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Product Code: 07178TWU  
Product Name: TAN 686A, 33446 WATER REDUCIBLE, MIL-DTL-64159, TYPE II, PART A

Hentzen Coatings, Inc., 6937 W. Mill Road, Milwaukee, WI 53218-1225

Chemtrec 24-hour Emergency Phone: 800-424-9300

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

(See top of page)

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

This product contains one or more reported carcinogens or suspected carcinogens which are noted below and in Section 11.

Component/Exposure Limits	CAS#	% by Wt.
TITANIUM DIOXIDE	13463-67-7	10-20%
ACGIH TLV/TWA - 10 MG/M3		
OSHA PEL - 10 MG/M3		
OTHER INFORMATION: IARC has listed TiO2 as a Group 2B, possibly carcinogenic to humans. See Section 11.		
UREA-FORMALDEHYDE POLYMER	9011-05-6	9.40
ACGIH TLV/TWA - 3 MG/M3 (RESPIRABLE ACGIH-TWA)		
OSHA PEL - 15 MG/M3 (TOTAL PARTICULATE)		
OTHER INFORMATION:		
10 MG/M3 (INHALABLE ACGIH-TWA)		
5.0 MG/M3 (RESPIRABLE FRACTION)		
YELLOW IRON OXIDE PIGMENT	51274-00-1	0-10%
ACGIH TLV/TWA - 5 MG/M3		
OSHA PEL - 10 PPM		
OTHER INFORMATION:		
Exposure limits are for Iron Oxide fume.		
N-METHYL-2-PYRROLIDINONE	872-50-4	3.32
ACGIH TLV/TWA - 100 PPM (MFR's limit)		
OSHA PEL - Not Established		

**3. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW:**

Harmful if inhaled. May cause the following effects:  
Nose, throat and respiratory tract irritation. Allergic respiratory reaction.  
May cause lung damage. Eye and skin irritation. Allergic skin reaction.

**EYE CONTACT:**

Can cause irritation.

**SKIN CONTACT:**

Can cause irritation. May cause defatting of the skin.

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Prolonged or repeated skin contact may cause dermatitis.

**PRIMARY ROUTES OF ENTRY:**

Dermal and inhalation.

**INGESTION:**

If swallowed, consult a physician immediately.

**INHALATION:**

Prolonged inhalation may cause headache, nausea. Mists can irritate respiratory passages.

**CHRONIC INFORMATION:**

See Section 11.

**CARCINOGENICITY:**

See Section 11.

**MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:**

Asthma and other respiratory ailments; chemical sensitization.

**4. FIRST AID MEASURES**

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**EYE CONTACT:**

Flush immediately with large amounts of running water for at least 15 minutes while lifting eyelids. Take to a physician for medical treatment.

**SKIN CONTACT:**

Wash affected areas with soap and water. Remove contaminated clothing and wash before reuse. Consult a physician if irritation develops or persists.

**INGESTION:**

If swallowed, CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

**INHALATION:**

Remove from exposure. Restore breathing. Keep warm and quiet. Notify a physician.

**5. FIRE FIGHTING MEASURES**

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**FIRE AND EXPLOSION PROPERTIES:****FLASH POINT (deg. F):**

&gt;201

**METHOD:**

Tag Closed Cup

**FLAMMABLE LIMITS % :**

Lower limit: 1.3

Upper limit: 9.5

**AUTOIGNITION TEMPERATURE:**

N/A

**EXTINGUISHING MEDIA:**

Alcohol foam, water fog, carbon dioxide. Foam supplier should be consulted regarding foam type and delivery rates.

**FIREFIGHTING PROCEDURES AND EQUIPMENT:**

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flames. Closed container may explode when exposed to extreme heat. Do not apply to hot surfaces. Never use welding or cutting torch on or near product container (even empty) because product (even residue) can ignite explosively. Full protective equipment including self-contained breathing apparatus should be worn.

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**6. ACCIDENTAL RELEASE MEASURES**

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**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED :**

Evacuate all non-essential personnel and remove all sources of ignition (flames, hot surfaces, electrical, static and frictional sparks). Ventilate area. Equip clean-up crew with appropriate protective equipment. Avoid breathing vapors. Avoid skin contact. Prevent entry into drains, sewers and waterways. Notify appropriate authorities if necessary. Contain and remove with inert absorbent and nonsparking tools.

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**7. HANDLING AND STORAGE**

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**HANDLING:**

Use only with adequate ventilation. Avoid prolonged breathing of vapors. Wear an appropriate, properly fitted

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respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates that vapor/mist levels are below applicable exposure limits. Follow respirator manufacturer's directions for use. Use grounding and bonding connection when transferring material to prevent static discharge, fire or explosion. Avoid free fall of liquid in excess of a few inches. Use sparkproof tools and explosion proof equipment.

**STORAGE:**

Do not store above 120 F or below 32 F. Store large quantities in buildings designed to comply with OSHA's 29 CFR 1910.106. Keep away from heat, sparks and open flame.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**ENGINEERING CONTROLS:**

Provide general dilution or local exhaust ventilation in volume and pattern to keep the air contaminant concentration below current applicable OSHA safety and health requirements in the mixing, application and curing areas; and to remove decomposition products during welding and flame cutting on surfaces coated with this product.

