

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 04.12.2023

Version number 1.0

Revision: 04.12.2023

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

Product identifier

Trade name: S1 Vivid White UV Ink

Article number: ixS1-w

Application of the substance / the mixture Printing inks

Details of the supplier of the safety data sheet

Inkcups Now Corp
310 Andover Street
Danvers, MA 01923 - USA
1-978-646-8980

Manufacturer/Supplier:

Inkcups Now Corp
310 Andover Street
Danvers, MA 01923
USA

Further information obtainable from: compliance@inkcups.com

Emergency telephone number: Verisk 3E Europe Non-Specific: +1 760 476 3962; Access Code: 335740

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 Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Repr. 2	H361 Suspected of damaging fertility or the unborn child.
STOT RE 1	H372 Causes damage to organs through prolonged or repeated exposure.
Aquatic Chronic 2	H411 Toxic 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



GHS07 GHS08 GHS09

Signal word Danger

Hazard-determining components of labelling:

2H-Azepin-2-one, 1-ethenylhexahydro-
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 04.12.2023

Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 1)

propylidynetrimethanol, propoxylated, esters with acrylic acid

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

2-phenoxyethyl acrylate

Neopentylglycol(PO)2 Diacrylate

hexamethylene diacrylate

Isobournyl Acrylate

Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

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

Other hazards No additional information available.**3 Composition/information on ingredients****Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 13463-67-7	titanium dioxide	≥ 10 - ≤ 50%
EINECS: 236-675-5	Carc. 2, H351	
Index number: 022-006-00-2		
CAS: 2235-00-9	2H-Azepin-2-one, 1-ethenylhexahydro-	10 - 25%
	STOT RE 1, H372; Acute Tox. 4, H302; Acute Tox. 4, H312; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 53879-54-2	propylidynetrimethanol, propoxylated, esters with acrylic acid	10 - 25%
	Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 84170-74-1	Neopentylglycol(PO)2 Diacrylate	≥ 2.5 - < 25%
	Aquatic Chronic 2, H411; Skin Sens. 1, H317	
CAS: 75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	10 - 25%
EINECS: 278-355-8	Repr. 2, H361f	
Index number: 015-203-00-X		
CAS: 13048-33-4	hexamethylene diacrylate	≥ 2.5 - < 10%
EINECS: 235-921-9	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
Index number: 607-109-00-8		

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 04.12.2023

Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 2)

CAS: 5888-33-5	Isobournyl Acrylate	≥ 2.5 - < 10%
EINECS: 227-561-6	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Eye	
Index number: 607-756-00-6	Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 48145-04-6	2-phenoxyethyl acrylate	≥ 3 - < 10%
	Repr. 2, H361; Aquatic Chronic 2, H411; Skin Sens. 1A, H317	
CAS: 86273-46-3	2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester	≥ 2.5 - ≤ 10%
	Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	

SVHC

75980-60-8 Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

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:**

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 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** 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.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 04.12.2023

Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 3)

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 fire - and explosion protection: 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 container tightly sealed.**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Control parameters****Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.**Exposure controls****Appropriate engineering controls** No further data; see section 7.**Individual protection measures, such as 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.

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.

Hand protection

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

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 04.12.2023

Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 4)

Eye/face protection

Tightly sealed goggles

9 Physical and chemical properties**Information on basic physical and chemical properties****General Information**

Physical state	Fluid
Colour:	White
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not determined.

Other information**Appearance:**

Form:	Liquid
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Important information on protection of health and environment, and on safety.

Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.

Change in condition

Evaporation rate	Not determined.
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Information with regard to physical hazard classes

Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 04.12.2023

Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 5)

Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

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 hazard classes as defined in Regulation (EC) No 1272/2008**

This product has not been reviewed for carcinogenicity by IARC, NTP, OSHA or ACGIH. It contains titanium dioxide which is not listed as a carcinogen by NTP, OSHA, or ACGIH. However, in 2006, IARC released Monograph Vol. 93 in which it reclassified titanium dioxide from not classifiable as to its carcinogenicity to humans (Group 3) to possibly carcinogenic to humans (Group 2B). The reclassification was based on two studies in which rats were exposed to extremely high concentrations of titanium dioxide pigment powders in a closed chamber for extended periods of time. It is important to note that the results of epidemiology studies which evaluated more than 20,000 titanium dioxide industry workers in Europe and the US did NOT suggest a carcinogenic effect from titanium dioxide dust on the human lung or mortality from other chronic diseases including respiratory diseases not associated with titanium dioxide dust. Based upon the results of these studies, the pigment manufacturer(s) conclude that TiO₂ will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Acute toxicity Harmful if swallowed.**LD/LC50 values relevant for classification:****ATE (Acute Toxicity Estimates)**

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)

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 04.12.2023

Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 6)

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)

Skin corrosion/irritation Causes skin irritation.**Serious eye damage/irritation** Causes serious eye irritation.**Respiratory or skin sensitisation** May cause an allergic skin reaction.**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** Suspected of damaging fertility or the unborn child.**STOT-single exposure** Based on available data, the classification criteria are not met.**STOT-repeated exposure** Causes damage to organs through prolonged or repeated exposure.**Aspiration hazard** Based on available data, the classification criteria are not met.**Information on other hazards****Endocrine disrupting properties**

128-37-0 Butylated hydroxytoluene: List II

540-97-6 dodecamethylcyclotetrasiloxane: List II

541-02-6 Decamethylcyclotetrasiloxane: List II

556-67-2 octamethylcyclotetrasiloxane: List II; III

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.**Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.**Other adverse 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.

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

Harmful to aquatic organisms

13 Disposal considerations**Waste treatment methods****Recommendation**

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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

(Contd. on page 8)

EU

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 04.12.2023

Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 7)

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN number or ID number****ADR, IMDG, IATA**

UN3082

UN proper shipping name**ADR**3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (Isobournyl Acrylate)**IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (Isobournyl Acrylate), MARINE POLLUTANT**IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (Isobournyl Acrylate)**Transport hazard class(es)****ADR, IMDG, IATA****Class**

9 Miscellaneous dangerous substances and articles.

Label

9

Packing group**ADR, IMDG, IATA**

III

Environmental hazards:Product contains environmentally hazardous substances: Isobournyl
Acrylate**Marine pollutant:**

Symbol (fish and tree)

Special marking (ADR):

Symbol (fish and tree)

Special marking (IATA):

Symbol (fish and tree)

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

**Maritime transport in bulk according to IMO
instruments**

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

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 8)

UN "Model Regulation":UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (ISOBOURNYL ACRYLATE), 9, III**15 Regulatory information****Directive 2004/42/EC****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**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

REGULATION (EU) 2019/1148**Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

108-88-3 Toluene: 3

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

108-88-3 Toluene: 3

National regulations:**Other regulations, limitations and prohibitive regulations****Substances of very high concern (SVHC) according to REACH, Article 57**

75980-60-8 Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

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.

H361 Suspected of damaging fertility or the unborn child.

H361f Suspected of damaging fertility.

H372 Causes damage to organs through prolonged or repeated exposure.

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.

(Contd. on page 10)

— EU —

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 1.0

Revision: 04.12.2023

Trade name: S1 Vivid White

(Contd. of page 9)

H412 Harmful to aquatic life with long lasting effects.

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

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

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

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

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