

### SECTION 1 Chemical Product And Company Identification

**Product Code :** Ti4  
**Commodity Name :** Ti4 Titanium Shield Coating  
**Company Identification :** SUPAHADO SDN.BHD.  
**For Information ,Call :** TEL : +604 827 6781  
 496-g . Jalan Ayer Itam , 11400 Penang . Malaysia

Product Use : For industrial use only,not intended for use as a medical device or drug.

### SECTION 2 Ingredients

Ingredient name :	% by Wt	IPA [Flammable Liquid]	10 - 90%
Alkoxyisilane Oligomer (Trade Secret)	5 - 52 %	Nano TiO2 Catalyst	0.1 - 10 %
Alkoxyisiloxane Compound (Trade Secret)	5 - 45 %	Tetraethyl Orthosilicate	0.1 - 10 %
Xylene [Flammable Liquid]	10 - 90 %	Metal-chelate compound (Trade Secret)	1 - 10 %
Ethanol [Flammable Liquid]	10 - 90 %	Polymer Wetting Agent	0.1 - 5 %
Methanol [Flammable Liquid]	1 - 8 %		

### SECTION 3 Hazards Identification

**Hazard category :** Flammable liquid (Category 3). Acute toxicity, inhalation (Category 3).  
 Eye irritation (Category 2) :



**Signal word :** Danger  
**Hazard warning statements :** Flammable liquid and vapor. Cause serious eye irritation. Toxic if inhaled.  
 Avoid breathing dust / fume / gas / mist / vapor / spray.  
**Precautionary statements :** IF IN EYES : Rinse cautiously with water for several minutes. Remove

contact lenses , if present and easy to do. Continue rinsing Call the doctor/physician.  
 INHALATION : Vapors may cause irritation of the respiratory system.  
 Signs/symptoms may include cough, sneezing , nasal , discharge , headache , hoarseness and nose throat pain.  
 SKIN CONTACT : Contact with the skin during product use is not expected to result in significant irritation.  
 EYE CONTACT : Contact with the eyes during product use is not expected to result in significant irritation.

### SECTION 4 First Aid Measures

**Eyes :** Rinse immediately with plenty of water for at least 15 minutes. In cause of eye irritation , seek medical attention.

**Skin :** In cause of contact with skin wash off immediately with soap and water.

**Ingestion :** Seek immediate medical attention.

**Inhalation :** Remove the casualty into fresh air and keep him calm. Ensure supply of fresh air. Take medical treatment.

**Notes to Physician :** Show this safety data sheet to the doctor in attendance.

### SECTION 5 First Fighting Measures

**General Information :** Approved pressure demand breathing apparatus and protective clothing should be used for all fires.

**Extinguishing Media :** Foam, Carbon dioxide (CO<sub>2</sub>) , Dry powder.

**Exposure hazards :** Vapors form explosive mixtures with air.  
Vapors may travel considerable distance to source of ignition and flash back.

**Special protection equipment for firefighters :** Wear full protective clothing.Wear self-contained breathing apparatus.

**Hazardous decomposition products :** Hazardous combustion products may include intense heat , dense black smoke , carbon monoxide , carbon dioxide.

### SECTION 6 Accidental Release Measures

**Step to be taken in case material is released or spilled:** Shut off all ignition sources.  
Contain the spill or leak.  
Scrape up with rag and place in container.

### SECTION 7 Handly And Storage

**Handling :** Handle and open container with care. Avoid dust formation and ignition sources. Ensure good local exhaust ventilation. Avoid breathing vapors.

**Storage :** Keep in a cool and dry and well-ventilated place. Store in the original container securely closed. Use with adequate ventilation.  
Avoid contact with eyes and skin.  
Avoid contact with water or moisture.  
Static electricity may accumulate and cause a fire hazard.  
Keep out of reach of children.

----- **Information about the emptied container** -----

Do not re-use this container.  
This container will be very hazardous when emptied.  
Residues will be explosive or flammable.  
Keep away from heat , sparks and flame.  
Do not puncture or cut this container , and do not weld on or near this container.  
container.

### SECTION 8 Exposure Controls , Personal Protection

**Exposure guidelines :** ACGIH TLV - TWA : 250ppm ; STEL 300ppm(SKIN),  
OSHA PEL : 8H TWA 250ppm [ Methanol ; decomposed product ]

**Technical measures /**

**Precautions :** No special precautions required.

**Respiratory protection :** Effective dust mask

**Hand protection :** Protective gloves

**Eye protection :** Suitable goggles of face protection

**Skin and body protection :** Working clothes , Closed footwear

**Other protective clothing or equipment :** Safety shower and eyewash equipment  
Keep away from heat , sparks and flame.

Avoid prolonged breathing vapor.

**Work/hygienic practices :** Avoid contact with eyes and skin.

Wash hands and gargle after handling.

**SECTION 9 Physical And Chemical Properties**

**Physical State :** Liquid  
**Color :** Clear , Colorless liquid  
**Odor :** Slight faint odor  
**Melting point :** Not applicable  
**Boiling point :** Not applicable  
**Flash point :** -7.3°C(Closed cup)  
**Ignition temperature :** Not applicable  
**Specific gravity :** 0.95~0.98  
**Water solubility 20°C :** Not applicable  
**Vapor pressure 20°C :** 81-91mmHg  
**Partition coefficient**  
**Log Pow 20 - 25°C:** Not applicable  
**Density :** 1.6 g / cm<sup>3</sup>

**SECTION 10 Stability And Reactivity**

**Stability :** Stable  
**Condition to avoid :** Strong Base , Acid , Water  
**Materials to avoid :** Strong Base , Acid , Water  
**Hazardous decomposition or by-products :** Methanol , Ethanol , Butyl alcohol (Easy to inflame).  
**Hazardous Polymerization :** Hazardous polymerization will not occur.

**SECTION 11 Toxicological Information**

**Acute toxicity (LD50) :** LD50 (Oral / Big mouse) : 18-20 ml / kg  
LD50(eat / Big mouse) : 5,525 mg / kg (Decomposition : Methanol)  
LD50(Oral / Rat) : 71000ppm / 4hr (Decomposition : Methanol)

**SECTION 12 Ecological Information**

No information is available.

**SECTION 13 Disposal Considerations**

**Waste from residues / un-used products :** Can be burned in chemical incinerator equipped with afterburner and scrubber but exert extra care in igniting as this product is very flammable.  
Do not dispose of the/emptied container unless the contents have been completely removed and container has been flushed with a clean neutral solvent and then dried up.  
Do not dispose the emptied container unlawfully.  
Observe all federal , state , and local laws.  
**Contaminated packaging :** Dispose of as unused product.

**SECTION 14 Transport Information**

**UN number :** UN 1993  
**Transport hazard class :** Flammable Liquids / Class 3  
**Packaging group :** II  
**Proper shipping name :** Flammable Liquids , N.O.S  
**Technical shipping name :** Organo - Siloxane  
**Marine pollutant :** None

**SECTION 15 Regulatory Information**

Data not available.

**SECTION 16 Additional Information****Prepared by :**

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**TEL** +604 827 6781

The Safety data Sheet is Prepared based on a limited source of our company's data and available references. This product should be Stored , handled and used in accordance With good industrial hygiene practices and in conformity with any legal regulation. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It Should not therefore be Construed as guaranteeing suaranteeing specific properties.

