

HENTZEN COATINGS, INC. -- #34031 AIRCRAFT GREEN ZENTHANE #08625GUZ-PA --
8010-01-246-0719

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Product Identification
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Product ID:#34031 AIRCRAFT GREEN ZENTHANE #08625GUZ-PA

MSDS Date:04/29/1998

FSC:8010

NIIN:01-246-0719

Status Code:A

MSDS Number: CJHLC

=== Responsible Party ===

Company Name:HENTZEN COATINGS, INC.

Address:6937 WEST MILL ROAD

Box:18642

City:MILWAUKEE

State:WI

ZIP:53218

Cou

ntry:US

Info Phone Num:414-353-4200

Emergency Phone Num:414-353-4200,DAY 800-424-9300,NITE

Preparer's Name:JANE FREEMAN

Chemtrec Ind/Phone:(800)424-9300

CAGE:09225

=== Contractor Identification ===

Company Name:HENTZEN COATINGS INC

Address:6937 WEST MILL ROAD

Box:18749

City:MILWAUKEE

State:WI

ZIP:53218

Country:US

Phone:414-353-4200

Contract Num:GS-10F40822

CAGE:09225

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Composition/Information on Ingredients
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Ingred Name:METHYL ISOBUTYL KETONE

CAS:108-10-1

Fraction b

y Wt: 2.0180%
Other REC Limits:75 PPM=STEL
OSHA PEL:50 PPM
ACGIH TLV:50 PPM

Ingred Name:SILICA, CRYSTALLINE
CAS:14808-60-7
RTECS #:VV7330000
Fraction by Wt: 20-30%
Other REC Limits:NONE
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.1 MG/M3

Ingred Name:XYLENE (SARA III)
CAS:1330-20-7
RTECS #:ZE2100000
Fraction by Wt: 1.7820%
Other REC Limits:STEL=150 PPM
OSHA PEL:100 PPM
ACGIH TLV:100 PPM
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:AROMATIC HYDROCARBONS (MIXTURE OF C8'S TO C10'S)
CAS:64742-95-6
Fr
action by Wt: 1.0690%
Other REC Limits:100 PPM=MFR'S LIMIT

Ingred Name:BUTYL ACETATE (SARA III)
CAS:123-86-4
RTECS #:AF7350000
Fraction by Wt: 1.2400%
Other REC Limits:200 PPM=STEL
OSHA PEL:150 PPM
ACGIH TLV:150 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:HEXAMETHYLENE DIISOCYANATE MONOMER
CAS:822-06-0
RTECS #:MO1740000
Fraction by Wt: .0370%
Other REC Limits:NONE
OSHA PEL:.005 PPM
ACGIH TLV:.005 PPM
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:HOMOPOLYMER OF HEXAMETHYLENE DII

SOCYANATE
CAS:28182-81-2
RTECS #:NQ9170000
Fraction by Wt: 30-40%
Other REC Limits:TWA=0.5MG/M3(MFR)

Ingred Name:METHYL ISOAMYL KETONE
CAS:110-12-3
RTECS #:MP3850000
Fraction by Wt: 7.3050%
OSHA PEL:100 PPM
ACGIH TLV:50 PPM

Ingred Name:BLACK IRON OXIDE PIGMENT
CAS:1317-61-9
Fraction by Wt: 5-10%
Other REC Limits:LIMITS/IRON OXID FUM
OSHA PEL:5 MG/M3
ACGIH TLV:5 MG/M3

Ingred Name:IRON OXIDE YELLOW
CAS:51274-00-1
Fraction by Wt: 1-5%
Other REC Limits:FOR IRON OXIDE FUME
OSHA PEL:5 MG/M3
ACGIH T
LV:5 MG/M3

===== Hazards Identification =====

Reports of Carcinogenicity:NTP:YES IARC:YES

Health Hazards Acute and

Chronic:ACUTE:EYES:IRRIT/TEARING/REDDENING/SWELLING/STINGING.IF
UNTREATED:CORNEAL DAMAGE/SLOW TO
HEAL.SKIN:IRRIT:REDDENING/RASH/SWELLING/SCALING/BLISTERING/POSSIBLE
SKIN SENSITIZATION.IF MATERIAL DRIES ON SKI N:REMOVAL VERY
DIFFICULT.REPEATED/PROLONGED SKIN CONTACT:POSSIBLE
DEFATTING/DERMATITIS.INHAL:ANESTHETIC.POSSIBLE

