



SAFETY DATA SHEET

Issuing Date: 28-Jan-2015

Revision Date: 22-Oct-2016

Revision Number: 2.1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: 08633TUA-B33

Product Name: ISRAELI TAN VOHAP FREE ZENTHANE
MIL-DTL-53039E, TYPE IX

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

Company Phone Number: 1-414-353-4200

Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use Industrial paint (Paint or Paint-Related), Restricted to professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin Corrosion/Irritation	Category 2
Carcinogenicity	Category 2
Flammable Liquids	Category 2

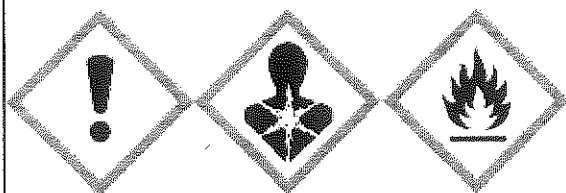
Label Elements

Emergency Overview

DANGER

Hazard Statements

harmful if inhaled
Causes skin irritation
Suspected of causing cancer
Highly flammable liquid and vapor



Appearance Opaque

Physical state Liquid

Odor Solvent

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/Bond container and receiving equipment
Use explosion-proof electrical/ ventilating/ lighting/ equipment

Use only non-sparking tools
Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains a known or suspected carcinogen

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
METHYL AMYL KETONE	110-43-0	30% - 40%	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³
HOMOPOLYMER OF HEXAMETHYLENE DIISOCYANATE	28182-81-2	10% - 20%	N/A	N/A
TITANIUM DIOXIDE	13463-67-7	5% - 10%	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust
HEXAMETHYLENE DIISOCYANATE MONOMER	822-06-0	0% - 1%	TWA: 0.005 ppm	N/A

4. FIRST AID MEASURES

First Aid Measures

General advice

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact

Immediately flush eyes with water for at least 15 minutes. Get medical attention. If easy to do, remove contact lenses. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact

Wash off immediately with soap and plenty of water. Consult a physician if necessary. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Inhalation

Consult a physician if necessary. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Asthma-like and/ or skin allergy-like symptoms.

Ingestion

Do NOT induce vomiting.

Self-protection of the first aider Remove all sources of ignition.

Most Important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Flammable. Containers may explode when heated or if contaminated with water.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment as required. Avoid breathing vapors or mists. Ventilate the area.

Other information DECONTAMINATION SOLUTION: Concentrated ammonia (3 - 8%), detergent (2%) and water (90 - 95%), a solution of Union Carbide's Tergitol TMN-10 (20%) and water (80%) or a solution of 50% isopropanol, 45% water, and 5% concentrated ammonia solution(% by weight).

Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

Methods for Containment Decontaminate floor with decontamination solution letting stand for at least 15 minutes. Soak up with inert absorbent material.

Methods for Cleaning Up Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks and flame. Protect from moisture.

Incompatible Products

Water. Glycol ethers. Alcohols. Epoxies. Bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH	OSHA	NIOSH IDLH
METHYL AMYL KETONE 110-43-0	TWA: 50 ppm	TWA: 100 ppm TWA: 465 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust	IDLH: 5000 mg/m ³
IRON (III) OXIDE 1309-37-1	TWA: 5 mg/m ³ respirable particulate matter	TWA: 10 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	IDLH: 2500 mg/m ³ Fe dust and fume TWA: 5 mg/m ³ Fe dust and fume
ORGANIC TIN COMPOUND 77-58-7	STEL: 0.2 mg/m ³ Sn TWA: 0.1 mg/m ³ Sn S*	TWA: 0.1 mg/m ³ Sn	IDLH: 25 mg/m ³ Sn TWA: 0.1 mg/m ³ except Cyhexatin Sn
HEXAMETHYLENE DIISOCYANATE MONOMER 822-06-0	TWA: 0.005 ppm	N/A	Ceiling: 0.020 ppm 10 min Ceiling: 0.140 mg/m ³ 10 min TWA: 0.005 ppm TWA: 0.035 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure controls

Engineering Measures

Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Use personal protective equipment as required.

Skin and Body Protection

Chemical resistant apron.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state
Odor
pH

Liquid
Solvent.
No data available

Appearance
Odor Threshold
Flash Point

Opaque
No data available
40 °F / 4 °C

Decomposition temperature	No data available	Boiling Point	183 °F / 84 °C
Melting Point / Melting Range	No data available	Freezing Point	No data available
Vapor Pressure @20°C (kPa)	No data available	Partition coefficient:	No data available
Vapor Density	No data available	Density	No data available
Bulk density	No data available	Specific Gravity	1.05
Evaporation Rate	No data available	Water solubility	No data available
Dynamic viscosity	No data available	Weight per Gallon (lbs/gal):	8.73
		Flammability Limits in Air	
		Upper	3 %
		Lower	0.42 %

