

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/11/15 Revision date: 10/19/2020 Version: 1.1

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

1.1. Product identifier	
Product form	: Mixture
Name	: SI-KP7UV UV Visible Ink
Product code	: SI-KP7UV
Synonyms	: SI-KP7UV-Q, SI-KP7UV-T, SI-KP7UV-G, SI-KP7UV-P, SI-KP7UV-SP, SI-KP7UV-30, SI- KP7UV-55
1.2 Relevant identified uses of the substance or mixture and uses advised against	

Use of the substance/mixture

: Ink for printing processes

1.3. Details of the supplier of the safety data sheet

PANNIER CORPORATION 207 Sandusky Street Pittsburgh, PA 15212-5823 United States of America

phone: 412-323-4900 email: sales@pannier.com www.pannier.com

1.4. Emergency telephone number

24hr Emergency number

: infotrac 800-535-5053

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US) Flam. Liq. 2 H225 Eye Dam. 1 H318 STOT SE 3 H336

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)

	· · · · ·	
	GHS02 GHS07	
Signal word (GHS-US)	: Danger	
Hazard statements (GHS-US)	: H225 - Highly flammable liquid and vapor H318 - Causes serious eye damage H336 - May cause drowsiness or dizziness	
Precautionary statements (GHS-US)	 H336 - May cause drowsiness or dizziness P210 - Keep away from heat, open flames, sparks Nosmoking P233 - Keep container tightly closed P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous 	

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

waste

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
butanone	(CAS №) 78-93-3	40-100	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Diprotium oxide	(CAS No) 7732-18-5 .	<=5	Not classified
ethyl (S)-2-hydroxypropionate, ethyl L-lactate, ethyl-(S)-lactate	(CAS No) 687-47-8	<=5	Flam. Liq. 3, H226 Eye Dam. 1, H318 STOT SE 3, H335
Surfactants	Proprietary	<=5	Not classified

Full text of H-phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effect	ts, both acute and delayed
Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after eye contact	: Causes serious eye damage.

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

No additional information available

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.	
Unsuitable extinguishing media	: Do not use a heavy water stream.	
5.2. Special hazards arising from the substance or mixture		
Fire hazard	: Highly flammable liquid and vapor.	
Explosion hazard	: May form flammable/explosive vapor-air mixture.	
Reactivity	: The product is stable at normal handling and storage conditions.	
5.3. Advice for firefighters		
Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.	

ON 6: Accidental release meas	ures
Personal precautions, protective equ	ipment and emergency procedures
measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
For non-emergency personnel	
ncy procedures	: Evacuate unnecessary personnel.
For emergency responders	
re equipment	: Equip cleanup crew with proper protection. Avoid breathing fume, vapors.
ncy procedures	: Ventilate area.
Environmental precautions	
	Personal precautions, protective equi measures For non-emergency personnel acy procedures For emergency responders re equipment acy procedures

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.	
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid breathing fume, Vapors.	
Hygiene measures	: Wash Skin thoroughly after handling.	
7.2. Conditions for safe storage, including any incompatibilities		
Technical measures	Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof Flame proof, lighting, electrical equipment and ventilation equipment.	
Storage conditions	: Keep in fireproof place. Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat-ignition.	
Incompatible products	: Strong bases. Strong acids.	
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.	

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
SI-KP7UV UV Visible	
ACGIH	Not applicable
OSHA	Not applicable

butanone (78-93-3)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	300 ppm
ACGIH	Remark (ACGIH)	URT irr; CNS & PNS impair
OSHA	OSHA PEL (TWA) (mg/m³)	590 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	200 ppm

Diprotium oxide (7732-18-5 .)		
ACGIH	Not applicable	
OSHA	Not applicable	

ethyl (S)-2-hydroxypropionate, ethyl L-lactate, ethyl-(S)-lactate (687-47-8)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Appropriate engineering controls Personal protective equipment : Provide adequate general and local exhaust ventilation.

: Protective goggles. Gloves.

Hand protection

: Wear protective gloves.

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Eye protection	: Chemical goggles or safety glasses.