RESP TRACT

IRRIT/ACUTE NERVOUS SYSTEM DEPRESSION SHOWN BY
HEADACHE/DIZZINESS/STAGGERING
/CONFUSION/UNCONSCIOUSNESS.ISOCYANATES IRRIT/BURN MUCOUS MEMBRANE
IN RESP TRACT(NOSE/THROAT/LUNGS):RUNNY NOSE/SOAR
THROAT/COUGHING/CHEST DISCOMFORT/SHORTENED BREATH/REDUCED LUNG
FUNCTION/BREATHING OBS TRUCTION.*CONTINUED UNDER SIGNS/SYMPTOMS

Explanation of Carcinogenicity:IARCH LISTS CRYSTALLINE SILICA:GROUP

1,CARCENOGENIC TO HUMANS.NTP CLASSIFIES CRYSTALLINE SILICA AS
REASONABLY

ANTICIPATED TO BE CARCINOGEN:MAY CAUSE LUNG INJURY IF
RESP PRECAUTIONS ARE NOT USED.

Effects of Overexposure:CONTINUED HEALTH HAZ:INHAL:POSSIBLE ASTHMA-LIKE
SYMPTOMS/ASTHMA ATTACK.POSSIBLE BRONCHITIS/BRONCHIAL SPASM/PULMONARY
EDEMA.THESE EFFECTS USUALLY REVERSABLE.POSSIBLE CHEMICAL
PNEUMONITIS W/FLU-LIKE SYMPTOMS(FEVER/CHILLS).POSSIBLE THROAT
DRYNESS/CHEST TIGHTNESS/HEADACHE/NAUSEA/FATIGUE/APPETITE
LOSS.INGEST:IRRIT/POSSIBLE CORROSIVE ACTION:MOUTH/STOMACH
TISSUE/DIGE

ST TRACT.SYMPTOMS:SOAR THROAT/ABDOMONAL
PAIN/NAUSEA/VOMITING/DIARRHEA.VOMITING CAUSE POSSIBLE ASPIRATION OF
SOLVENT INTO LUNGS LEADING TO CHEMICAL PNEUMONITIS. **CONTINUED
UNDER TOXICOLOGICAL SECTION (SIGN&SYMPTOMS LISTED BELOW UNDER MED
COND AGGRAVATED)

Medical Cond Aggravated by Exposure:ASTHMA/OTHER RESP AILMENTS.SKIN
ALLERGIES/EXEMA.CHEM SENSITIZATION.SIGNS&SYMPTOMS:HARMFUL IF
INHALED.EFFECTS:NOSE,THROAT,RESP TRACT IRRIT,ALLERGIC RESP
REACTION,LUNG DAMAGE,EYE&SKIN
IRRIT,SKIN REACTIONS.

===== First Aid Measures =====

First Aid:EYES: FLUSH IMMEDIATELY WITH LOW PRESSURE LUKE WARM WATER FOR 15
MINUTES, LIFTING LIDS TO RINSE ENTIRE EYE. TAKE TO DR IMMEDIATELY.SKIN:
REMOVE CONTAMINATED CLOTHING IMMEDIATELY & WASH THOROUGHLY BEFORE REUSE.
WASH EFFECTED AREAS THOROUGHLY WITH SOAP/WATER. SEVERE EXPOSURE:GET
UNDER SAFETY SHOWER AFTER REMOVING CLOTHING. CALL DR IN BOTH
CASES.INHAL:REMOVE TO RISK FREE AREA.ADMINISTER OXYGEN/ARTIF
ICIAL
RESP AS NEEDED. GET DR. POSSIBLE ASTHMATIC TYPE SYMPTOMS IMMEDIATELY OR
SEVERAL HOURS LATER. SEE DR. INGEST:CALL DR IMMEDIATELY! DO NOT INDUCE
VOMITING.

===== Fire Fighting Measures =====

Flash Point:=-15.6C, 60.F
Autoignition Temp:=-232.2C, 450.F
Lower Limits:1.0
Upper Limits:8.00
Extinguishing Media:FOAM, DRY CHEMICAL AND CO2 OR ALCOHOL FOAM
Fire Fighting Procedures:FULL PROTECT EQUIP WITH SELF-CONTAINED BREATHING
APPARATUS SHOULD BE WORN.DURING FIRE

, IRRIT & HIGHLY TOXIC GASES &
SMOKE ARE PRESENT FROM DECOMP/COMBUST PRODS.KEEP CONTRS TIGHTLY
CLOSED.ISOLATE FROM HE AT/ELECTRICAL EQUIP/SPARKS/OPEN FLAMES.
Unusual Fire/Explosion Hazard:CLOSED CONTRS MAY EXPLODE WHEN EXPOSED TO
EXTREME HEAT OR BURST WHEN CONTAM W/ H2O (CO2 RELEASED).DO NOT
APPLY TO HOT SURFACES.NEVER USE WELDING/CUTTING TORCH ON/NEAR
CONTRS(EVEN EMPTY) B/C PRODUCT(EV EN RESIDUE) CAN IGNITE
EXPLOSIVELY.FLAMMABLE LIQUID!KEEP AWAY FROM
HEAT/SPARKS/FLAM
E.VAPORS MAY CAUSE FLASH FIRE.