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Water, Glycol ethers, Alcohols, Epoxies, Bases.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	The product has not been tested
Inhalation	There is no data for this product.
Eye Contact	There is no data for this product.
Skin Contact	There is no data for this product.
Ingestion	There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL AMYL KETONE 110-43-0	= 1600 mg/kg (Rat)	= 12.6 mL/kg (Rabbit)	> 2000 ppm (Rat) 4 h
HOMOPOLYMER OF HEXAMETHYLENE DIISOCYANATE 28182-81-2	N/A	N/A	= 18500 mg/m ³ (Rat) 1 h
TITANIUM DIOXIDE 13463-67-7	> 10000 mg/kg (Rat)	N/A	N/A
IRON (III) OXIDE 1309-37-1	> 10000 mg/kg (Rat)	N/A	N/A
ORGANIC TIN COMPOUND 77-58-7	= 45 mg/kg (Rat)	= 630 mg/kg (Rabbit)	N/A
HEXAMETHYLENE DIISOCYANATE MONOMER 822-06-0	= 710 µL/kg (Rat)	= 593 mg/kg (Rabbit)	= 0.06 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
MUTAGENIC EFFECTS No information available.
Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
TITANIUM DIOXIDE 13463-67-7	N/A	Group 2B	N/A	X
IRON (III) OXIDE 1309-37-1	N/A	Group 3	N/A	N/A

Legend:

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive Toxicity No information available.
Specific target organ systemic toxicity (single exposure) No information available.
Specific target organ systemic toxicity (repeated exposure) No information available.
Target Organ Effects Central nervous system (CNS), Eyes, Lungs, Peripheral Nervous System (PNS), Respiratory system, Skin.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 2063 mg/kg
ATEmix (dermal) 16970 mg/kg
ATEmix (inhalation-dust/mist) 2 mg/l
Oral LD50 3600 mg/kg (rat) Estimated
Dermal LD50 29940 mg/kg (rat) Estimated

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
METHYL AMYL KETONE 110-43-0	N/A	126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
HEXAMETHYLENE DIISOCYANATE MONOMER 822-06-0	N/A	26.1: 96 h Brachydanio rerio mg/L LC50 static	N/A

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
METHYL AMYL KETONE 110-43-0	1.98

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste treatment methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

US EPA Waste Number D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
ORGANIC TIN COMPOUND 77-58-7	Toxic

14. TRANSPORT INFORMATION

DOT

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions 149, B52, IB2, T4, TP1, TP8, TP28
Description UN1263, Paint, 3, II
Emergency Response Guide Number 128

TDG

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, 3, II

MEX

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions A3, A72
Description UN1263, Paint, 3, II

IATA

UN-No UN1263
Hazard class 3
Packing Group II
ERG Code 3L
Special Provisions A3, A72, A192

IMDG/IMO

UN-No UN1263
Hazard class 3
Packing Group II
EmS-No F-E, S-E

Special Provisions	163, 367
<u>RID</u>	
UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Description	UN1263, Paint, 3, II
<u>ADR/RID</u>	
UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Tunnel restriction code	(D/E)
Special Provisions	163, 640C, 650, 367
Description	UN1263, Paint, 3, II, (D/E)
ADR/RID-Labels	3
<u>ADN</u>	
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Classification Code	F1
Special Provisions	163, 640C, 650
Description	UN1263, Paint, 3, II
Hazard Labels	3
Limited Quantity (LQ)	5 L
Ventilation	VE01

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
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Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CAA (Clean Air Act)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
HEXAMETHYLENE DIISOCYANATE MONOMER	100 lb	N/A	RQ 100 lb final RQ RQ 45.4 kg final RQ

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	CAS No	California Proposition 65
TITANIUM DIOXIDE	13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
METHYL AMYL KETONE	X	X	X	N/A	X
TITANIUM DIOXIDE	X	X	X	N/A	X
TERTIARY BUTYL ACETATE	X	X	X	N/A	X

International Regulations

Mexico - Grade

Serious risk, Grade 3

Chemical Name	Carcinogenic Status	Exposure Limits
METHYL AMYL KETONE	N/A	Mexico: TWA 50 ppm Mexico: TWA 235 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 465 mg/m ³
TITANIUM DIOXIDE	N/A	Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³
IRON (III) OXIDE	N/A	Mexico: TWA 5 mg/m ³ Mexico: STEL 10 mg/m ³
ORGANIC TIN COMPOUND	N/A	Mexico: TWA 0.1 mg/m ³ Mexico: STEL 0.2 mg/m ³

16. OTHER INFORMATION

NFPA

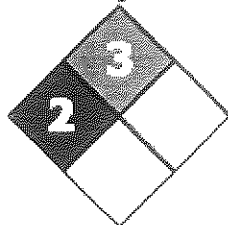
Health Hazard 2

Flammability 3

Instability 0

Physical and Chemical
Hazards -

NFPA Rating



HMIS

Health Hazard 1 * Flammability 3

Physical Hazard 0 Personal protection X

Chronic Hazard Star Legend

** Chronic Health Hazard*

Issuing Date: 28-Jan-2015

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Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. 08633TUA-B33

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