according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Date of issue: 08/08/2025 Version: 2.0 Reviewed on 08/08/2025

1 Identification

Product identifier

Product name: S1 White UV Cure Ink

Other means of identification

Article number: S1

Application of the substance / the mixture: Printing inks

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

Information department: compliance@inkcups.com

Emergency telephone number: Verisk 3E US & Canada: +1 866 519 4752; Access Code: 335740

2 Hazard(s) identification

Classification of the substance or mixture

Acute toxicity - oral 4 H302 Harmful if swallowed. Skin irritation 2 H315 Causes skin irritation. Eye irritation 2A H319 Causes serious eye irritation. Sensitization - skin 1 H317 May cause an allergic skin reaction.

Reproductive toxicity 1B H360 May damage fertility or the unborn child.

Specific target organ toxicity (repeated exposure) 1 H372 Causes damage to organs through prolonged or repeated exposure.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms





GHS07

Signal word Danger

Hazard-determining components of labeling:

2H-Azepin-2-one, 1-ethenylhexahydrodiphenyl(2,4,6-trimethylbenzoyl)phosphine oxide propylidynetrimethanol, propoxylated, esters with acrylic acid 2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester Neopentylglycol(PO)2 Diacrylate

hexamethylene diacrylate

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Product name: White UV Cure Ink

Isobournyl Acrylate

2-phenoxyethyl acrylate

Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

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

Contaminated work clothing must not be allowed out of the workplace.

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

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

11 % of the mixture consists of component(s) of unknown toxicity.

Classification according to (d)(1)(ii) of § 1910.1200

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

13463-67-7 titanium dioxide ≥ 10 - ≤ 50%

Carcinogenicity 2, H351

2235-00-9 2H-Azepin-2-one, 1-ethenylhexahydro-

Specific target organ toxicity (repeated exposure) 1, H372; Acute toxicity - oral 4, H302; Acute toxicity - dermal 4, H312; Eye irritation 2A, H319; Sensitization - skin 1, H317

53879-54-2 propylidynetrimethanol, propoxylated, esters with acrylic acid 10 - 25%

Eye irritation 2A, H319; Sensitization - skin 1, H317

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84170-74-1 Neopentylglycol(PO)2 Diacrylate	≥ 2.5 - ≤ 25%
Sensitization - skin 1, H317	
75980-60-8 diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	10 - 25%
Reproductive toxicity 1B, H360; Sensitization - skin 1B, H317	
13048-33-4 hexamethylene diacrylate	2.5 - 10%
Skin irritation 2, H315; Eye irritation 2A, H319; Sensitization - skin 1, H317	
5888-33-5 Isobournyl Acrylate	2.5 - 10%
Skin irritation 2, H315; Eye irritation 2A, H319; Sensitization - skin 1, H317; Specific target organ toxicity (single exposure) 3, H335	
48145-04-6 2-phenoxyethyl acrylate	2.5 - 10%
Reproductive toxicity 2, H361; Sensitization - skin 1A, H317	
86273-46-3 2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester	≥ 2.5 - ≤ 10%
Acute toxicity - oral 4, H302; Sensitization - skin 1, H317	

4 First-aid measures

Description of first aid measures

General information:

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. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist consult doctor.

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 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

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 Not required.

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.

Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

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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.

7 Handling and storage

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about protection against explosions and fires: No special measures required.

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 receptacle tightly sealed.

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

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

13048-33-4 hexamethylene diacrylate

WEEL Long-term value: 1 mg/m³

DSEN

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

Exposure controls

Appropriate engineering controls No further data; see section 7.

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.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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

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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

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Physical state
Color:
White
Odor:
Odor threshold:
Not determined.
Melting point/Melting range:
Undetermined.
Boiling point/Boiling range:
Undetermined.
Flammability:
Not applicable.
Explosion limits:

Lower: Not determined.
Upper: Not determined.
Flash point: Not applicable.
Decomposition temperature: Not determined.
pH-value: Not determined.

Viscosity:

Kinematic: Not determined. **Dynamic:** Not determined.

Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water):

Vapor pressure:

Not determined.

Not determined.

Vapor pressure:

Density:Not determined.Relative densityNot determined.Vapor densityNot determined.Particle characteristicsNot applicable.

Other information

Appearance:

Form: Liquid

Important information on protection of health and

environment, and on safety.

Ignition temperature: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

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Product name: White UV Cure Ink

Change in condition

Evaporation rate Not determined.

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.

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:

LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 1,946 - 1,950 mg/kg

Dermal LD50 5,107 mg/kg

13463-67-7 titanium dioxide

Oral LD50 > 20,000 mg/kg (rat)

Dermal LD50 > 10,000 mg/kg (rabbit)

Inhalative LC50/4 h > 6.82 mg/l (rat)

2235-00-9 2H-Azepin-2-one, 1-ethenylhexahydro-

Oral LD50 500 mg/kg (ATE)

Dermal LD50 1,100 mg/kg (ATE)

53879-54-2 propylidynetrimethanol, propoxylated, esters with acrylic acid

Oral LD50 > 2,000 mg/kg (rat)

13048-33-4 hexamethylene diacrylate

Oral LD50 > 5,000 mg/kg (rat)

Dermal LD50 > 3,000 mg/kg (rab)

86273-46-3 2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester

Oral LD50 500 mg/kg (ATE)

Primary irritant effect:

on the skin: No irritant effect. on the eye: Irritating effect.

