

SAFETY DATA SHEET

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

Product identifier

Product name: UVSF-2151G UV Ink

Product No:UVSF-2151G

Date Issued: October 12, 2016. **Revision** #001.

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

Identified uses: Solvent

Uses advised against: None known.

Details of the supplier of the safety data sheet

Manufacturer / Supplier:

Hilord Chemical Corporation.
70 Engineers Road
Hauppauge, New York 11788

Emergency telephone number:

Telephone office hours: 800-645-1022

E-mail: info@hilord.com

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

SECTION 2: Hazards identification

Hazard classification:

Health hazards

Acute toxicity (Oral)	Category 4
Acute toxicity (Dermal)	Category 4
Acute toxicity (Inhalation)	Category 4
Specific target organ toxicity - repeated exposure (Inhalation)	Category 2

OSHA Specified Hazards: not applicable

Warning label items including precautionary statement:

Pictogram:



Signal words: WARNING!

Hazard Statement(s):
H227: Combustible liquid.
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H318: Cause eye irritation.
H332: Harmful if inhaled.
H373: May cause damage to organs (Kidneys.) through prolonged or repeated exposure.

Precautionary statement:

Prevention:
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P270: Do not eat, drink or smoke when using this product.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P271: Use only outdoors or in a well-ventilated area.
P264: Wash hands thoroughly after handling.

Response:
P370 + 378: In case of fire: Use water spray, carbon dioxide, dry chemical or foam for extinction.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P363: Wash contaminated clothing before reuse.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314: Get medical advice/attention if you feel unwell.
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330: Rinse mouth.

Storage: P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise
classified (HNOC):

Peroxide former.

SECTION 3: Composition/information on ingredients

Substances / Mixtures

General information:

Substance

Chemical name	Concentration	Additional identification	Notes
2-butoxyethyl acetate	>90%	CAS-No.: 112-07-2	#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SECTION 4: First aid measures

Description of first aid measures

Inhalation: Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Skin contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Seek medical advice.

Most important symptoms and effects, both acute and delayed: Symptoms may be delayed.

Indication of any immediate medical attention and special treatment needed

Hazards: None known.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards: Combustible liquid and vapor. USE WATER WITH CAUTION. Material will float and may ignite on surface of water.

Extinguishing media

Suitable extinguishing media: Water spray. Dry chemical. Carbon Dioxide. Foam.

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture: Forms peroxides of unknown stability.

Advice for firefighters

Special fire fighting procedures: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment.

Environmental precautions: Avoid release to the environment.

Methods and material for containment and cleaning up: Eliminate sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

Precautions for safe handling: Keep away from heat, sparks and open flame. Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Do not allow to evaporate to near dryness. Do not distill to near dryness. Addition of water or appropriate reducing materials will lessen peroxide formation.

Conditions for safe storage, including any incompatibilities:

Keep away from food, drink and animal feeding stuffs. Keep container tightly closed and in a well-ventilated place. Store away from heat and light.

Specific end use(s):

Solvent-cleaner

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Country specific exposure limits have not been established or are not applicable unless listed below.

Chemical name	Type	Exposure Limit values	Source
2-butoxyethyl acetate; butylglycol acetate	TWA	20 ppm	US. ACGIH Threshold Limit Values (01 2010)
	TWA	25 ppm	Eastman Chemical Company occupational exposure limit: (01 2001)

Exposure controls

Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information:

Eye bath. Washing facilities. Safety shower.

Eye/face protection:

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection:

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Other:

No data available.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene measures: Observe good industrial hygiene practices.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical State:	Liquid
Form:	Liquid
Color:	Colorless
Odor:	Mild
Odor Threshold:	Not determined.
pH:	No data available.
Freezing Point:	-64.6 °C
Boiling Point:	No data available
Flash Point:	>145°F (Tag closed cup)
Evaporation Rate:	0.03
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)–:	No data available.
Flammability Limit - Lower (%)–:	No data available.
Vapor pressure:	No data available)
Vapor density (air=1):	No data available
Specific Gravity:	0.94 (20 °C)
Solubility(ies)	
Solubility in Water:	1 g/l
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.

Autoignition Temperature:	No data available
Decomposition Temperature:	No data available
Dynamic Viscosity:	2.48 cP
Kinematic viscosity:	No data available
Explosive properties:	No data available.
Oxidizing properties:	No data available.

Reactivity:	None known.
Chemical stability:	Stable
Possibility of hazardous reactions:	Forms peroxides of unknown stability.

