

UV LED Waterslide Inks

SAFETY INFORMATION SUMMARY | MSDS WORKING DRAFT

Safety information summary / MSDS working draft. Contains confirmed product information and supported safety notes. Finished-product hazard classification is incomplete. This is not a complete SDS and does not replace safety documentation required for supply or transport.

01 Product and supplier

Use: Professional printing of low-temperature waterslide decals. The printed ink is UV LED cured, and the decals are then transferred to articles for exterior decoration.

Use restriction: Not for surfaces in direct contact with food or beverages.

Scope: The uncured UV LED waterslide inks listed below, as supplied before addition of separately supplied hardener.

Supplier: Linkonink / Dongguan Lingheng New Materials Co., Ltd., China

Address: Tianbaoli Coatings Factory, No. 5 Wende Road, Xiaokeng Village, Liaobu Town, Dongguan, Guangdong, China

Business contact: Henry Tang | henry@linkonink.com | +86 134 1212 3095

Website: linkonink.com

Manufacturer emergency contact: Henry Tang | +86 134 1212 3095

Availability: Monday-Friday, 09:00-17:00 Beijing time (UTC+8).

02 Product range

Product name	Description
UV LED Waterslide Clear Varnish	Clear varnish
UV LED Waterslide Red Ink	Contains red pigment
UV LED Waterslide Black Ink	Contains black pigment
UV LED Waterslide White Ink	Contains white pigment
UV LED Waterslide High-Build Varnish	For thicker prints and raised effects
UV LED Waterslide Hot Stamping Primer	For hot stamping in decal production

This document covers known information for the product family. It does not establish identical compositions or hazard classifications for all variants.

03 Water miscibility and packaging

Water miscibility: Not miscible with water (manufacturer statement).

Packs: 5 kg/pail, 4 pails/carton; 1 kg/can, 10 cans/carton.

Composition and safety notes

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04 Known composition information

Ingredient / group		Identification and notes
Urethane acrylate		Resin component
Polyester acrylate		Resin component
2-Phenoxyethyl acrylate (PHEA)		CAS 48145-04-6 [1-2]
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (TPO)		CAS 75980-60-8; photoinitiator [3-4]
Additives		Formulation additives
Pigments		Present in coloured inks only

Ingredient groups are manufacturer-declared. PHEA and TPO names and CAS numbers were checked against published references. This is a summary of confirmed ingredients, not a complete formulation disclosure.

05 Separately supplied hardener

Hardener type: Epoxy-functional silane coupling agent. The manufacturer confirms that it is packaged separately and added before use. It is outside the as-supplied ink composition covered here and requires its own matching safety information. Follow the manufacturer's process instructions for the applicable products and addition rate.

06 Known ingredient hazards

PHEA: Published raw-material safety information identifies skin irritation (H315), serious eye irritation (H319), respiratory irritation (H335) and long-term aquatic toxicity (H411). [2]
TPO: EU reproductive toxicity category 1B: **may damage fertility; suspected of damaging the unborn child (H360Fd)**. Ingredient information also identifies skin sensitisation (H317) and long-term aquatic toxicity (H411). [3-4]

These are known ingredient hazards, not a finished-product GHS/CLP classification or label. Product assessment still requires actual raw-material data, concentrations and colour-specific formulation information.

07 Handling and equipment protection

Ventilate and control ink mist and splashes. Prevent skin/eye contact; use goggles, protective clothing and chemically compatible gloves. Select respiratory protection through an exposure assessment. Maintain UV shielding and interlocks; do not look into curing sources or expose skin to radiation. Provide exhaust and protection from hot surfaces in baking areas. [5-6]

First aid, storage and disposal

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08 First aid

Skin: Remove contaminated clothing; wash thoroughly with soap and water, not solvents. Seek medical advice for a rash or persistent discomfort.

Eyes: Rinse immediately and continuously with water, remove contact lenses if easy, and obtain medical advice.

Unwell after inhalation: Move to fresh air, rest and seek medical advice.

Ingestion: Rinse the mouth, do not induce vomiting, and contact a doctor or poison centre immediately. Give nothing by mouth to an unconscious person. [2,4-5,7]

09 Storage and hygiene

Recommended storage: 10-25°C. **Shelf life:** 24 months in unopened original packs under recommended conditions (manufacturer statement). Keep containers closed, away from light, heat and UV sources. Prevent contamination and unintended curing. Wash after handling; no eating, drinking or smoking in the work area. [5-6]

10 Spills, fire and disposal

Spill: Exclude unprotected personnel. Trained staff should collect spills with compatible inert absorbent. Keep out of drains, soil and water; protect collected material from light and heat and arrange authorised disposal. [5-6]

Fire: Evacuate, alert emergency services and avoid smoke. Firefighters need protective equipment, self-contained breathing apparatus and extinguishing media suited to the incident. [2,7]

Disposal: Keep uncured ink, wash waste and contaminated packaging out of drains. Use authorised disposal under local requirements. Curing does not automatically make waste suitable for ordinary disposal. [5-6]

11 Transport information

Transport classification: pending assessment.

12 Information basis

Product details are manufacturer-confirmed. Safety notes use published ingredient information and industry guidance, not tests on this finished ink. Other products' physical values and classifications have not been assigned to this ink. Numbering follows this summary, not the full 16-section SDS structure.

[1] PHEA identity reference; [2] Merck/Sigma-Aldrich - PHEA SDS

[3] INRS - TPO EU reproductive toxicity classification; [4] TCI - TPO

[5] EuPIA - Safe handling of UV/EB inks (2024)

[6] RadTech - Safety and handling of UV/EB curing materials (2010)

[7] Nazdar 849304 SDS (2023; format and general emergency reference)

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