Safety data sheet

according to 1907/2006/EC, Article 31

Version number 2.0

Revision: 1.19.2023

* 1 Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name: S1 Series UV INK

165 BLACK

Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
Application of the substance / the mixture Printing inks

Details of the supplier of the safety data sheet
INKCUPS CORP.
310 ANDOVER ST.
DANVERS, MA 01923
978-646-8980

Emergency telephone number:
CHEMTREC : 18004249300
CHEMTREC International +1 (703) 527-3887 24 hr

2 Hazards identification

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

Acute Tox. 4	H302	Harmful if swallowed.
Skin Corr. 1C	H314	Causes severe skin burns and eye damage.
Eye Dam. 1	H318	Causes serious eye damage.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Repr. 1A	H360FD	May damage fertility. May damage the unborn child.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.

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

GHS05 GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:
2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester
Tetrahydrofurfuryl Acrylate
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
Neopentylglycol(PO)2 Diacrylate

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 1.19.2022 Version number 2.0 Revision: 1.19.2023

Trade name: Black LED Cure Ink

(Contd. of page 1)

propylidynetrimethanol, propoxylated, esters with acrylic acid
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Hazard statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H360FD May damage fertility. May damage the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

9.6 percent of the mixture consists of component(s) of unknown toxicity

Other hazards No additional information available.

3 Composition/information on ingredients

Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 86273-46-3	2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥ 25 - ≤ 50%
CAS: 2399-48-6	Tetrahydrofurfuryl Acrylate Repr. 1B, H360; Skin Corr. 1C, H314; Eye Dam. 1, H318; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Sens. 1, H317	≥ 10 - < 25%
CAS: 84170-74-1	Neopentylglycol(PO)2 Diacrylate Aquatic Chronic 2, H411; Skin Sens. 1, H317	2.5 - 10%
CAS: 75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	≥ 3 - ≤ 10%
EINECS: 278-355-8	Repr. 2, H361f	
CAS: 53879-54-2	propylidynetrimethanol, propoxylated, esters with acrylic acid Eye Irrit. 2, H319; Skin Sens. 1, H317	≥ 2.5 - < 10%
CAS: 162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	2.5 - 10%
ELINCS: 423-340-5	Skin Sens. 1, H317; Aquatic Chronic 4, H413	
CAS: 1333-86-4	Carbon black	≥ 0 - ≤ 10%
EINECS: 215-609-9	Self-heat. 2, H252	
CAS: 71868-10-5	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	≥ 0.3 - < 2.5%
ELINCS: 400-600-6	Repr. 1B, H360FD; Aquatic Chronic 2, H411; Acute Tox. 4, H302	
CAS: 119313-12-1	2-benzyl-2-dimethylamino-4-morpholinobutyrophenone	≥ 0.3 - < 2.5%
ELINCS: 404-360-3	Repr. 1A, H360D; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 1.19.2022 Version number 2.0 Revision: 1.19.2023

Trade name: Black LED Cure Ink

(Contd. of page 2)

SVHC

71868-10-5 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one

119313-12-1 2-benzyl-2-dimethylamino-4-morpholinobutyrophenone

Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

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 water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 1.19.2022 Version number 2.0 Revision: 1.19.2023

Trade name: Black LED Cure Ink

(Contd. of page 3)

7 Handling and storage

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Information about fire - and explosion protection: Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

1333-86-4 Carbon black

WEL Short-term value: 7 mg/m³

Long-term value: 3.5 mg/m³

Additional information: The lists valid during the making were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ thechemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 1.19.2022 Version number 2.0 Revision: 1.19.2023

Trade name: Black LED Cure Ink

(Contd. of page 4)

Eye protection:

Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid

Colour: Black

Odour: Characteristic

Odour threshold: Not determined.

pH-value: Not determined.

Change in condition

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gas): Not applicable.

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapour pressure: Not determined.

Density: Not determined.

Relative density Not determined.

Vapour density Not determined.

Evaporation rate Not determined.

Solubility in / Miscibility with water: Fully miscible.

Partition coefficient: n-octanol/water: Not determined.

Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

VOC (EC) < 0.01 %

Other information No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 1.19.2022 Version number 2.0 Revision: 1.19.2023

Trade name: Black LED Cure Ink

(Contd. of page 5)

Possibility of hazardous reactions No dangerous reactions known.
Conditions to avoid No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects
Acute toxicity
Harmful if swallowed.
LD/LC50 values relevant for classification:
ATE (Acute Toxicity Estimates)
Oral LD50 > 600 - 612 mg/kg
86273-46-3 2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester
Oral LD50 500 mg/kg (ATE)
2399-48-6 Tetrahydrofurfuryl Acrylate
Oral LD50 928 mg/kg (rat)
53879-54-2 propylidynetrimethanol, propoxylated, esters with acrylic acid
Oral LD50 > 2,000 mg/kg (rat)
1333-86-4 Carbon black
Oral LD50 10,000 mg/kg (rat)
71868-10-5 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one
Oral LD50 500 mg/kg (ATE)
Primary irritant effect:
Skin corrosion/irritation
Causes severe skin burns and eye damage.
Serious eye damage/irritation
Causes serious eye damage.
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
2399-48-6 Tetrahydrofurfuryl Acrylate
Oral NOAEL 120 mg/kg/day (rat)
May damage fertility. May damage 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.
Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.
Behaviour in environmental systems:
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 1.19.2022 Version number 2.0 Revision: 1.19.2023

Trade name: Black LED Cure Ink

(Contd. of page 6)

Ecotoxical effects:
Remark: Harmful to fish
Additional ecological information:
General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

UN-Number	
ADR, IMDG, IATA	not regulated
UN proper shipping name	
ADR, IMDG, IATA	not regulated
Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	not regulated
Packing group	
ADR, IMDG, IATA	not regulated
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
UN "Model Regulation":	not regulated

15 Regulatory information

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.
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 30

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 1.19.2022 Version number 2.0 Revision: 1.19.2023

Trade name: Black LED Cure Ink

(Contd. of page 7)

National regulations:

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

71868-10-5 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one

119313-12-1 2-benzyl-2-dimethylamino-4-morpholinobutyrophenone

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

Relevant phrases

H252 Self-heating in large quantities; may catch fire.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child.
H360D May damage the unborn child.
H360FD May damage fertility. May damage the unborn child.
H361f Suspected of damaging fertility.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
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.

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
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)
VOC: Volatile Organic Compounds (USA, EU)
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
Self-heat. 2: Self-heating substances and mixtures – Category 2
Acute Tox. 4: Acute toxicity - oral – Category 4
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Repr. 1A: Reproductive toxicity – Category 1A
Repr. 1A: Reproductive toxicity – Category 1A
Repr. 1B: Reproductive toxicity – Category 1B
Repr. 1B: Reproductive toxicity – Category 1B
Repr. 2: Reproductive toxicity – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
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

*** Data compared to the previous version altered.**