**RESPIRATORY PROTECTION:**

When spray applied and when used in limited ventilation areas, wear a NIOSH/MSHA approved organic vapor/particulate respirator designed to remove a combination of particulate, gas and vapor. When used in confined areas or poorly ventilated areas, use a NIOSH/MSHA approved air line type respirator or hood. During sanding or grinding operations, use a NIOSH approved particulate respirator to remove solid airborne particles of sanding dust. Use NIOSH approved respirators when flame cutting, welding or hazing material coated with this product. Observe OSHA regulations for respirator use (29 CFR 1910.134). Air monitoring of the workplace may be required to determine appropriate respirator selection.

**EYE PROTECTION:**

Use safety eyewear with splash guards or side shields.

**SKIN PROTECTION:**

It is good industrial hygiene practice to minimize skin contact. Chemical resistant gloves are required for prolonged or repeated contact. An apron may be appropriate

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to protect against skin contact. Prevent prolonged skin contact with contaminated clothing. Wash contaminated clothing before reuse.

**OTHER PROTECTIVE EQUIPMENT AND GUIDLINES:**

Safety showers and eye wash stations should be available.  
Educate and train employees in the safe use of this product.

**9. PHYSICAL AND CHEMICAL PROPERTIES****PHYSICAL STATE:**

Liquid.

**APPEARANCE:**

Opaque.

**ODOR:**

Slight Ammonia Odor.

**VOC (LB/GL) :**

1.06 lb/gl

**VOC (grams/liter) :**

127 g/l

**WEIGHT PER GALLON:**

10.452 lb/gl

**SPECIFIC GRAVITY:**

1.2552

**%EXEMPT SOLVENT by WEIGHT:**

48.458

**%EXEMPT SOLVENT by VOLUME:**

60.93

**BOILING POINT (deg. F) :**

390

**WATER SOLUBILITY:**

Appreciable.

**pH:**

8.4

**FREEZING POINT (deg. F) :**

32

**10. STABILITY AND REACTIVITY****STABILITY:**

Stable under normal conditions.

**HAZARDOUS POLYMERIZATION:**

Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

May produce hazardous fumes when heated to decomposition as

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in welding. Fumes may contain the following:  
Carbon Monoxide, Carbon Dioxide and other toxic vapors  
depending upon the temperature reached.

**INCOMPATIBILITIES (MATERIALS TO AVOID):**  
Avoid any materials that react with water.

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## **11. TOXICOLOGICAL INFORMATION**

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### **ACUTE EFFECTS:**

Titanium Dioxide:

Oral ALD Rat = >24,000 mg/kg  
Dermal ALD Rabbit = >10,000 mg/m<sup>3</sup>  
Inhalation 4-hour ALC Rat = >6.82 mg/l

Has not been tested as a whole for acute effects.

### **CHRONIC EFFECTS:**

Has not been tested as a whole for acute effects.

### **CARCINOGENICITY:**

IARC has listed titanium dioxide as Group 2B, possible human carcinogen. The listing is based on the opinion by IARC that there is inadequate evidence of carcinogenicity to humans, but there is sufficient evidence of cancer in experimental animals.

Has not been tested as a whole for carcinogenicity effects.

### **MUTAGENICITY:**

Has not been tested as a whole for mutagenicity effects.

### **REPRODUCTIVE EFFECTS:**

Has not been tested as a whole for reproductive effects.

### **DEVELOPMENTAL EFFECTS:**

Has not been tested as a whole for developmental effects.

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## **12. ECOLOGICAL INFORMATION**

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### **ECOLOGICAL EFFECTS:**

Has not been tested as a whole for ecological effects.

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**13. DISPOSAL CONSIDERATIONS**

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**DISPOSAL METHODS:**

Recycle, fuel blend or incinerate.  
Dispose of in accordance with applicable laws and regulations. It is the responsibility of the owner of the waste to dispose of it properly. Laboratory analysis is recommended to profile the waste for proper disposal determination.

**U.S E.P.A WASTE NUMBER AND DESCRIPTION:**

Not listed.

**HAZARDOUS WASTE CHARACTERISTICS:**

None known.

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**14. TRANSPORT INFORMATION**

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**UN NUMBER:**

UN number is not applicable.

**DOT PROPER SHIPPING NAME:**

Paint

**DOT HAZARD CLASS:**

Not regulated by current DOT statutes.

**DOT LABEL:**

Not regulated.

**DOT PACKAGING GROUP:**

Unregulated

**U.S POSTAL SERVICE:**

Will not handle.

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**15. REGULATORY INFORMATION**

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(Not meant to be all inclusive - selected regulations represented)

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

CAS#872-50-4      Methylpyrrolione

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**TSCA STATUS:**

All ingredients are listed on the TSCA inventory.

**STATE REGULATIONS:**

This product may contain chemicals that fall under individual state Right-to-Know regulatory requirements. See Section 2 for material listings. For details on regulatory requirements, contact the appropriate agency in your state.

**16. OTHER INFORMATION**

Date of issue: 7/18/2007

Last Revision Date: 07/17/07

**HMIS Information-**

HEALTH: 2

FLAMMABILITY: 1

REACTIVITY: 1

PERSONAL PROTECTIVE EQUIPMENT:

**DISCLAIMER:**

This MSDS is provided as an informational resource only. The information is received from a combination of sources, including raw material suppliers and is believed to be reliable and accurate. It does not intend to be all-inclusive and shall only be used as a guide. Changing reporting requirements and other uncontrolled variables make it impossible to guarantee the accuracy of the information contained in this document. It is the responsibility of the user to verify its information as well as determine the proper personal protection based on conditions of use. The buyer assumes all responsibility for the use and handling of this product in accordance with the Federal, State and Local laws and regulations. Hentzen Coatings, Inc. makes no representation or warranty regarding the accuracy of this information nor that the information or data will not change.