

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

1 Identification

Product identifier

Product name: LVR Varnish 2

Article number: LVR Varnish 2

Application of the substance / the mixture: Printing inks, Restricted to professional users.

Details of the supplier of the safety data sheet

INKCUPS CORP.

310 ANDOVER ST.

DANVERS, MA 01923 - USA

978-646-8980

Information department: compliance@inkcups.com

Emergency telephone number: CHEMTREC 800-424-9300 24hr

2 Hazard(s) identification

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed.

Skin Corr. 1C; H314, Causes severe skin burns and eye damage.

Skin Sens. 1; H317, May cause an allergic skin reaction.

Eye Dam. 1; H318, Causes serious eye damage.

Repr. 1B; H360, May damage fertility or the unborn child.

STOT RE 2; H373, May cause 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



Signal word Danger

Hazard statements

Harmful if swallowed.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

May damage fertility or the unborn child.

May cause 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 vapor/mist.

Wash hands and exposed skin thoroughly after handling.

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

Contaminated work clothing should not be allowed out of the workplace.
 Wear face protection/protective gloves/protective clothing.
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 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.
 Immediately call a POISON CENTER/doctor.
 If skin irritation or rash occurs: Get medical advice/attention.
 Take off contaminated clothing and wash it before reuse.
 Avoid release to the environment.
 Dispose of contents/container in accordance with local/regional/national/international regulations.
Additional information:
 Not applicable.

3 Composition/information on ingredients

Chemical characterization: This product is a mixture.

Dangerous components:

86273-46-3	2-Propenoic acid, 2-[2-(ethenyloxy)ethoxy]ethyl ester Acute Tox. 4, H302; Skin Sens. 1, H317	25 - 40%
5117-12-4	4-(1-oxo-2-propenyl)-morpholine Acute Tox. 4, H302; Skin Sens. 1, H317; Eye Dam. 1, H318; STOT RE 2, H373	15 - 25%
48145-04-6	2-phenoxyethyl acrylate Skin Sens. 1A, H317; Repr. 2, H361	15 - 25%
2399-48-6	Tetrahydrofurfuryl acrylate 1, HHNOC071; Acute Tox. 4, H302; Skin Corr. 1C, H314; Skin Sens. 1B, H317; Eye Dam. 1, H318; Repr. 1B, H360	5 - 10%
84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate Skin Sens. 1B, H317	5 - 10%
13048-33-4	hexane-1,6-diol diacrylate Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319	3 - 5%
53879-54-2	Propylidynetrimethanol, propoxylated, esters with acrylic acid Skin Irrit. 2, H315; Eye Irrit. 2, H319	3 - 5%
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide Skin Sens. 1A, H317	< 1%

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

-

4 First-aid measures

Description of first aid measures

General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment. Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable.

Most important symptoms and effects, both acute and delayed

Sensitization: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Tissue-damaging effects: This product contains substances with skin corrosive properties.

Inhaled vapor or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Nitrogen oxides (NO_x)

Carbon oxides (CO / CO₂)

Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

- Avoid direct contact with spilled substances.
- Ensure adequate ventilation, especially in confined areas.
- Contaminated areas may be slippery.

Environmental precautions

- Avoid discharge to lakes, streams, sewers, etc.
- Keep unauthorized persons away from the spill.

Methods and material for containment and cleaning up

- Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
- Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

Reference to other sections

- See section 13 "Disposal considerations" on handling of waste.
- See section 8 "Exposure controls/personal protection" for protective measures.

7 Handling and storage

Precautions for safe handling

- Avoid direct contact with the product.
- Smoking, drinking and consumption of food is not allowed in the work area.
- See section 8 "Exposure controls/personal protection" for information on personal protection.

Conditions for safe storage, including any incompatibilities

- Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

- Keep only in original packaging.

Storage conditions

- Dry, cool and well ventilated 5 - 30°C
- Protect from sunlight.

Incompatible materials

- No specific requirements

Specific end use(s)

- This product should only be used for applications quoted in section 1.

8 Exposure controls/personal protection

Control parameters

- No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

Exposure controls

- Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

- Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

- There are no exposure scenarios implemented for this product.

Exposure limits

- Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

- The formation of vapors must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

eyewash and emergency showers are clearly marked. Ensure that eyewash stations and safety showers are located within easy reach.

Apply standard precautions during use of the product. Avoid inhalation of vapors.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Respiratory Equipment

Respiratory protection is not needed in the event of adequate ventilation.

Skin protection



Dedicated work clothing should be worn.

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.

Eye protection



In the likelihood of direct or incidental exposure, use face protection.



anti-splash safety goggles

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

Form:	Liquid
Color:	Clear, Yellowish
Odor:	Characteristic
Odor threshold:	Not determined.
pH-value:	Not relevant.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	> 100 °C (> 212 °F)
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density:	Not determined.
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not determined.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity

No data available.

Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

Possibility of hazardous reactions, including those associated with foreseeable emergencies

None known.

Conditions to avoid

Sunlight

Incompatible materials

No specific requirements

Hazardous decomposition products

Thermal decomposition may produce corrosive vapors.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>2000 mg/kg
Product/substance	hexane-1,6-diol diacrylate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>5000 mg/kg
Product/substance	hexane-1,6-diol diacrylate
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	3650 mg/kg

Harmful if swallowed.

Skin corrosion/irritation

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Result:	No adverse effect observed (Not irritating)
Product/substance	hexane-1,6-diol diacrylate
Result:	Adverse effect observed (Irritating)

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Result:	No adverse effect observed (Not irritating)
Product/substance	hexane-1,6-diol diacrylate
Result:	Adverse effect observed (Highly irritating)

Causes serious eye damage.

Respiratory sensitization

Based on available data, the classification criteria are not met.

Skin sensitization

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Result:	No adverse effect observed (not sensitizing)
Product/substance	hexane-1,6-diol diacrylate
Result:	Adverse effect observed (sensitizing)

May cause an allergic skin reaction.

Germ cell mutagenicity

Product/substance	Propylidynetrimethanol, propoxylated, esters with acrylic acid
Test method:	OECD 471
Species:	Bacteria
Conclusion:	No adverse effect observed

Based on available data, the classification criteria are not met.

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Product/substance Propylidyntrimethanol, propoxylated, esters with acrylic acid
 Species: Rat
 Test: NOAEL
 Result: ≥ 500 mg/kg bw/day

May damage fertility or the unborn child.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapor or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Other information

toluene has been classified by IARC as a group 3 carcinogen.

12 Ecological information

Toxicity

Product/substance hexane-1,6-diol diacrylate
 Species: Fish, *Oryzias latipes*
 Duration: 96 hours
 Test: LC50
 Result: 0.38 mg/L

Product/substance hexane-1,6-diol diacrylate
 Species: Crustacean, *Daphnia magna*
 Duration: 48 hours
 Test: EC50
 Result: 2.7 mg/L

Based on available data, the classification criteria are not met.

Persistence and degradability

Product/substance hexane-1,6-diol diacrylate
 Conclusion: Readily biodegradable

Bioaccumulative potential

Product/substance hexane-1,6-diol diacrylate
 LogKow: 2.81 @ 25C
 Conclusion: -

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

Reviewed on 05/01/2025

None known.

Packaging containing residues of the product must be disposed of similarly to the product.

UN3082

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-phenoxyethyl acrylate)

9

III

A

Not applicable.

5L

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

UN "Model Regulation":

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (2-PHENOXYETHYL ACRYLATE), 9, III

Additional Information

These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of DOT/IMDG/IATA provided the packaging's meet the general specifications for packaging: Part 178 (DOT) / 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA).

-

DOT / See § 172.101 Hazardous Materials Table for any information on special provisions, requirements, or warnings in connection with transport. See § 172.602, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

15 Regulatory information

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

U.S. Federal regulations

TSCA (the non-confidential portion)

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

4-(1-oxo-2-propenyl)-morpholine is listed

2-phenoxyethyl acrylate is listed

Tetrahydrofurfuryl acrylate is listed

hexane-1,6-diol diacrylate is listed

Propylidynetrimethanol, propoxylated, esters with acrylic acid is listed

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide is listed

Clean Air Act

None of the components are listed

EPCRA Section 302

None of the components are listed

EPCRA Section 304

None of the components are listed

EPCRA section 313

None of the components are listed

CERCLA

None of the components are listed

Hazardous chemical inventory reporting

This product is subject to Tier II reporting.

State regulations

California / Prop. 65

None of the components are listed

Massachusetts / Right To Know Act

None of the components are listed

New Jersey / Right To Know Act

None of the components are listed

New York / Right To Know Act

None of the components are listed

Pennsylvania / Right To Know Act

None of the components are listed

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

Restrictions for application

Restricted to professional users.

Demands for specific education

No specific requirements.

Additional information

Not applicable.

Chemical safety assessment

No

Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

16 Other information

Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

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.

H361, Suspected of damaging fertility or the unborn child.

H373, May cause damage to organs through prolonged or repeated exposure.

HHNOC071, Corrosive to the respiratory tract.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation

EINECS = European Inventory of Existing Commercial chemical Substances

EPCRA = Emergency Planning and Community Right-To-Know Act

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HCIS = Hazardous Chemical Information System

HNOC = Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

PBT = Persistent, Bioaccumulative and Toxic

RCRA = Resource Conservation and Recovery Act

Safety Data Sheet

Conforms to OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200 / revised 2024)

Printing date 05/01/2025

Version: 1.0

Reviewed on 05/01/2025

Product name: LVR Varnish 2

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SARA = Superfund Amendments and Reauthorization Act

SCL = A specific concentration limit.

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TSCA = The Toxic Substances Control Act

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en