



# SAFETY DATA SHEET

Issuing Date: 22-Dec-2011

Revision Date: 20-Jun-2018

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

Product Code: 08628KUZ-ULVOC

Product Name: 37038 AIRCRAFT BLACK 1.0 VOC  
ZENTHANE® MIL-DTL-53039E, TYPE IV

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)


Skin Corrosion/Irritation	Category 2
Carcinogenicity	Category 2
Reproductive Toxicity	Category 1B
Flammable Liquids	Category 3

### Label Elements

#### Emergency Overview

**DANGER**

**Hazard Statements**  
 Causes skin irritation  
 Suspected of causing cancer  
 May damage fertility or the unborn child  
 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
- 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  
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 in contact with skin
- Toxic to aquatic life

**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
BENZENE,1-CHLORO-4 (TRIFLUOROMETHYL)	98-56-6	40% - 50%	TWA: 2.5 mg/m <sup>3</sup> F	TWA: 2.5 mg/m <sup>3</sup> F
HOMOPOLYMER OF HEXAMETHYLENE DIISOCYANATE	28182-81-2	10% - 20%	N/A	N/A
AROMATIC HYDROCARBON	64742-94-5	1% - 5%	N/A	N/A
CARBON BLACK	1333-86-4	1% - 5%	TWA: 3 mg/m <sup>3</sup> inhalable particulate matter	TWA: 3.5 mg/m <sup>3</sup>
ORGANIC TIN COMPOUND	77-58-7	0% - 1%	STEL: 0.2 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> Sn S*	TWA: 0.1 mg/m <sup>3</sup> Sn
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. If symptoms persist, call a physician.

**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**

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Consult a physician if necessary. If breathing is irregular or stopped, administer artificial respiration. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, call a physician. Asthma-like and/ or skin allergy-like symptoms.

**Ingestion** Do NOT induce vomiting. Drink plenty of water. Rinse mouth. If symptoms persist, call a physician. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

**Self-protection of the first aider** Remove all sources of ignition. Use personal protective equipment as required.

**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**

Wear self-contained breathing apparatus and protective suit.

**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. Keep people away from and upwind of spill/leak. 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** Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal. 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). Use with local exhaust ventilation. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe vapor or mist. 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. Keep containers tightly closed in a cool, well-ventilated place. 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
BENZENE, 1-CHLORO-4 (TRIFLUOROMETHYL) 98-56-6	TWA: 2.5 mg/m <sup>3</sup> F	TWA: 2.5 mg/m <sup>3</sup> F	IDLH: 250 mg/m <sup>3</sup> F
CARBON BLACK 1333-86-4	TWA: 3 mg/m <sup>3</sup> inhalable particulate matter	TWA: 3.5 mg/m <sup>3</sup>	IDLH: 1750 mg/m <sup>3</sup> TWA: 3.5 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> Carbon black in presence of Polycyclic aromatic hydrocarbons PAH
ORGANIC TIN COMPOUND 77-58-7	STEL: 0.2 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> Sn S*	TWA: 0.1 mg/m <sup>3</sup> Sn	IDLH: 25 mg/m <sup>3</sup> Sn TWA: 0.1 mg/m <sup>3</sup> 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 <sup>3</sup> 10 min TWA: 0.005 ppm TWA: 0.035 mg/m <sup>3</sup>

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**

<b>Physical state</b>	Liquid	<b>Appearance</b>	Opaque
<b>Odor</b>	Solvent.	<b>Odor Threshold</b>	No data available
<b>pH</b>	No data available	<b>Flash Point</b>	100 °F / 38 °C
<b>Decomposition temperature</b>	No data available	<b>Boiling Point</b>	183 °F / 84 °C
<b>Melting Point / Melting Range</b>	No data available	<b>Freezing Point</b>	No data available
<b>Vapor Pressure @20°C (kPa)</b>	No data available	<b>Partition coefficient:</b>	No data available
<b>Vapor Density</b>	No data available	<b>Density</b>	No data available
<b>Bulk density</b>	No data available	<b>Specific Gravity</b>	1.25
<b>Evaporation Rate</b>	No data available	<b>Water solubility</b>	No data available
<b>Dynamic viscosity</b>	No data available	<b>Weight per Gallon (lbs/gal):</b>	10.40
		<b>Flammability Limits in Air</b>	
		<b>Upper</b>	4.53 %
		<b>Lower</b>	0.39 %

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Conditions to Avoid**

Heat, flames and sparks.

**Incompatible Materials**

Water. Glycol ethers. Alcohols. Epoxies. Bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

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

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
BENZENE,1-CHLORO-4 (TRIFLUOROMETHYL) 98-56-6	= 13 g/kg ( Rat )	> 2 mL/kg ( Rabbit )	= 33 mg/L ( Rat ) 4 h
HOMOPOLYMER OF HEXAMETHYLENE DIISOCYANATE 28182-81-2	N/A	N/A	= 18500 mg/m <sup>3</sup> ( Rat ) 1 h
CARBON BLACK 1333-86-4	> 15400 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.

**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
CARBON BLACK 1333-86-4	A3	Group 2B	N/A	X

**Legend:**

- ACGIH (American Conference of Governmental Industrial Hygienists)
- A3 - Animal Carcinogen
- 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.  
**Chronic Toxicity** Prolonged or repeated exposure increases the risk. Avoid repeated exposure. May cause adverse liver effects.  
**Target Organ Effects** Eyes, Gastrointestinal tract (GI), Liver, Lymphatic System, 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)** 11535 mg/kg  
**ATEmix (dermal)** 2651 mg/kg  
**ATEmix (inhalation-dust/mist)** 6610.1 mg/l  
**Oral LD50** 10684 mg/kg (rat) Estimated  
**Dermal LD50** 4117 mg/kg (rat) Estimated  
**Inhalation LC50** 41553 mg/l (mist) (dust) mg/m<sup>3</sup> Estimated  
**Inhalation LC50**

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
BENZENE,1-CHLORO-4 (TRIFLUOROMETHYL) 98-56-6	N/A	N/A	3.68: 48 h Daphnia magna mg/L EC50
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
BENZENE, 1-CHLORO-4 (TRIFLUOROMETHYL) 98-56-6	3.7
AROMATIC HYDROCARBON 64742-94-5	6.1

**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** III  
**Special Provisions** B1, B52, IB3, T2, TP1, TP29  
**Description** UN1263, Paint, 3, III  
**Emergency Response Guide Number** 128

**TDG**

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

**MEX**

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

**ICAO**

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

**IATA**

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

**IMDG/IMO**

UN-No	UN1263
Hazard class	3
Packing Group	III
EmS-No	F-E, S-E
Special Provisions	163, 223, 367 955

**RID**

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	III
Classification Code	F1
Description	UN1263, Paint, 3, III

**ADR/RID**

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	III
Classification Code	F1
Tunnel restriction code	(D/E)
Special Provisions	163, 640E, 650, 367
Description	UN1263, Paint, 3, III, (D/E)
ADR/RID-Labels	3

**ADN**

Proper shipping name	Paint
Hazard class	3
Packing Group	III
Classification Code	F1
Special Provisions	163, 640E, 650
Description	UN1263, Paint, 3, III
Hazard Labels	3
Limited Quantity (LQ)	5 L
Ventilation	VE01

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA	Complies
DSL/NDSL	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/NDSL - 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
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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

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
CARBON BLACK	1333-86-4	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
BENZENE,1-CHLORO-4 (TRIFLUOROMETHYL)	N/A	X	N/A	N/A	X
CARBON BLACK	X	X	X	X	X

**International Regulations**

**Mexico - Grade**

Moderate risk, Grade 2

Chemical Name	Carcinogenic Status	Exposure Limits
BENZENE,1-CHLORO-4 (TRIFLUOROMETHYL)	N/A	Mexico: TWA 2.5 mg/m <sup>3</sup>
CARBON BLACK	N/A	Mexico: TWA 3.5 mg/m <sup>3</sup> Mexico: STEL 7 mg/m <sup>3</sup>
ORGANIC TIN COMPOUND	N/A	Mexico: TWA 0.1 mg/m <sup>3</sup>

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		Mexico: STEL 0.2 mg/m <sup>3</sup>
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**16. OTHER INFORMATION**

**NFPA**                      Health Hazard 0                      Flammability 2                      Instability 0                      Physical and Chemical Hazards -

NFPA Rating



**HMIS**                      Health Hazard 2 \*                      Flammability 2                      Physical Hazard 1                      Personal protection X

*Chronic Hazard Star Legend*

*\* Chronic Health Hazard*

**Issuing Date:**                      22-Dec-2011

**Revision Date:**                      20-Jun-2018

**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. 08628KUZ-ULVOC

end