



Safety Data Sheet August 2024

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s) O1005PLUS-1L
Product name Light Cyan
Product category PLUS UV Ink

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

Recommended use Industrial Printing Operations

1.3. Details of the supplier of the safety data sheet

Ollinks
Unit D15, HRS Business Park
Garretts Green Lane
Garretts Green
Birmingham, B33 0UE
Tel: +44 (0)121 243 5475

For further information, please contact

Contact person Jennifer Davies
E-mail address info@inkjetmonkey.com

1.4. Emergency telephone number

0044 7930 324 262

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)
Reproductive toxicity	Category 1B - (H360FD)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

**Signal word**

Danger

Hazard statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H360FD - May damage fertility. May damage the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face 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

P310 - Immediately call a POISON CENTER or doctor

2.3. Other hazards

Toxic to aquatic life.

PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical name	EC No (EU Index No)	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number	Note
2-Phenoxyethyl acrylate	256-360-6	48145-04-6	30 - 60	Skin Sens. 1A (H317) Repr. 2 (H361fd) Aquatic Chronic 2 (H411)	01-2119980532-35-xxxx	
Dipropylene glycol diacrylate	260-754-3	57472-68-1	10 - 30	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317)	01-2119484629-21-xxxx	
N-vinylcaprolactam	218-787-6	2235-00-9	5 - 10	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Eye Irrit. 2A (H319) Skin Sens. 1B (H317) STOT RE 1 (H372) [liver, respiratory system]	01-2119977109-27-xxxx	
Hexamethylene diacrylate (HDODA)	235-921-9	13048-33-4	5 - 10	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	01-2119484737-22-xxxx	
1-Propanone, 2-methyl-1-[4-	400-600-6	71868-10-5	1 - 5	Acute Tox. 4 (H302)	01-0000015054-80-	3

(methylthio)phenyl]-2-(4-morpholinyl)-				Repr. 1B (H360FD) Aquatic Chronic 2 (H411)	xxxx	
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	278-355-8	75980-60-8	1 - 5	Skin Sens. 1 (H317) Repr. 1B (H360Fd)	01-2119972295-29-xxxx	3
Phenothiazine	202-196-5	92-84-2	0.10 - < 0.50	Acute Tox. 4 (H302) Skin Sens. 1 (H317) STOT RE 2 (H373) Aquatic Acute (H400) Aquatic Chronic 1 (H410)	01-2119488529-19-xxxx	1

Note

REACH No: Registration number(s) may not be provided because substance(s) are exempted or not yet required to be registered under REACH

1. Substance with a Community workplace exposure limit

3. SVHC: Substances of Very High Concern for Authorization

Chemical name	EU - CLP (1272/2008) - Annex VI - Table 3 - Acute Toxicity Estimates (ATEs)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
2-Phenoxyethyl acrylate 48145-04-6				1
Hexamethylene diacrylate (HDODA) 13048-33-4			1	1
1-Propanone, 2-methyl-1-[4-(methylthio)phenyl]-2-(4-morpholinyl)- 71868-10-5				1
Phenothiazine 92-84-2			1	1

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention.
Inhalation	Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

None under normal use conditions.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Foam. Carbon dioxide (CO₂). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions. Hazardous polymerization may take place during a fire due to heat. Closed containers could violently rupture.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray. Sealed containers may rupture when heated.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2. Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

6.4. Reference to other sections

See Section 12 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep at temperatures between 18°-32°C (65°-90°F). Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep out of the reach of children. Protect from direct sunlight. Keep away from open flames, hot surfaces and sources of ignition.

7.3. Specific end use(s)

Exposure scenario	No information available.
Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

Chemical name	France
Phenothiazine 92-84-2	TWA/VME: 5 mg/m ³ Skin
Chemical name	Spain
Phenothiazine 92-84-2	TWA/VLA-ED: 5 mg/m ³ Skin
Chemical name	Portugal
Phenothiazine 92-84-2	TWA/VLE-MP: 5 mg/m ³ Skin
Chemical name	Finland
Phenothiazine	TWA: 5 mg/m ³