Eye protection Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information

: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	chemical properties
Physical state	: Liquid
Color	: Clear
Odor	: Slight; characteristic
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: ≥-139 °C
Freezing point	: No data available
Boiling point	: 79,6 - 154 °C
Flash point	: -9 °C
Auto-ignition temperature	: No data available
Decomposition temperature	No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 12,132 kPa
Relative vapor density at 20 °C	: 3,11
Relative density	: No data available
Specific gravity / density	: 0,9 - 1,1 g/cm ³
Solubility	 In water, material is partially soluble. Water: Solubility in water of component(s) of the mixture : butanone, ethyl methyl ketone: 28 g/100ml ethyl (S)-2-hydroxypropionate, ethyl L-lactate, ethyl-(S)-lactate: > 30 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 1,8 - 10 vol %
9.2. Other information	
VOC content	: 90 - 100 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Not classified

(Based on available data, the classification criteria are not met)

butanone (78-93-3)	
LD50 oral rat	2737 mg/kg (Rat; Equivalent or similar to OECD 423; Read-across; 2054 mg/kg; Rat; Equivalent or similar to OECD 423; Read-across; 2328 mg/kg; Rat)
LD50 dermal rabbit	6480 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; >10; Rabbit)
LC50 inhalation rat (mg/l)	34 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	11300 ppm/4h (Rat; Literature study)
ATE US (oral)	2737,000 mg/kg body weight
ATE US (dermal)	6480,000 mg/kg body weight
ATE US (gases)	11300,000 ppmV/4h
ATE US (vapors)	34,000 mg/l/4h
ATE US (dust, mist)	34,000 mg/l/4h

ethyl (S)-2-hydroxypropionate, ethyl L-lactat	e, ethyl-(S)-lactate (687-47-8)
LD50 oral rat	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; >2000 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit; Literature study)
Skin corrosion/irritation	: Not classified
	(Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified
	(Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified
	(Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified
	(Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified
	(Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Specific target organ toxicity (repeated	: Not classified
exposure)	(Based on available data, the classification criteria are not met)
. ,	
Aspiration hazard	: Not classified
Aspiration nazard	(Based on available data, the classification criteria are not met)
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met.
symptoms	
Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after eye contact	: Causes serious eye damage.

SECTION 12: Ecological information

12.1. Toxicity

butanone (78-93-3)	
LC50 fish 1	1690 mg/l (96 h; Lepomis macrochirus; Lethal)
EC50 Daphnia 1	308 mg/l (48 h; Daphnia magna; Locomotor effect)
LC50 fish 2	2990 mg/l (96 h; Pimephales promelas)
TLM fish 1	5600 mg/l (96 h; Gambusia affinis)
TLM fish 2	1690 mg/l (96 h; Lepomis macrochirus)

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butanone (78-93-3)	
TLM other aquatic organisms 1	> 1000 ppm (96 h)
Threshold limit algae 1	110 mg/l (168 h; Microcystis aeruginosa)
Threshold limit algae 2	4300 mg/l (192 h; Scenedesmus quadricauda)

ethyl (S)-2-hydroxypropionate, ethyl L-lactate, ethyl-(S)-lactate (687-47-8)		
LC50 fish 1	320 mg/l (96 h; Brachydanio rerio)	
LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h)	
EC50 Daphnia 1	683 mg/l (48 h; Daphnia magna; GLP)	
LC50 fish 2	100 - 1000 mg/l (96 h; Pisces)	
TLM fish 1	100 - 1000,96 h; Pisces	
TLM other aquatic organisms 1	100 - 1000,96 h	
Threshold limit other aquatic organisms 1	100 - 1000,96 h	
Threshold limit algae 1	320 mg/l (72 h; Selenastrum capricornutum)	
Threshold limit algae 2	3500 mg/l (72 h; Selenastrum capricornutum; Growth rate)	

12.2. Persistence and degradability

SI-KP7UV UV Visible	
Persistence and degradability	Not established.
butanone (78-93-3)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in soil. Biodegradable in soil in anaerobic condition.
Biochemical oxygen demand (BOD)	1,92 g O ₂ /g substance
Chemical oxygen demand (COD)	2,31 g O ₂ /g substance
ThOD	2,44 g O ₂ /g substance
BOD (% of ThOD)	> % ThOD (5 day(s)) > 0.5

