



DATE REVISED: July 17, 2018

## SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: VAN SON UV TKP PROCESS SERIES 2.2 KILO CANS

Product Codes: VS12010, VS12011, VS12012, VS12013

General Use: Printing inks

Product Description: A mixture of pigments in multifunctional acrylate vehicle.

MANUFACTURER: T&amp;K TOKA Co., Ltd.

ADDRESS: No.283-1, Chikumazawa, Miyoshi-machi, Irumagun Saitama 354-8577, Japan

GENERAL INFORMATION: Telephone 631-715-7000

EMERGENCY TELEPHONE NUMBERS: Telephone 631-715-7000 8:30-17:30

NORTH AMERICAN OFFICE: 888 VETERANS HWY, HAUPPAUGE, NY 11788

## 2. HAZARDS IDENTIFICATION

UN Hazard Classification:

HAZARD CLASS : Not Applicable

UN/NA NUMBER : Not Applicable

GUIDE NUMBER : 171

EU DSD\* Classification:

Xn; R52/53

GHS Classification 【EU CLP Classification\*\*】:

Physical

Flammable Liquid - Not classified

Health

Acute Toxicity (oral) - Not classified

Acute Toxicity (dermal) - Not classified

Acute Toxicity (inhalation) - Not classified

**Serious eye damage/eye irritation - Category 2****Skin Corrosion/Irritation - Category 2****Skin Sensitization - Not Classified**

Respiratory sensitizer - Not classified

Mutagenicity - Not classified

Carcinogenicity - Not classified

Reproductive Toxicity - Category 2

Target Organ Toxicity (following single exposure) - Not classified

Target Organ Toxicity (following repeated exposure) - Not classified

Environmental

Aquatic Toxicity (acute) - Category 3

Aquatic Toxicity (chronic) - Category 3

\*DSD(Dangerous Substances Directive) based on current EU (directives 67/548/EEC, and

\*\*Classified based on the EU CLP regulation (Regulation on Classification, Labelling and Packaging of substances and mixtures)[REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008].

GHS Label

Symbols

Pictogram code



Signal word

Warning

Hazard Statements	
Hazard Code	
	Causes skin irritation. May cause allergic skin reaction. Causes serious eye irritation. May cause damaging fertility or the unborn child.
Prevention Code	
	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

**Other Precautionary Statements**

Specific treatment (see PREVENTION on this sheet).  
 Take off contaminated clothing and wash before reuse.  
 Wash contaminated clothing before reuse.  
 Collect spillage.  
 IF ON SKIN: Wash with plenty of soap and water.  
 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.  
 If skin irritation occurs: Get medical advice/attention.  
 If eye irritation persists: Get medical advice/attention.  
 Store locked up.  
 Dispose of contents/container to Federal, State and local regulations.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances presenting a health or environmental hazard within the meaning of Directive 67/548/EEC, Regulation (EC) No 1272/2008 of The European Parliament and of The Council of 16 December 2008.

COMPOSITION	CAS#	CONTENT wt%	upper -EU DSD (Risk) Classification lower -EU CLP Classification
Photosensitive resin	Trade secret	10-20	- -
Acrylic ester monomer	Mixture	20-40	- -
Acrylic ester monomer B	131-17-9	0-1	Xn, N R: 22-51/53 Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 2 GHS07, GHS09, Wng H302, H410, H410
Photo initiator C (2-Methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one)	71868-10-5	0-5	
Photo initiator	Trade secret	1-10	Xn, N R: 22-51/53 Acute Tox. 4, Aquatic Chronic 2 GHS07, GHS09, Wng
Additives	Mixture	1-10	
Carbon black	1333-86-4	0-20	- -
Titanium dioxide	13463-67-7	0-55	- -
Pigments	Various	0-20	- -
Additives	Mixture	1-10	- -

(\*) For full text of Products R-phrases see section 15

**4. FIRST AID MEASURES**

**EYE CONTACT :** Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**SKIN CONTACT :** If feels itching or burning of the skin, remove contaminated clothing. Immediately wash skin thoroughly with mild soap and plenty of water. Get immediate medical attention. Wash contaminated clothing before reuse.

**INHALATION :** Remove person to fresh air. If respiratory irritation, headache, dizziness, nausea, vomiting, breathing difficulty or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, give artificial respiration.

**INGESTION :** If swallowed, do not induce vomiting unless directed by medical personnel. Get immediate medical attention.

#### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguish Media :** Use dry chemical powder, carbon dioxide, or foam to extinguish fire.

**Extinguishing media which must not be used :** Extinguishers with water.

**Special Fire Fighting Procedures :** Exposed firefighters must wear proper protective equipment and positive pressure self-contained breathing apparatus with full face mask. Move containers from fire area if it can be done without risk. Do not enter fire area without proper protection. Fight fire from safe distance/protected location. Water should be used to cool fire-exposed containers, structures and to protect personnel. Do not flush down sewer or other drainage systems.

**HAZARDOUS DECONPOSITION PRODUCTS :** Products of combustion are hazardous including carbon monoxide and Carbon dioxide.

#### 6. ACCIDENTAL RELEASE MEASURES

**GENERAL :** Avoid skin contact and breathing vapor. Consult an expert on the disposal of recovered material. Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. (Also see Section 8).

**LAND SPILL :** Vapor protective clothing should be worn for spills and leaks. Shut off ignition sources; no flares, smoking or flames in hazard area. Prevent additional discharge of product, if possible to do so without hazard. Small spills: Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills: Dike far ahead

**WATER SPILL :** Remove from surface by skimming or with suitable absorbents. Do not flush to sewer or waterways. Prevent release to the environment if possible.

#### 7. HANDLING AND STORAGE

##### Handling

Avoid contact with eyes. Avoid prolonged repeated skin contact and breathing mists/vapours. Keep container closed. Use in well-ventilated area away from all ignition sources. Use good personal hygiene practices.

Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.

Keep away from heat and flame. Keep operating temperatures below ignition temperatures at all times. Use nonsparking tools.

##### Storage

**SPECIAL SENSITIVITY :** Heat. Direct rays of the sun .

Risk of possibly rupturing container by fire, high heat sources, raising temperature.

Store in tightly closed containers in cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles. Ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. Store at ambient or lower temperature. Store out of direct sunlight. Protect against physical damage.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Exposure Limits

Substance	OSHA		ACGIH	
	TWA	STEL	TWA	STEL
Carbon black	3.5mg/m <sup>3</sup>	n/e	3.5mg/m <sup>3</sup>	n/e
Titanium dioxide	15mg/m <sup>3</sup>	n/e	10mg/m <sup>3</sup>	n/e

n/e—none established

OSHA Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200) :  
These substances are considered hazardous ingredients (List on "Table Z-1")

ACGIH : Carbon black TLV; 3.5mg/m<sup>3</sup> as TWA & A4 (not classifiable as a human carcinogen)[ACGIH2004]. Titanium Dioxide TLV; as TWA 10mg/m<sup>3</sup> A4 (not classifiable as a human carcinogen)[ACGIH2001].

#### Engineering Controls

VENTILATION : Local exhaust ventilation may be necessary to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Provide mechanical ventilation for confined spaces. Use explosion-proof ventilation equipment

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear chemical safety splash-proof goggles for eye protection and face shield. Avoid skin contact. Wear impervious gloves for skin protection. Use NIOSH approved respirators when necessary.

### 9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE : Paste	VAPOR PRESSURE : No Data Available
COLOR : Various colors	VAPOR DENSITY (AIR=1) : No Data Available
ODOR : Mild	MOLECULAR FORMULA : Mixture
FLASH POINT : >170°C/338°F	MOLECULAR WEIGHT : Mixture
BOILING POINT : Not Applicable	SPECIFIC GRAVITY : 1.1-1.5 at 25°C/77°F
MELTING POINT : Not Applicable	SOLUBILITY IN WATER : May Partly Soluble
AUTO IGNITION TEMPERATURE : No Data Available	

### 10. STABILITY AND REACTIVITY

The material is stable in normal use and stocking conditions. It can release carbon oxides and vapours that can be harmful to health if taken to hot temperatures or in case of fire.

Condition to avoid : Avoid open flames, welding arcs, or other high temperature sources which include thermal decomposition.

Incompatibles : Oxidizing agents, and strong Alkaline.

