R36/38
Isodecyl Acrylate	1550-01-0	215-542-5	10%-20%	P305, P351. P338	S26
Other photo sensitive	Trada Cara d	Trada Cara d	250/ 450/	H315, H319	R36/38
monomers	Trade Secret	Trade Secret	35%-45%	P305 . P351. P338	S26
polymerization initiator	Trade Secret	Trade Secret	5%-15%	H317, H413	P280
Surfactant	Trade Secret	Trade Secret	0.1%—l%	_	_

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FUV INK-W

Ingredients	CAS-No.	EINECS	Percent		Classification
				Regulation (EC) Nu.	67/548/EEC
				1272/2008 [CLP)	
Synthetic resin	Trade Secret	Trade Secret	1%-5%	_	_
Acrylated amine synergist	Trade Secret	Trade Secret	1%-5°/0		
Titanium Dioxide	13463-67-7	236-675-5	5%-15%		_
				H315. H319	R36/38
Hexa methylene diacrylate	13048-33-4	3048-33-4 235-921-9	5%-10%	P305, P351, P338	S26
				H315, H319	R36/38
Tetrahydrofurfuryl Acrylate	2399-48-6	8-6 219-268-7	10%-20%	P305, P351. P338	S26
				H315, H319	R36/38
Isodecyl Acrylate	1330-61-6,	215-542-5	5%-10%	P305 , P351, _{P338}	S 26
Other photo sensitive		~		H315, H319	R36/38
monomers	Trade Secret	Trade Secret	15%-25%	P305, P351. P338	S26
				H317. H413	
polymerization initiator	Trade Secret	Trade Secret	5%-15%	P280	—
Surfactant	Trade Secret	Trade Secret	0.1%-1.0%	_	_

Ingredients	CAS No.	EINECS	Percent	Clas	sification
				1272/2008 [CLP]	
Synthetic resin	Trade Secret	Trade Secret	5-10	—	—
Acrylated amine synergist	Trade Secret	Trade Secret	1-5		_
3.3,3,5-Trimethtyl	0(170.00.0	200 200 0	10.15	H315,1-1319	R36/38 S26
Cyclohexane Acrylate	86178-38-3	289-200-9	10-15	P305 , P351. P338	
Totrobudrofurfurril A orgilato	2200 48 6	210 269 7	25 40	H315, H319	R36/38 S26
Tetranydrofurfur yr Acrylate	2399-40-0	219-200-7	23-40	P305 , P351. P338	
Other photo sensitive	Trada Saarat	Tuo da Caanat	10.20	H315, H319	R36/38 S26
monomer	Trade Secret	Trade Secret	10-50	P305 , P351. P338	
2-Isopropylthimanthone	5495-84-1	226-827-9	5-15	H302	R22
Other polymerization initiator	Trade Secret	Trade Secret	1-5	H317, H413	P280
Surfactant	Trade Secret	Trade Secret	0.1-2.0		

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First aid measures

4.1 Description of firs	t aid measures
Eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physicia
Skin contact:	Remove contaminated clothing and shoes immediately. Wash off with soap and plenty of water for at le st
	15-20 minutes. Consult a physician.
Ingestion:	Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
4.2 Most important sy	mptoms and effects, both acute and delayed
Potential acute he	alth effects
Eye contact:	Causes severe eye injury which may persist for several days.
Inhalation:	Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated
	areas or confined spaces, may irritate nose. throat/respiratory system.
Skin contact:	May cause skin irritation, injury, dermatitis, allergy and/or sensitization.
Ingestion:	May cause injury of mouth, throat. and stomach.
Over-exposure sig	ans/symptoms
Eye contact:	No specific data.
Inhalation:	No specific data.
Skin contact:	No specific data.
Ingestion:	No specific data.
4.3 Indication of any	immediate medical attention and special treatment needed

Treat symptomatically.

<u>4. Fire-fighting measures</u>

5.1 Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO2)

5.2 Special hazards arising from the substance or mixture

Carbon monoxides, carbon dioxide, oxides of nitrogen, toxic gases/vapors.

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5.3 Advice for firefighters

Wear special chemical protective clothing and use breathing apparatus with independent air supply. Approach tire from upwin and avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues.

5.4 Further information

Applying direct water may be dangerous because tire may expand to surroundings.

Use water spray to cool unopened containers

5.5 NFPA Ratings: Health: 1 Flammability: 2 Reactivity: 0

Hazard Scale: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe

6. Accidental release measures

Absorb spill with sand or earth then place in a chemical waste container.

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container f disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1 Handling

Keep out of reach of children and do not drink. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Kee away

from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Make sure cartridges dry

before insertion into printer housing.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and dark place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end uses

Inkjet printing

8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

Personal protective equipment

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Eye/face protection	Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves and wear appropriate protective impervious clothing. Gloves must be inspected
	prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable aws and good laboratory practices.
Wash and dry hands.	The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Body Protection	Complete suit protecting against chemicals. The type of protective equipment must he selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	Handle with NIOSH approved air purifying respiratory protection equipment in case ventilation is not adequate. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges s a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US).
Hygiene measures:	Wash hands after handling. In case contact with clothing, wash before reuse. Do not eat, drink of smoke in handling or storage area.
Environmental controls:	Do not release to the environment.

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9. Physical and chemicalproperties

FUV ink-C

1	Color	Cyan Liquid
2	Odor	Characteristic odor
3	Boiling point/boiling range of ink	No data available
4	Melting Point/Melting Range	No data available
5	Flash point of ink	>90 °C
6	Auto-Ignition Temperature	No data available
7	Flammability(solid, gas)	Not applicable
8	Explosive Properties	No data available
9	Vapour Pressure	No data available
10	Specific Gravity	Approx 1.0
11	Solubility	No data available
12	Water solubility	Insoluble
13	Viscosity	5.0-10.0 cps
14	pH	Not applicable
15	Oxidizing properties	No data available
16	Vapor Density	Not applicable

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FUV Ink-LC

1	Color	Cyan Liquid
2	Odor	Characteristic odor
3	Boiling point/boiling range of ink	No data available
4	Melting Point/Melting Range	No data available
5	Flash point of ink	>90 °C
6	Auto-Ignition Temperature	No data available
7	Flammability(solid, gas)	Not applicable
8	Explosive Properties	No data available
9	Vapour Pressure	No data available
10	Specific Gravity	Approx I.0
11	Solubility	No data available
12	Water solubility	Insoluble
13	Viscosity	5.0- I0.0 cps
14	рН	Not applicable
15	Oxidizing properties	Not data available
16	Vapor Density	Not applicable

FUV Ink-M

1	Color	Magenta Liquid
2	Odor	Characteristic odor
3	Boiling point/boiling range of ink	No data available
4	Melting Point/Melting Range	No data available
5	Flash point of ink	>90°C
6	Auto-Ignition Temperature	No data available
7	Flammability(solid, gas)	Not applicable
8	Explosive Properties	No data available
9	Vapour Pressure	No data available
10	Specific Gravity	Approx 1.0
11	Solubility	No data available
12	Water solubility	Insoluble
13	Viscosity	5.0-10.0 cps
14	рН	Not applicable
15	Oxidizing properties	No data available
16	Vapor Density	Not applicable

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FUV Ink-LM				
1	Color	Magenta Liquid		
2	Odor	Characteristic odor		
3	Boiling point/boiling range of ink	No data available		
4	Melting Point/Melting Range	No data available		
5	Flash point of ink	>90°C		
6	Auto-Ignition Temperature	No data available		
	Fiammability(solid, gas)	Not applicable		
8	Explosive Properties	No data available		
9	Vapour Pressure	No data available		
10	Specific Gravity	Approx 1.0		
11	Solubility	No data available		
12	Water solubility	Insoluble		
13	Viscosity	5.0-10.0 cps		
14	PH	Not applicable		
15	Oxidizing properties	No data available		
16	Vapor Density	Not applicable		

FUV Ink-Y

Ι	Color	Yellow Liquid
2	Odor	Characteristic odor
3	Boiling point/boiling range of ink	No data available
4	Melting Point/Melting Range	No data available
5	Flash point of ink	>90t
6	Auto-Ignition Temperature	No data available
7	Flammability(solid, gas)	Not applicable
8	Explosive Properties	No data available
9	Vapour Pressure	No data available
10	Specific Gravity	Approx 1.0
II	Solubility	No data available
12	Water solubility	insoluble
13	Viscosity	5.0-10.0 cps
14	pH	Not applicable
15	Oxidizing properties	No data available
16	Vapor Density	Not applicable

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FUV in	k-K	
Ι	Color	Black Liquid
2	Odor	Characteristic odor
3	Boiling point/boiling range of ink	No data available
4	Melting Point/Melting Range	No data available
5	Flash point of ink	>90°C
6	Auto-Ignition Temperature	No data available
	Flammability(solid, gas)	Not applicable
	Explosive Properties	No data available
	Vapour Pressure	No data available
10	Specific Gravity	Approx 1.0
11	Solubility	No data available
12	Water solubility	Insoluble
13	Viscosity	5.0-10.0 cps
14	рН	Not applicable
15	Oxidizing properties	No data available
16	Vapor Density	Not applicable
ELIN/		
1	Color	White Liquid
2	Odor	Characteristic odor
3	Boiling point/boiling range of ink	No data available
4	Melting Point/Melting Range	No data available
5	Flash point of ink	>80°C
6	Auto-Ignition Temperature	No data available
7	Flammability(solid, gas)	Not applicable
8	Explosive Properties	No data available
9	Vapour Pressure	No data available
10	Specific Gravity	Approx 1.2
ΙI	Solubility	No data available
12	Water solubility	Insoluble
13	Viscosity	5.0-10.0 cps
14	РН	Not applicable
15	Oxidizing properties	No data available
	Manan Danaita	Netapplicable