Diprotium oxide (7732-18-5.)	
Persistence and degradability	Not established.

ethyl (S)-2-hydroxypropionate, ethyl L-lactate, ethyl-(S)-lactate (687-47-8)		
Persistence and degradability	Readily biodegradable in water. No straightforward conclusion can be drawn based upon the available numerical values.	
ThOD	1,35 g O ₂ /g substance	

12.3. Bio accumulative potential

SI-KP7UV UV Visible	
Bio accumulative potential	Not established.
butanone (78-93-3)	
Log Pow	0,3 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 40 °C)
Bio accumulative potential	Low bioaccumulation potential (Log Kow < 4).
Diprotium oxide (7732-18-5 .)	
Bio accumulative potential	Bioaccumulation: Not applicable.

ethyl (S)-2-hydroxypropionate, ethyl L-lactate, ethyl-(S)-lactate (687-47-8)	
Log Pow	0,31 (QSAR; 20 °C; 0.31; QSAR; 20 °C)
Bio accumulative potential	Low bioaccumulation potential (Log Kow < 4).

Mobility in soil 12.4.

0,024 N/m (20 °C)	
Slightly harmful to plants.	
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ethyl (S)-2-hydroxypropionate, ethyl L-lactate, ethyl-(S)-lactate (687-47-8)	
Surface tension	0,07 N/m (20 °C; 1 g/l)

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Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.
SECTION 13: Disposal considerations	3
3.1. Waste treatment methods	
Vaste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to a licensed waste center in accordance with local/regional/national/international regulations.
dditional information	: Handle empty containers with care because residual vapors are flammable.
cology - waste materials	: Avoid release to the environment.
ECTION 14: Transport information	
accordance with DOT	
	: UN1210 Printing ink, flammable CONTAINS butanone, ethyl methyl ketone(78-93-3) ; ethyl L- lactate, ethyl-(S)-lactate(687-47-8), 3, II
N-No.(DOT)	: UN1210
roper Shipping Name (DOT)	: Printing ink, flammable
	CONTAINS butanone, ethyl methyl ketone(78-93-3) ; ethyl L-lactate, ethyl-(S)-lactate(687-47-8)
	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
lazard labels (DOT)	: 3 - Flammable liquid
acking group (DOT)	: II - Medium Danger
OT Special Provisions (49 CFR 172.102)	 149 - When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in 173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons). IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal
OT Packaging Exceptions (49 CFR 173.xxx)	: 150
OT Packaging Non-Bulk (49 CFR 173.xxx)	: 173
OT Packaging Bulk (49 CFR 173.xxx)	: 242
DT Quantity Limitations Passenger aircraft/rail 9 CFR 173.27)	: 5L
OT Quantity Limitations Cargo aircraft only (49 FR 175.75)	: 60 L
OT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
dditional information	

No additional information available

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Transport by sea	
UN-No. (IMDG)	: 1210
Proper Shipping Name (IMDG)	: PRINTING INK
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger
Air transport	
Air transport UN-No.(IATA)	: 1210
•	: 1210 : Printing ink
UN-No.(IATA)	
UN-No.(IATA) Proper Shipping Name (IATA)	: Printing ink

SECTION 15: Regulatory information

15.1. US Federal regulations

butanone (78-93-3)	
Listed on the United States TSCA (Toxic Substan Not listed on the United States SARA Section 31	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb.
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Diprotium oxide (7732-18-5)	
Diprotium oxide (7732-18-5 .) Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory
	nces Control Act) inventory
	, ,

15.2. International regulations

CANADA

No additional information available

EU-Regulations No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not classified 15.2.2. National regulations 15.3. US State regulations

SECTION 16: Other information

Revision date Other information : 10/19/2020

: None.

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Full text of H-phrases:

Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects

NFPA health hazard	
NFPA fire hazard	
NFPA reactivity	

: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

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: 3 - Liquids and solids that can be ignited under almost all ambient conditions.

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 3 Serious Hazard
Physical	: 0 Minimal Hazard
Personal Protection	: C

SDS US (GHS HazCom 2012)

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