Hazardous Reactions/Decomposition Products : Reacts with strong oxidizing agents. Thermal decomposition products may include oxides of carbon and nitrogen, or sulfur.

### 11. TOXICOLOGICAL INFORMATION

#### Corrosive and Irritant Properties

Photoinitiator C	Oral LD50(rat) 1984 mg/kg
	Dermal LD(rabbit) > 2000 mg/kg
	Ames test : Negative
Acrylic ester monomer B	Oral LD50 (rat) 656 mg/kg
Acute Tox. 4	Dermal LD (rabbit) > 3800 mg/kg

#### GHS Information

Acrylic ester monomer B (Acute Tox. 4)	Acute Toxicity (oral) - Category 4
Photoinitiator C	Acute Tox. 4
	Acute Toxicity (oral) - Category 4

Evaluation of Carcinogenicity are not applicable by IARC, EPA, EU, and NTP.

### 12. ECOLOGICAL INFORMATION

#### Aquatic toxicity Information

Photoinitiator C	Brachydanio rerio (Fish) LC50 : 9 mg/L (OECD)
	Large Daphnia EC50 : 15.3 mg/L (OECD)
	A growth obstruction to the algae EC50 : 1.7 mg/L
	Residual property/Rapid degradability : The difficulty resolution, BOD 0% HPLC (28days), An average of 1.3%

Acrylic ester monomer B

Oryzias latipes 96h-LC50=0.44MG/L

#### GHS Information

Photoinitiator C

Aquatic Chronic 2

Aquatic Toxicity (chronic) -Category 2

Acrylic ester monomer B

Aquatic Acute 1

Aquatic Chronic 1

Aquatic Toxicity (acute) - Category 1

Aquatic Toxicity (chronic) - Category 1

**13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with Federal, State and local regulations.  
Empty containers must be handled with care due to product residue.

**14. TRANSPORT INFORMATION**

U.S. Department of Transportation (DOT)

Proper SHIPPING NAME : Not applicable

HAZARD CLASS : Not applicable

UN/NA NO : Not applicable

Packing Group : Not applicable

Label Codes : Not applicable

Labels Required : Not applicable

The following description is transport in accordance with ADR for road, RID for rail, IMDG for sea and ICAO for air transport.

ADR/RID/IMDG/ICAO/IATA Class : Not applicable

UN Number : Not applicable

Proper SHIPPING NAME : Not applicable

Label : Not applicable

Packing group: Not applicable

**15. REGULATORY INFORMATION**

(1). U.S. Federal Regulations

Toxic Substances Control Act (TSCA) information

All components of this product are included on the 8(b)TSCA Inventory list.

Superfund Amendments and Reauthorization Act (SARA) Title III Information

These products contains none of the substances subject to reporting requirements of SARA section 313 (40 CFR 372)

Component	CAS Number	Maximum %
-	-	-

National Fire Protection Association (NFPA) Ratings : This information is intended solely for the use of individuals trained in the NFPA system.

	Health : 1
	Flammability : 1
	Reactivity : 1

(2). EU Regulations

European Inventory of Existing Chemicals (EINECS) : All of the components of this product are included on EINECS.

The following information is based on current EU (directives 67/548/EEC - 28th update [2001/59/EC], 1999/45/EC and 2001/58/EC).

EU Classification

Designation according to EC guidelines in label :

[EU Classification] Xi; Xn, R: 52/53 S: 7-9-16-24/25-26-28-29-33-36/37-61-62

Code letter and hazard designation of product : Xi (Irritant) Xn (Harmful)

Symbol



Risk (R) Phrases: R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety (S) Phrases :

- S7 Keep container tightly closed.
- S9 Keep container in a well-ventilated place.
- S16 Keep away from sources of ignition-No smoking.
- S24/25 Avoid contact with eyes and skin.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S28 After contact with skin, wash immediately with plenty of water and seek medical advice.
- S29 Do not empty into drains.
- S36/37 Wear suitable protective clothing and gloves.
- S61 Avoid release to the environment. Refer to special instructions/Safety data sheet
- S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

Contains : Photo Initiator C

Follow all regulations in your country.

<b>16. OTHER INFORMATION</b>
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Revision Indicator : 04

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