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LUV Ink-GL

LUTI			
Ι	Color	Clear Liquid	
2	Odor	Characteristic odor	
3.	Boiling point/boiling range of ink	No data available	
4	Melting Point/Melting Range	No data available	
5	Flash point of ink	>90 °C	
6	Auto-Ignition Temperature	No data available	
7	Flammability(solid, gas)	Not applicable	
8	Explosive Properties	No data available	
9	Vapour Pressure	No data available	
10	Specific Gravity	Approx 1.0	
11	Solubility	No data available	
12	Water solubility	Insoluble	
13	Viscosity	4.0-8.0 cps	
14	pH	Not applicable	
15	Oxidizing properties	No data available	
16	Vapor Density	Not applicable	

The Physical and chemical data given in Section 9 are typical values for this product and are not intended to be product specifications.

<u>10.</u> Stability and reactivity

10.1 Reactivity	High temperatures and UV light may cause rapid polymerization.	
10,2 Chemical stability	Unstable. Polymerize under heat and/or light.	
10.3 Possibility of hazardous reactions	Not expected	
10.4 Conditions to avoid	Elevated temperatures/heat, UV light, when not in use.	
10.5 Incompatible materials	Avoid contact with acids, amines, free radical initiators, oxidizing agents.	
10.6 Hazardous decomposition products	Carbon monoxide, carbon dioxide. oxides of nitrogen. toxic gases/vapors.	

<u>11.</u> Toxicological information

11,1 Information on toxicological effects

Routes of Overexposure:	Eye, skin, inhalation, and oral ingestion	
Acute Health Hazards:	Overexposure of the eye surface to ink may be mildly irritating. Overexposure of ink col act wit	
	the skin may cause irritation and in some people, swelling and redness. Intentional inhal tion ${\rm to}$	
	ink vapors may result in respiratory tract irritation. Intentional or accidental oral ingestit may	
	cause an upset stomach.	
Chronic Health Hazards	No information available	

Chronic Health Hazards:	No information available
Mugtagenicity:	No information available
Carcinogenicity:	No information available

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Acute Toxicity Data:

Hexamethylene diacrylate.

LD50 Oral, mouse:>2000 mg/kg

LD50 Dermal, rabbit: >2000 mg /kg

Causes moderate skin irritation Causes moderate eye irritation

Isodecyl Acrylate

LD50 Oral. rat:12.000 mg/kg

Causes moderate skin irritation

Causes moderate eye irritation

Tetrahydrofintaryi Acrylate

Causes moderate skin irritation

Causes moderate eye irritation

The information shown in SECION 3, Hazards identification, is based on toxicity profiles of similar materials or on the components present in this material.

12. Ecological information

12.1 Toxicity

Acquatic toxicity: No further relevant information available.

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.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

<u>13. Disposal considerations</u>

13, I Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging Dispose of as unused product.

<u>14.</u> Transport information

14.1 UN number			
	ADR/RID: —	IMDG: —	IATA: —
14.2 UN proper ship	ping name		
	ADR/R1D: Not da	ngerous goods	
	IMDG: Not danger	ous goods	

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	1ATA: Not dangerous	ands			
14.3 Transport hazard class(es)					
	ADR/RID:	IMDG:	IATA: —		
14.4 Packaging group)				
5 5 5 1	ADR/R ID:	1MDG:	IATA:		
Environmental hazar	ds				
	ADR/R ID: no	IMDG Marine pollutant: no	IATA: no		
14.6 Special precaut	ions for user				
	No data available				
15 D I (• 6 /•				
<u>15. Regulatory</u>	<u>information</u>	la tra a lla chatta a constitue de la constitue de la			
15.1 Safety, nealth a	and environmental regi	Jiations/legislation specific for the sui	ostance or mixture		
	(EC) NO. 1907/2006	(KEACH)			
REACH Status:	In compliance.	are listed or evented			
Anney XIV - Lis	status: All components	t to authorization			
Substances of v	ery high concern				
None of the con	nponents are listed.				
Annex XVII - Re	strictions on the manuf	acture, placing on the market and use	e of certain dangerous substances, mixtures an 1		
articles					
Not applicable.					
15.2 Chemical Safet	y Assessment				
No data availabl	e				
15.3 Other informati	on				
US Regulation:	US Regulation:				
TSCA Section 4	(a) Final Test Rules Re	gulated: Not regulated.			
TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR): Not regulated.					
TSCA Section	TSCA Section 8(a) Inventory Update Rule: All components on TSCA INVENTORY				
TSCA Section 8	TSCA Section 8(d) Health and Safety Study Reporting: Not regulated.				
TSCA Section 12(b) One-Time Export Notification Regulated: Not regulated.					
California Propo	California Proposition 65: Not regulated.				
16, Other inform	nation				

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.