SECTION 10: Stability and reactivity

Conditions to avoid:	Heat, sparks, flames.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon Dioxide. Carbon Monoxide.

Information on likely routes of exposure

Inhalation:	Harmful if inhaled.
Ingestion:	Harmful if swallowed.

SECTION 11: Toxicological information

Skin contact:	Harmful in contact with skin.
Eye contact:	None known.

Information on toxicological effects

Acute Toxicity

Oral

Product:	No data available.
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Specified substance(s)

2-butoxyethyl acetate; butylglycol acetate	Oral LD-50: (Rat, Male and Female): 1,880 mg/kg
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Dermal

Product:	No data available.
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Specified substance(s)

2-butoxyethyl acetate; butylglycol acetate	Dermal LD-50: (Rabbit): 1,500 mg/kg
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Inhalation

Product:	No data available.
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Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate

LC50 (Rat, 4 h): > 450 ppm 7.82 mg/l (highest concentration obtainable)
LC50 (Rat, 4 h): > 4.59 mg/l

Repeated dose toxicity

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate

No data available.

Skin corrosion/irritation:

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate

(Guinea Pig, 72 h): very slight

Serious eye damage/eye irritation:

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate

(Rabbit): Slight

Respiratory or skin sensitization:

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate

Skin Sensitization: (Guinea Pig) - non-sensitizing

Mutagenicity

In vitro

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate

No data available.

In vivo

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate

No data available.

Carcinogenicity

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate

No data available.

Reproductive toxicity

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
 butylglycol acetate

No data available.

Specific target organ toxicity - single exposure

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
 butylglycol acetate

No data available.

Specific target organ toxicity - repeated exposure

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
 butylglycol acetate

Inhalation: Kidney

Aspiration hazard

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
 butylglycol acetate

No data available.

Other adverse effects:

Can cause kidney damage.

SECTION 12: Ecological information

Toxicity

Acute toxicity

Fish

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
 butylglycol acetate

LC-50 (Rainbow Trout, 96 h): 20 - 40 mg/l

Aquatic invertebrates

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
 butylglycol acetate

EC-50 (daphnid, 48 h): 37 mg/l

Chronic Toxicity

Fish

Product:

No data available.

Specified substance(s)

2-butoxyethyl acetate;
 butylglycol acetate

No data available.

Aquatic invertebrates

Product: No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate No data available.

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate EC-50 (Algae (Pseudokirchneriella subcapitata), 72 h): 1,570 mg/l

Specified substance(s)

2-butoxyethyl
acetate; butylglycol EC-50 (Algae (Pseudokirchneriella subcapitata), 72 h): 1,570 mg/l

Persistence and degradability

Biodegradation

Product: No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate 88 % (28 d, Ready Biodegradability: Manometric Respirometry Test)

Persistence and degradability

Biodegradation

Product: No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate 88 % (28 d, Ready Biodegradability: Manometric Respirometry Test)

Biological Oxygen Demand:

Product No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate No data available.

Chemical Oxygen Demand:

Product No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate No data available.

BOD/COD ratio

Product No data available.

Specified substance(s)

2-butoxyethyl acetate;
butylglycol acetate No data available.

Bioaccumulative potential

Product: No data available.

Specified substance(s)

2-butoxyethyl acetate; No data available.
 butylglycol acetate

Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

2-butoxyethyl acetate; No data available.
 butylglycol acetate

Results of PBT and vPvB assessment:

No data available.

2-butoxyethyl acetate; No data available.
 butylglycol acetate

SECTION 13: Disposal considerations

Waste treatment methods

General information: No data available.

Disposal methods:

Dispose of waste and residues in accordance with local authority requirements. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

SECTION 14: Transport information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT

Class combustible liquid, Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities

Possible Shipping Description(s):

NA 1993 Combustible liquid, n.o.s. (2-butoxyethyl acetate) combustible liquid III

IMDG - International Maritime Dangerous Goods Code

Class not regulated

Possible Shipping Description(s): not regulated

IATA

Class not regulated
Possible Shipping Description(s):
Not regulated

SECTION 15: Regulatory information

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

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: controlled

WHMIS (Canada) Hazard Classification: B/3, D/1/B

SARA 311-312 Hazard Classification(s):

immediate (acute) health hazard
delayed (chronic) health hazard
fire hazard
reactive hazard

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List

GLYCOL ETHERS 100%

OSHA: hazardous

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.



Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 2*, Flammability - 2, Chemical Reactivity - 1

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Training information: No data available.

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.