Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

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

1.1 Product identifier

Trade name: XFLEXX Black UV Cure Ink

Article number: XFLEXX

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 Europe GmbH
Gewerbestrasse 15
57258 Freudenberg - Germnay
T +49 2734 4782050
info@inkcups.com

Further information obtainable from: 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

Hazard-determining components of labelling:
Tetrahydrofurfuryl Acrylate
2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester
2-phenoxyethyl acrylate

(Contd. on page 2)

Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

Trade name: Black UV Cure Ink

(Contd. of page 1)

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
Neopentylglycol(PO)2 Diacrylate
propylidynetrimethanol, propoxylated, 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:

8.3 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: 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	25 - 50%
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	≥ 10 - < 25%
CAS: 48145-04-6	2-phenoxyethyl acrylate Repr. 2, H361; Aquatic Chronic 2, H411; Skin Sens. 1A, H317	≥ 3 - < 25%
CAS: 84170-74-1	Neopentylglycol(PO)2 Diacrylate Aquatic Chronic 2, H411; Skin Sens. 1, H317	2.5 - 10%
CAS: 75980-60-8 EINECS: 278-355-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide Repr. 2, H361f; Skin Sens. 1B, H317	≥ 3 - ≤ 10%
CAS: 53879-54-2	propylidynetrimethanol, propoxylated, esters with acrylic acid Eye Irrit. 2, H319; Skin Sens. 1, H317	≥ 2.5 - < 10%
CAS: 1333-86-4 EINECS: 215-609-9	Carbon black Self-heat. 2, H252	≥ 0 - ≤ 10%

(Contd. on page 3)

Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

Trade name: Black UV Cure Ink

(Contd. of page 2)

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: 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. 1B, H360D; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

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.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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:

Call for a doctor immediately.

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.

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.

(Contd. on page 4)

Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

Trade name: Black UV Cure Ink

(Contd. of page 3)

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/m³

Long-term value: 3.5 mg/m³

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

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

(Contd. on page 5)

Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

Trade name: Black UV Cure Ink

(Contd. of page 4)

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:

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	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:	Not miscible or difficult to mix.
Partition coefficient: n-octanol/water:	Not determined.

Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

(Contd. on page 6)

Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

Trade name: Black UV Cure Ink

(Contd. of page 5)

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 1,400 - 1,408 mg/kg

2399-48-6 Tetrahydrofurfuryl Acrylate
Oral LD50 928 mg/kg (rat)

86273-46-3 2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester
Oral LD50 500 mg/kg (ATE)

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.
Additional toxicological information:
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
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.

(Contd. on page 7)

Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

Trade name: Black UV Cure Ink

(Contd. of page 6)

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.

Ecotoxical effects:

Remark: Toxic for 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.

Also poisonous for fish and plankton in water bodies.

Toxic for 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.

SECTION 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA UN3082

14.2 UN proper shipping name

ADR 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetrahydrofurfuryl Acrylate)

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetrahydrofurfuryl Acrylate), MARINE POLLUTANT

IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetrahydrofurfuryl Acrylate)

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Class 9 Miscellaneous dangerous substances and articles.

Label 9

(Contd. on page 8)

Safety data sheet
according to UK REACH

(Contd. of page 7)

14.4 Packing group
ADR, IMDG, IATA III
14.5 Environmental hazards:
Marine pollutant: Symbol (fish and tree)
Special marking (ADR): Symbol (fish and tree)
Special marking (IATA): Symbol (fish and tree)
14.6 Special precautions for user Warning: Miscellaneous dangerous substances and articles.
Hazard identification number (Kemler code): 90
EMS Number: F-A,S-F
Stowage Category A
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

Transport/Additional information:

ADR
Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
Transport category 3
Tunnel restriction code (-)

IMDG
Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation": UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAHYDROFURFURYL ACRYLATE), 9, III

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

(Contd. on page 9)

Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

Trade name: Black UV Cure Ink

(Contd. of page 8)

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
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

(Contd. on page 10)

Safety data sheet

according to UK REACH

Printing date 10.02.2025 Version number 3.0 Revision: 10.02.2025

Trade name: Black UV Cure Ink

(Contd. of page 9)

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.**