92-84-2	STEL: 10 mg/m ³ Skin
Chemical name	Denmark
Phenothiazine 92-84-2	TWA: 5 mg/m ³ Skin
Chemical name	Switzerland
Phenothiazine 92-84-2	TWA/MAK: 5 mg/m ³ inhalable dust Skin
Chemical name	Poland
Phenothiazine 92-84-2	TWA/NDS: 4 mg/m ³
Chemical name	Norway
Phenothiazine 92-84-2	TWA: 5 mg/m ³ Skin
Chemical name	Ireland
Phenothiazine 92-84-2	: 5 ppm STEL: 15 mg/m ³
Chemical name	Australia TWA
Phenothiazine 92-84-2	TWA: 5 mg/m ³

Derived No Effect Level (DNEL)

Chemical name	DNEL - Dermal (Workers)	DNEL - Inhalation (Workers)
2-Phenoxyethyl acrylate 48145-04-6	1.5 mg/kg (Systemic long term)	10 mg/m ³ (Systemic long term) 77 mg/m ³ (Local long term)
Dipropylene glycol diacrylate 57472-68-1	2.77 mg/kg (Systemic long term)	24.48 mg/m ³ (Systemic long term)
N-vinylcaprolactam 2235-00-9	0.7 mg/kg (Systemic long term)	4.9 mg/m ³ (Systemic long term) 0.17 mg/m ³ (Local long term)
Hexamethylene diacrylate (HDODA) 13048-33-4	2.77 mg/kg (Systemic long term)	24.5 mg/m ³ (Systemic long term)
1-Propanone, 2-methyl-1-[4-(methylthio)phenyl]-2-(4-morpholinyl)- 71868-10-5	0.4 mg/kg (Systemic long term)	2.82 mg/m ³ (Systemic long term)
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide 75980-60-8	1.1 mg/kg (Systemic long term)	3.5 mg/m ³ (Systemic long term)
Phenothiazine 92-84-2	0.15 mg/kg (Systemic long term)	0.53 mg/m ³ (Systemic long term) 1.59 mg/m ³ (Systemic acute/short term)

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures

Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

Personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Wear suitable face shield. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye Protection

Safety glasses with side-shields. Goggles. Face-shield. Avoid contact with eyes. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Hand Protection	Chemical resistant protective gloves. Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding >480 minutes of permeation time): eg. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers. Taking into account the varying conditions, the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Due to different glove types, the manufacturer's directions for use should be observed. Replace gloves immediately when torn or any change in appearance is noticed such as dimension, color, flexibility.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Odor	Mild. Sweet. Acrylic.
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	> 149 °C	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	> 94 °C	Pensky Martens Closed Cup (PMCC)
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapor pressure	No data available	None known
Relative density	1.09	None known

Bulk density	No data available	
Liquid Density	No data available	
Relative vapor density	No data available	None known
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing. Do not store for longer periods at temperatures above 93°C (200°F).

10.4. Conditions to avoid

Temperatures above 93 °C / 200 °F. Protect from direct sunlight. Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO₂). Carbon monoxide.

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Inhalation	Specific test data for the substance or mixture is not available.
Eye Contact	Specific test data for the substance or mixture is not available.
Skin Contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown acute toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	5,033.10
ATEmix (dermal)	21,426.30
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	99,999.00
ATEmix (inhalation-vapor)	99,999.00

Unknown Acute Toxicity

- 0 % of the mixture consists of ingredient(s) of unknown acute toxicity.
 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical name	Oral LD50
2-Phenoxyethyl acrylate 48145-04-6	= 4660 µL/kg (Rat)
Dipropylene glycol diacrylate 57472-68-1	= 4600 mg/kg (Rat)
Hexamethylene diacrylate (HDODA) 13048-33-4	= 5 g/kg (Rat)
Phenothiazine 92-84-2	= 5000 mg/kg (Rat)

Chemical name	Dermal LD50
Dipropylene glycol diacrylate 57472-68-1	> 2000 mg/kg (Rabbit)
N-vinylcaprolactam 2235-00-9	= 1700 mg/kg (Rabbit)
Hexamethylene diacrylate (HDODA) 13048-33-4	= 3600 mg/kg (Rabbit)
1-Propanone, 2-methyl-1-[4-(methylthio)phenyl]-2-(4-morpholinyl)- 71868-10-5	> 2000 mg/kg (Rat)
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide 75980-60-8	> 2000 mg/kg (Rat)
Phenothiazine 92-84-2	> 2000 mg/kg (Rat)

