

SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information



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Information Telephone: (412) 323-4900

INFOTRAC: (800) 535-5053

Product Name: T-3584-01

Product Use: Ink

Not recommended for: Consumer use

Section 2 - Hazards Identification

GHS Ratings

Skin sensitizer 1 Skin sensitizer

GHS Hazards

H317 May cause an allergic skin reaction.

GHS Precautions

P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/face protection
P321 Specific treatment (see supplemental first aid instruction on this label)
P363 Wash contaminated clothing before reuse
P302+P352 IF ON SKIN: wash with plenty of water.
P333+P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Signal Word: **Warning**



Acute Toxicity

N/A

Conditions Aggravated

N/A

Chronic Effects

N/A

Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Titanium (IV) dioxide	13463-67-7	5.00% - 10.00%

Section 4 - First Aid Measures

INHALATION - Move affected person to fresh air, rest in a half upright position, and loosen clothing. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Seek medical advice after significant exposure.

EYE CONTACT - Flush with large amounts of water for at least 15 minutes. Lift eyelids occasionally. Get prompt medical attention.

SKIN - Wash thoroughly with soap and water immediately. Remove all contaminated clothing immediately. Seek medical advice if irritation persists.

INGESTION - Seek medical advice. The decision to induce vomiting or not must be made by a physician after careful consideration of all materials ingested. Risk of aspiration into lungs.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Carbon Dioxide---Dry Chemical---Foam---Water Fog

Use water for cooling material stored in vicinity of fire.

Explosion Hazards

Vapors are heavier than air and may travel along the ground to an ignition source some distance from material handling point. Ignition sources include pilot lights, smoking, heaters, electric motors, sparks from electrical switches and static discharges.

CAUTION: Never use cutting torch on empty containers! Residual solvent vapor in empty container may explode. Application to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain Medical Attention.

Hazardous Combustion Products

N/A

Recommended Fire Equipment

Use self-contained breathing apparatus with a full-face piece operated in a pressure-demand or other positive pressure mode. Wear protective clothing.

Section 6 - Accidental Release Measures

Non-emergency personnel: Evacuate and isolate the area and prevent access. Remove ignition sources. No flares, smoking or flames in hazard area. Notify management. Avoid breathing vapor or mist and put on protective equipment. Control source of the leak. Ventilate.

Emergency responders: See section 8 for any specialized clothing recommendations. Also reference the information for non-emergency personnel

Environmental precautions: Prevent further leakage or spillage if possible. Do not allow the material to spread to drains, sewers, water supplies, or soil. Contact APV (**330-773-8911**) for assistance and advice.

Small Spill: Stop leak if possible and move containers from the spill area. Water soluble: dilute with water and mop up. Water Insoluble: Cover spill area with a suitable absorbent inert material (Kitty Litter, Oil-Dri, etc.) and dispose of in an appropriate metal waste container. Dispose of material through a licensed waste disposal contractor.

Large Spill: Stop leak if possible and move containers from the spill area. Approach release from upwind. Contain spillage and with non-combustible absorbent material and place in appropriate disposal container according to local regulations. Dispose of material through a licensed waste disposal contractor. Report spill to appropriate governing agencies if applicable.

APV requires that CHEMTREC be immediately notified (**800-424-9300**) when this product is unintentionally released from its container during its course of distribution, regardless of the amount released. Distribution includes transportation, storage incidental to transportation, loading and unloading. Such notification must be immediate and made by the person have knowledge of the release.

Section 7 - Handling and Storage

Precautions for Safe Handling

Keep away from food, drink and heat. Keep away from sources of ignition. No smoking. Do not breathe vapor. Avoid contact with skin and eyes. Never use pressure to empty. Take precautionary measures against static discharges.

Storage temperature-

Minimum: do not freeze
Maximum: 40°C (104°F)

Storage Period- See technical data sheet.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Titanium (IV) dioxide 13463-67-7	15 mg/m ³ TWA (total dust)	10 mg/m ³ TWA	N/A

Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other controls to keep air containment concentration below current applicable OSHA permissible exposure limit or ACGIH TLV limit, and volatiles below lower explosive limit. Heavy solvent vapors should be removed from the lower levels of area, and all ignition sources (non-explosion proof equipment) should be eliminated if flammable mixtures will be encountered. Remove decomposition products formed during welding or flame cutting of surfaces coated with this product. For baking finishes - vent vapors emitted on heating.

Environmental Controls: Emissions should comply with environmental protection legislation.

Individual Protection Measures:

Hygiene measures- Wash hands, forearms, etc. after handling chemical products, before eating, smoking, and using the lavatory, and the end of the work period. Use appropriate techniques when removing potentially contaminated clothing and wash before reusing. Know the locations of eyewash and safety showers.

Respiratory Protection- Provide adequate ventilation to keep exposure below permissible limits. If a risk assessment deems necessary, operator is to use a properly fitted, air purifying or supplied air respirator. Respirator selection must be based on known/ anticipated exposure levels, the hazards of the product, and the safe working limits of the respirator.

Skin and Body Protection- Wear chemical resistant gloves (nitrile) and paint suits when necessary, based on risk assessment. The most suitable glove must be chosen in consultation with the gloves supplier who can inform about the breakthrough time of the glove material. PPE for the body should be selected based on the risks of the task being

performed and approved by a specialist. Appropriate footwear should also be approved.

Eye/Face Protection- Wear approved chemical safety goggles where exposure to vapor or contact with eyes is possible. Eye wash stations should also be made available. If inhalation hazard exists, a risk assessment will determine if a full face respirator may be required

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties:

LEL/UEL: 13%	Autoignition Temperature: 371°C
Evaporation Rate (nBuAc=1): Not determined	Vapor Pressure: 2.5 kPa
Vapor Density: 0.8	Freezing Point: Not determined
Partition coefficient: Not determined	Viscosity: Not determined
pH: 6.0-8.0	% Weight Solids 33.02
% Volume Solids 23.80	VOC Wt/Gal (wet) 0.14
U.S. VOC Wt/Gal (wet) 0.14	Specific Gravity (SG) 1.159
Odor: None	Odor Threshold: Not determined
Color: Orange	Boiling Point: 100°C
Flash Point: 212°F, 100°C	

Section 10 - Stability and Reactivity

Stability and reactivity profile

This material is considered stable
Hazardous polymerization will not occur.

The following materials should be avoided in contact with the mixture

Strong acids
Oxidizing agents
Reducing agents

Hazardous decomposition products

Titanium/titanium oxides
Carbon oxides

Section 11 - Toxicological Information

Mixture Toxicity

Component Toxicity

LC₅₀ and LD₅₀ toxicity for this product are merely estimates and have yet to be determined. For individual component ecotoxicity, please refer to Section 11.

Possible Routes of Entry

Inhalation Eye Contact Ingestion

Potential Target Organs

Respiratory System

Effects of Overexposure

The following components are possible carcinogens

***Materials labeled a carcinogen in dust form are supplied in solution, thus eliminating the hazard.**

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
13463-67-7	Titanium (IV) dioxide	5 to 10%	Titanium (IV) dioxide: (*dust) NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed

Section 12 - Ecological Information

Mixture Ecotoxicity

Toxicity- Do not release into environment. May cause long term adverse effects.

Persistence and degradability- N/A

Bioaccumulative potential- N/A

Mobility in Soil- N/A

Component Ecotoxicity

Section 13 - Disposal Considerations

Dispose of in accordance with federal, state and local regulations. Controlled incineration is recommended for disposal of unused product. Prevent contamination of soil, drains and surface waters. Dispose of large containers to a licensed reconditioner. Dispose of small containers in compliance with local regulations.

Section 14 - Transport Information

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
ALL	NOT REGULATED FOR TRANSPORT			

Section 15 - Regulatory Information

The following chemicals are listed in California Title 8 CCR Sections as Hazardous Substances 14807-96-6 Talc

The following chemicals are listed in California Title 8 CCR Sections 5200-5220 as Carcinogens.

- None

The following chemicals are listed in California Title 8 CCR Section 5203 as Carcinogens

- None

The following chemicals are listed in California Title 8 CCR Section 5209 as Carcinogens.

- None

The following chemicals are listed in the EU-Substances of Very High Concern (2008/67/ED) (SVHC):

- None

The following chemicals are listed in the EU-Restriction of the use of certain Hazardous Substances (2011/65/EU) (RoHS):

- None

The following chemicals are included in the Global Automotive Declarable Substance List (GADSL)

- None

The following substances are required for notification by the Japanese Enforcement Order of the Industrial Safety and Health Law (ISHL):

13463-67-7 Titanium (IV) dioxide

The following chemicals are listed on the Massachusetts Right-to-Know Hazardous Substances List.

56-81-5 1, 2, 3-Propanetriol
13463-67-7 Titanium (IV) dioxide
14807-96-6 Talc

The following chemicals are listed on the New Jersey Right-to-Know Hazardous Substances List.

57-55-6 Propylene Glycol
56-81-5 1, 2, 3-Propanetriol
13463-67-7 Titanium (IV) dioxide
14807-96-6 Talc

The following chemicals are listed on the Pennsylvania Right-to-Know Hazardous Substances List.

57-55-6 Propylene Glycol
56-81-5 1, 2, 3-Propanetriol
13463-67-7 Titanium (IV) dioxide
14807-96-6 Talc

The following chemicals are listed by the State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

13463-67-7 Titanium (IV) dioxide 5 to 10 % Carcinogen

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) requires certain facilities manufacturing, processing, or otherwise using listed toxic chemicals to report their environmental releases of such chemicals annually. The following chemicals are listed:

- None

The following chemicals are listed in EPCRA (SARA) Section 313: Persistent, Bioaccumulative, and Toxic Chemicals (PBT)

- None

The following chemicals are listed under EPCRA (SARA) Section 313: Toxic Release Inventory (TRI)

- None

Under Section 12(b) of the Toxic Substances Control Act (TSCA), exporters may need to notify the U.S. Environmental Protection Agency if they export or intend to export a product containing a chemical substance that is present on this list. The following substances are contained within this material:

- None

The following chemicals are listed as a *Hazardous Air Pollutant* under listed under the U.S. CAA (Clean Air Act)

- None

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Canadian Domestic Substances List (DSL)	Yes
Canada	Canadian Non-Domestic Substances List (NSDL)	No
China	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Europe	REACH Registered or Pre-Registered Substances and Intermediates	Yes
Japan	Japanese Inventory of Existing and New Chemical Substances (ENCS)	No
Japan	Japan Inventory of Industrial Safety and Health Law Substances (ISHL)	No
Korea	Korean Existing Chemical Inventory (KECI)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes

EU Risk Phrases

Not Available

Safety Phrase

Not Available

Section 16 - Other Information

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

Hazardous Material Information System (HMIS)

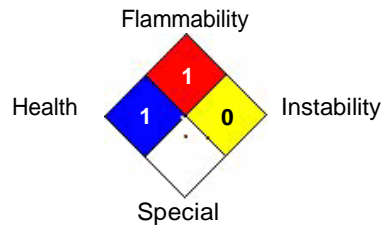
HEALTH	*	1
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		E

HMIS & NFPA Hazard Rating

Legend

- * = Chronic Health Hazard
- 0 = INSIGNIFICANT
- 1 = SLIGHT
- 2 = MODERATE
- 3 = HIGH

National Fire Protection Association (NFPA)



The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Date revised: 2018-10-01
Date Prepared: 10/1/2018

Revision No: 5
Reviewer ID: apalmer