

## Safety data sheet

according to UK REACH

Printing date 28.01.2025

Version number 5.0

Revision: 28.01.2025

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

#### 1.1 Product identifier

**Trade name:** S1 Black LED Cure Ink

**Article number:** S1

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Product category** Ink and toners

**Application of the substance / the mixture** Printing inks

#### 1.3 Details of the supplier of the safety data sheet

Inkcups Now, LLC

310 Andover Street

Danvers, MA 01923 - USA

1-978-646-8980

**Manufacturer/Supplier:**

Inkcups Now, LLC

310 Andover Street

Danvers, MA 01923

USA

Inkcups Europe GmbH

Gewerbestrasse 15

57258 Freudenberg - Germany

T +49 2734 4782050

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**Further information obtainable from:** [compliance@inkcups.com](mailto:compliance@inkcups.com)

**1.4 Emergency telephone number:** Verisk 3E Great Britain: +44 20 35147487; Access Code: 335740

### 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 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. 1B H360FD May damage fertility. May damage the unborn child.

Aquatic Chronic 2 H411 Toxic 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**



GHS05



GHS07



GHS08



GHS09

**Signal word** Danger

(Contd. on page 2)

—GB—

**Safety data sheet**

according to UK REACH

Printing date 28.01.2025

Version number 5.0

Revision: 28.01.2025

**Trade name: Black LED Cure Ink**

(Contd. of page 1)

**Hazard-determining components of labelling:**

2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester

Tetrahydrofurfuryl Acrylate

2-phenoxyethyl acrylate

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Neopentylglycol(PO)<sub>2</sub> Diacrylate

propylidynetrimethanol, propoxylated, esters with acrylic acid

4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid

**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.

H411 Toxic 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 carefully and follow all instructions.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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:**

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

**2.3 Other hazards** No additional information available.**SECTION 3: Composition/information on ingredients****3.2 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: 48145-04-6	2-phenoxyethyl acrylate Repr. 2, H361; Aquatic Chronic 2, H411; Skin Sens. 1A, H317	≥ 10 - < 25%
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) <sub>2</sub> Diacrylate Aquatic Chronic 2, H411; Skin Sens. 1, H317	2.5 - 10%

(Contd. on page 3)

— GB —

**Safety data sheet**

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Printing date 28.01.2025

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Revision: 28.01.2025

**Trade name: Black LED Cure Ink**

(Contd. of page 2)

CAS: 75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	≥ 3 - ≤ 10%
EINECS: 278-355-8	Repr. 2, H361f; Skin Sens. 1B, H317	
CAS: 53879-54-2	propylidynetrimethanol, propoxylated, esters with acrylic acid	≥ 2.5 - < 10%
	Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	2.5 - 10%
ELINCS: 423-340-5	Skin Sens. 1A, 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	≥ 0.25 - < 0.3%
ELINCS: 404-360-3	Repr. 1B, H360D; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 55818-57-0	4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, esters with acrylic acid	≥ 0.1 - < 1%
	Skin Sens. 1, H317	

**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.**SECTION 4: First aid measures****4.1 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.**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:** Use fire extinguishing methods suitable to surrounding conditions.**5.2 Special hazards arising from the substance or mixture** No further relevant information available.**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**

Wear protective equipment. Keep unprotected persons away.

**6.2 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.

(Contd. on page 4)

# Safety data sheet

according to UK REACH

Printing date 28.01.2025

Version number 5.0

Revision: 28.01.2025

**Trade name: Black LED Cure Ink**

(Contd. of page 3)

Dilute with plenty of water.

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, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

**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**

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.

**7.2 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.

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

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**
**Additional information about design of technical facilities:** No further data; see section 7.

**Ingredients with limit values that require monitoring at the workplace:**
**1333-86-4 Carbon black**
WEL Short-term value: 7 mg/m<sup>3</sup>Long-term value: 3.5 mg/m<sup>3</sup>
**Additional information:** The lists valid during the making were used as basis.

**8.2 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

(Contd. on page 5)

**Safety data sheet**

according to UK REACH

Printing date 28.01.2025

Version number 5.0

Revision: 28.01.2025

**Trade name: Black LED Cure Ink**

(Contd. of page 4)

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/ the chemical 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.

**Eye protection:**

Tightly sealed goggles

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Black
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	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** Not applicable.

**Decomposition temperature:** Not determined.

**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.

(Contd. on page 6)

**Safety data sheet**

according to UK REACH

Printing date 28.01.2025

Version number 5.0

Revision: 28.01.2025

**Trade name: Black LED Cure Ink**

(Contd. of page 5)

**Viscosity:****Dynamic:**

Not determined.

**Kinematic:**

Not determined.

**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 relevant for classification:****ATE (Acute Toxicity Estimates)**

Oral LD50 &gt; 1,084 - 1,120 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 &gt; 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.

**Additional toxicological information:****CMR effects (carcinogenicity, 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**

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.

(Contd. on page 7)

**Safety data sheet**

according to UK REACH

Printing date 28.01.2025

Version number 5.0

Revision: 28.01.2025

**Trade name: Black LED Cure Ink**

(Contd. of page 6)

**Aspiration hazard** Based on available data, the classification criteria are not met.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic 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.**Ecotoxicological 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

**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 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.**SECTION 14: Transport information****14.1 UN-Number****ADR, IMDG, IATA**

not regulated

**14.2 UN proper shipping name****ADR, IMDG, IATA**

not regulated

**14.3 Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class**

not regulated

**14.4 Packing group****ADR, IMDG, IATA**

not regulated

**14.5 Environmental hazards:**

Not applicable.

**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.

**UN "Model Regulation":**

not regulated

— GB —

(Contd. on page 8)

**Safety data sheet**

according to UK REACH

Printing date 28.01.2025

Version number 5.0

Revision: 28.01.2025

**Trade name: Black LED Cure Ink**

(Contd. of page 7)

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Poisons Act****Regulated explosives precursors**

None of the ingredients is listed.

**Regulated poisons**

None of the ingredients is listed.

**Reportable explosives precursors**

None of the ingredients is listed.

**Reportable poisons**

None of the ingredients is listed.

**Directive 2012/18/EU****Named dangerous substances - ANNEX I** None of the ingredients is listed.**Seveso category** E2 Hazardous to the Aquatic Environment**Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t**National regulations:****Other regulations, limitations and prohibitive regulations****Substances of very high concern (SVHC) according to UK REACH**

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

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

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

**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.

H361 Suspected of damaging fertility or 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 relatif au transport international 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

(Contd. on page 9)

— GB —



**Safety data sheet**

according to UK REACH

Printing date 28.01.2025

Version number 5.0

Revision: 28.01.2025

**Trade name: Black LED Cure Ink**

(Contd. of page 8)

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)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 ATE: Acute toxicity estimate values  
 Self-heat. 2: Self-heating substances and mixtures – Category 2  
 Acute Tox. 4: Acute toxicity – 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  
 Skin Sens. 1A: Skin sensitisation – Category 1A  
 Skin Sens. 1B: Skin sensitisation – Category 1B  
 Repr. 1B: Reproductive toxicity – Category 1B  
 Repr. 1B: Reproductive toxicity – Category 1B  
 Repr. 1B: Reproductive toxicity – Category 1B  
 Repr. 2: Reproductive toxicity – Category 2  
 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.**

— GB —