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

Interactive effects No interactive effects between components are known.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

13463-67-7 titanium dioxide: 2B

105-60-2 1,6-hexanolactam: 3

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15625-89-5 2,2-bis(acryloyloxymethyl)butyl acrylate: 2B

108-88-3 Toluene: 3 79-10-7 acrylic acid: 3

128-37-0 Butylated hydroxytoluene: 3 NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

Alternative sources for toxicological information

No non-standard sources for toxicological information where used.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available. **Bioaccumulative potential** No further relevant information available.

Mobility in soil No further relevant information available.

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable. Other adverse effects Remark: Harmful to fish

Additional ecological information:

General notes:

Water hazard class 2 (Self-assessment): hazardous for water

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

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

* 13 Disposal considerations

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN-Number

DOT not regulated IMDG, IATA UN3082

UN proper shipping name

DOT not regulated

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Isobournyl Acrylate), MARINE POLLUTANT

IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Isobournyl Acrylate)

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

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Transport hazard class(es)

DOT

Class not regulated

IMDG, IATA



Class 9 Miscellaneous dangerous substances and articles

Label

Packing group

DOT not regulated

IMDG, IATA

Environmental hazards: Product contains environmentally hazardous substances: Isobournyl

Acrylate

Marine pollutant: Symbol (fish and tree)
Special marking (IATA): Symbol (fish and tree)

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

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 Warning: Miscellaneous dangerous substances and articles

Special precautions for user Warning **Hazard identification number (Kemler code):** 90

EMS Number: F-A,S-F Stowage Category A

UN "Model Regulation": UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (ISOBOURNYL ACRYLATE), 9, III

*15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

13463-67-7 titanium dioxide: ACTIVE

2235-00-9 2H-Azepin-2-one, 1-ethenylhexahydro-: ACTIVE

53879-54-2 propylidynetrimethanol, propoxylated, esters with acrylic acid: ACTIVE

84170-74-1 Neopentylglycol(PO)2 Diacrylate: ACTIVE

75980-60-8 diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide: ACTIVE

13048-33-4 hexamethylene diacrylate: ACTIVE

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5888-33-5 Isobournyl Acrylate: ACTIVE

48145-04-6 2-phenoxyethyl acrylate: ACTIVE

86273-46-3 2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester: ACTIVE

Hazardous Air Pollutants

108-88-3 Toluene

67-56-1 methanol

79-10-7 acrylic acid

Proposition 65

Chemicals known to cause cancer:

13463-67-7 titanium dioxide

15625-89-5 2,2-bis(acryloyloxymethyl)butyl acrylate

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

108-88-3 Toluene

67-56-1 methanol

Carcinogenic categories

EPA (Environmental Protection Agency)

108-88-3 Toluene: II

TLV (Threshold Limit Value)

13463-67-7 titanium dioxide: A4

105-60-2 1,6-hexanolactam: A5

108-88-3 Toluene: A4

79-10-7 acrylic acid: A4

128-37-0 Butylated hydroxytoluene: A4

NIOSH-Ca (National Institute for Occupational Safety and Health)

13463-67-7 titanium dioxide

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms





GHS07

GHS08

Signal word Danger

Hazard-determining components of labeling:

2H-Azepin-2-one, 1-ethenylhexahydro-

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

propylidynetrimethanol, propoxylated, esters with acrylic acid

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

Neopentylglycol(PO)2 Diacrylate

hexamethylene diacrylate

Isobournyl Acrylate

2-phenoxyethyl acrylate

Hazard statements

Harmful if swallowed.

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Product name: White UV Cure Ink

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

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

Contaminated work clothing must not be allowed out of the workplace.

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

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

Date of previous version 08/10/2021

Version number of previous version: 1.0

Date of preparation 08/08/2025

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

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Product name: White UV Cure Ink

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute toxicity - oral 4: Acute toxicity - Category 4

Skin irritation 2: Skin corrosion/irritation – Category 2

Eye irritation 2A: Serious eye damage/eye irritation - Category 2A

Sensitization - skin 1: Skin sensitisation - Category 1

Sensitization - skin 1A: Skin sensitisation - Category 1A

Sensitization - skin 1B: Skin sensitisation - Category 1B

Carcinogenicity 2: Carcinogenicity – Category 2

Reproductive toxicity 1B: Reproductive toxicity - Category 1B

Reproductive toxicity 2: Reproductive toxicity – Category 2

Specific target organ toxicity (single exposure) 3: Specific target organ toxicity (single exposure) – Category 3

Specific target organ toxicity (repeated exposure) 1: Specific target organ toxicity (repeated exposure) – Category 1

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^{*} Data compared to the previous version altered.