Chemical name	Inhalation LC50
N-vinylcaprolactam 2235-00-9	> 1.6 mg/L (Rat) 8 h

Skin corrosion/irritation	Specific test data for the substance or mixture is not available. Causes skin irritation (pain, redness and swelling). (based on components).
Eye damage/irritation	Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components).
Sensitization	Specific test data for the substance or mixture is not available. May cause an allergic skin reaction. (based on components).
Mutagenic Effects	Specific test data for the substance or mixture is not available.
Carcinogenic effects	Specific test data for the substance or mixture is not available.
Reproductive Effects	Specific test data for the substance or mixture is not available. May damage fertility. May damage the unborn child. (based on components).
CMR, categories 1 and 2	This product contains one or more substances which are classified in the EU as carcinogenic, mutagenic and/or reprotoxic

Chemical name	CMR, categories 1 and 2
2-Phenoxyethyl acrylate 48145-04-6	Repr. 2
1-Propanone, 2-methyl-1-[4-(methylthio)phenyl]-2-(4-morpholinyl)- 71868-10-5	Repr. 1B
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide 75980-60-8	Repr. 1B

STOT - single exposure	Specific test data for the substance or mixture is not available.
STOT - repeated exposure	Specific test data for the substance or mixture is not available. May cause damage to organs through prolonged or repeated exposure. (based on components).
Target organ effects	Liver, Respiratory system.
Aspiration hazard	Specific test data for the substance or mixture is not available.

11.2. Information on other hazards

No information available

Section 12: ECOLOGICAL INFORMATION**12.1. Toxicity**

Specific test data for the substance or mixture is not available. Toxic to aquatic life with long lasting effects. (based on components).

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment

Chemical name	Fish
N-vinylcaprolactam 2235-00-9	96h LC50 Danio rerio: = 307 mg/L (static)
1-Propanone, 2-methyl-1-[4-(methylthio)phenyl]-2-(4-morpholinyl)- 71868-10-5	96h LC50 Danio rerio: = 9 mg/L (static)
Phenothiazine 92-84-2	96h LC50 Oncorhynchus mykiss: = 0.597 mg/L (static)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical name	Partition coefficient
Phenothiazine 92-84-2	4.24

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Endocrine disrupting properties.

This product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods****Waste from residues/unused products**

Contain and dispose of waste according to local regulations.

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14: TRANSPORT INFORMATION**Note:**

This information is not intended to convey all specific transportation requirements relating to this product. Transportation classifications may vary by container volume and may be

influenced by regional or country variations in regulations. Additional transportation information can be found in the specific regulations for your mode of transportation. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

ADR

Not Regulated

ADR Special Provision 375 applies only to environmentally hazardous substances, UN3077 and UN3082. These items may be shipped as "not regulated" if in quantities of 5L or less (per inner packaging) for liquids or 5KG or less (per inner packaging) for solids and the packaging used meets the defined standards.

ICAO / IATA / IMDG / IMO

Not Regulated

ICAO/IATA Special Provision A197 applies only to environmentally hazardous substances, UN3077 and UN3082. These items may be shipped as "not regulated" if in quantities of 5L or less (per inner packaging) for liquids or 5KG or less (per inner packaging) for solids and the packaging used meets the defined standards.

IMDG code 2.10.2.7 applies only to marine pollutants. These items may be shipped as "not regulated" and no marine pollutant mark is required if in quantities of 5L or less (per inner packaging) for liquids or 5KG or less (per inner packaging) for solids and the packaging used meets the defined standards.

Section 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture*****European Union*****International Inventories**

For further information, please contact: Supplier (manufacturer/importer/downstream user/distributor)

Regulation (EC) No. 1907/2006 (REACH), Article 57

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59). See section 3 for more information.

15.2. Chemical safety assessment

No information available.

Section 16: OTHER INFORMATION**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

H360FD - May damage fertility. May damage the unborn child

H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

H373 - May cause 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

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation
+	Sensitizers		

Revision date Aug-08-2024

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet