Safety Data Sheet

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

Printing date 09/29/2025 Version: 1.0 Reviewed on 09/29/2025

1 Identification

Product identifier

Product name: HI-R ink, White

Article number: ixHIR-W
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
Skin Sens. 1; H317, May cause an allergic skin reaction.
Eye Dam. 1; H318, Causes serious eye damage.
Repr. 2; H361, Suspected of damaging 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
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of damaging 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.
Contaminated work clothing should not be allowed out of the workplace.
Wear face protection/protective gloves/protective clothing.

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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.
Get medical advice/attention if you feel unwell.
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:

5888-33-5	isobornyl acrylate Skin Sens. 1A, H317	25 - 40%
84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate Skin Sens. 1B, H317	10 - 15%
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	5 - 10%
48145-04-6	2-phenoxyethyl acrylate Skin Sens. 1A, H317; Repr. 2, H361	5 - 10%
84170-74-1	Neopentyl glycol propoxylate diacrylate Skin Sens. 1B, H317	5 - 10%
57472-68-1	Oxybis(methyl-2,1-ethanediyl) diacrylate Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318	3 - 5%
53879-54-2	Propylidynetrimethanol, propoxylated, esters with acrylic acid Skin Irrit. 2, H315; Eye Irrit. 2, H319	<1%
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).
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.

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Skin contact

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 salt 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

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

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.
The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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.

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.

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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

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

Specific end use(s)

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

8 Exposure controls/personal protection

Control parameters

titanium dioxide

Long term exposure limit (ACGIH TLV) (mg/m³): 10

Long term exposure limit (NIOSH REL) (mg/m³): Potential occupational carcinogen; (ultrafine particles) / 2.4 (fine) / 0.3 (ultrafine)

ethylbenzene

Short term exposure limit (STEL) (NIOSH REL) (ppm): 125

Long term exposure limit (OSHA Table Z-1) (mg/m³): 435

Long term exposure limit (OSHA Table Z-1) (ppm): 100

Long term exposure limit (ACGIH TLV) (ppm): 20

toluene

Short term exposure limit (STEL) (NIOSH REL) (ppm): 150

Long term exposure limit (ACGIH TLV) (ppm): 20

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

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

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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 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

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9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Liquid
Color:	White
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

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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11 Toxicological information

Information on toxicological effects

Acute toxicity:

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

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitization

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

Skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

STOT-single exposure

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

Long term effects

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

Other information

titanium dioxide has been classified by IARC as a group 2B carcinogen.
toluene has been classified by IARC as a group 3 carcinogen.
ethylbenzene has been classified by IARC as a group 2B carcinogen.

12 Ecological information

Toxicity

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

Persistence and degradability

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

Bioaccumulative potential

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

Mobility in soil

No data available.

Results of PBT and vPvB assessment

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

Other adverse effects

None known.

13 Disposal considerations

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

toluene is listed with EPA Hazardous Waste Number: U220

Specific labelling

Contaminated packing

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

14 Transport information

	UN / ID	UN Proper shipping name	Hazard class(es)	PG*	Env**	Other information
DOT	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (isobornyl acrylate)	Transport hazard class: 9 Label: 9 Classification code: M6 	III	No	Limited quantities: 5 L Tunnel restriction code: (-) See below for additional information.
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (isobornyl acrylate)	Transport hazard class: 9 Label: 9 Classification code: M6 	III	No	Limited quantities: 5 L EmS: F-A S-F See below for additional information.
IATA	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (isobornyl acrylate)	Transport hazard class: 9 Label: 9 Classification code: M6 	III	No	See below for additional information.

* Packing group

** Environmental hazards

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).

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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.

Special precautions for user

Not applicable

Transport in bulk according to IMO instruments

No data available.

15 Regulatory information

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

U.S. Federal regulations

TSCA (the non-confidential portion)

isobornyl acrylate is listed
titanium dioxide is listed
4-(1-oxo-2-propenyl)-morpholine is listed
2-phenoxyethyl acrylate is listed
Neopentyl glycol propoxylate diacrylate is listed
Oxybis(methyl-2,1-ethanediyl) diacrylate is listed
Propylidynetrimethanol, ethoxylated, esters with acrylic acid is listed
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide is listed
ethylbenzene is listed
toluene is listed

Clean Air Act

ethylbenzene is regulated as a hazardous air pollutant (HAPS)
toluene is regulated as a hazardous air pollutant (HAPS)

EPCRA Section 302

None of the components are listed

EPCRA Section 304

None of the components are listed

EPCRA section 313

ethylbenzene is listed
toluene is listed

CERCLA

ethylbenzene is regulated with a Reportable Quantity (RQ) of: 1000 pounds
toluene is regulated with a Reportable Quantity (RQ) of: 1000 pounds

Hazardous chemical inventory reporting

This product is subject to Tier II reporting.

State regulations

California / Prop. 65

titanium dioxide is known to cause: cancer

ethylbenzene is known to cause: Cancer
NSRL/MADL (µg/day): 54 (inhalation) 41 (oral)

toluene is known to cause: Developmental Toxicity

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NSRL/MADL (µg/day): 7000 (Level represents absorbed dose (rounded from 6,525 µg/day)

Massachusetts / Right To Know Act
titanium dioxide is listed
ethylbenzene is listed
toluene is listed

New Jersey / Right To Know Act
titanium dioxide is substance number: 1861

ethylbenzene / Substance number: 0851
ethylbenzene is on the Special Health Hazard Substance List

toluene / Substance number: 1866
toluene is on the Special Health Hazard Substance List

New York / Right To Know Act
titanium dioxide is listed
titanium dioxide is regulated with a Threshold Reporting Quantity (TRQ) of: 100 pounds

ethylbenzene is listed
ethylbenzene is regulated with a Reportable Quantity (RQ) of: 1000 pounds
ethylbenzene is regulated with a Threshold Reporting Quantity (TRQ) of: 0 pounds

toluene is listed
toluene is regulated with a Reportable Quantity (RQ) of: 1000 pounds
toluene is regulated with a Threshold Reporting Quantity (TRQ) of: 0 pounds

Pennsylvania / Right To Know Act
titanium dioxide is listed

ethylbenzene is listed
ethylbenzene is hazardous to the environment (E)

toluene is listed
toluene is hazardous to the environment (E)

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.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H361, Suspected of damaging fertility or the unborn child.

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

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
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.

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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