===== Accidental Release Measures =====

Spill Release Procedures:EVAC NON-ESSENTIAL PERSONNEL.REMOVE ALL IGNIT
SOURCES:FLAMES/HOT SURFACES/ELECTRICAL/STATIC & FRICTIONAL
SPARKS.VENTILATE AREA.EQUIP CLEAN UP CREW W/APRRROP PROTECTIVE
EQUIP.AVOID BREATH VAPORS/SKIN CO NTACT.COVER SPILL W/INERT
ABSORBENT.POUR LIQUID DECONTAM OVER SPILL:LET STAND 10 MIN.COLLECT
MATERIAL IN OPEN CONTNRS/ADD FURTHER AMOUNTS DECONTAM
SO

LUTION.***CONT UNDER ECOLOGICAL SECTION

Neutralizing Agent:CONCENTRTD AMONIA(3-8%),DETERGENT(2%)&H2O(90-95%).OR
SOLUTION OF NIACT CORP'S TERGITOL TMN-10(20%) & H2O(80%).

===== Handling and Storage =====

Handling and Storage Precautions:PROTECT PERSONS HANDLING PRODUCT:MUST
NOT BREATHE VAPORS/CONTACT EYES/SKIN. IN SPRAY
OPERATIONS:PROTECTION AFFORDED AGAINST EXPOSURE TO VAPOR/SPRAY
MIST.CAN CAUSE IRRIT TO EYES/SKIN/NOSE/THROAT.AVOID EYES/CLOTH
ING
CONTACT.WASH THOROUGHLY AFTER HANDLING. AVOID PROLONGED/REPEATED
CONTACT W/SKIN.

Other Precautions:USE GROUNDING/BONDING CONNECTIONS IN TRANFERING
MATERIAL TO PREVENT STATIC DISCHARGE/FIRE OR EXPLOSION.AVOID LIQUID
FREE-FALL>FEW INCHES.USE SPARK PROOF TOOLS/EXPLOSION PROOF
EQUIP.DON'T STORE ABOVE 1 20F OR BELOW 32 F.STORE LG QUANTITIES IN
BUILDINGS THAT COMPLY W/OSHA'S 29 CFR 1910.106. ****CONT UN DER
ECOLOGICAL

===== Exposure Controls/Personal Protectio

n =====

Respiratory Protection: AIRLINE RESPIRATORS UNLESS AIR SAMPLING SHOWS EXPOSURE TO BE BELOW OSHA LIMITS. THEN, EITHER CHEMICAL CARTRIDGE RESPIRATORS OR AIRLINE RESPIRATORS ARE REQUIRED. USE SAME PRECAUTIONS DURING MIXING OR WHERE PAINT FUMES WOULD BE PRESENT.
*****CONTINUED UNDER OTHER INFORMATION SECTION

Ventilation: EXHAUST TO KEEP AIRBORN CONTAMINANTS BELOW EXPOSURE LIMITS. CLEAN EXHAUST AIR BY SCRUBBER/FILTERS. VENT CURING OVENS. IF OVEN OFF, GASES NOT VENTED PROPERLY

Protective Gloves: PERMEATION RESISTANT GLOVES

Eye Protection: SAFETY EYE WEAR WITH SPLASH GUARDS OR SIDE SHIELDS. FACE SHIELD. NO CONTACT LENSES.

Other Protective Equipment: WEAR PROTECTIVE CLOTHING TO KEEP SKIN CONTACT AT A MINIMUM. KEEP SKIN CREAM PROTECTED AREAS TO A MINIMUM. SAFETY SHOWERS/EYE WASH STATIONS. TRAIN EMPLOYEES IN SAFE USE OF THIS PRODUCT.

Work Hygienic Practices: ONCE A PERSON IS SENSITIZED TO ISOCYANATES, NO FURTHER EXPOSURE CAN BE PERMITTED.

Supplemental Safety and Health

MEDICAL SUPERVISION OF ALL EMPLOYEES HANDLING THIS PRODUCT RECOMMENDED. SHOULD INCLUDE PRE-EMPLOYMENT & PERIODIC MEDICAL EXAMS WITH RESPIRATORY FUNCTION TESTS (FEV₁, FVC MINIMUM). PERSONS WITH ASTHMA-TYPE CONDITIONS/ BRONCHITIS/ OTHER RESPIRATORY DISEASES OR RECURRENT SKIN EXEMA/ SENSITIZATION SHOULD BE EXCLUDED FROM WORKING WITH ISOCYANATES.

===== Physical/Chemical Properties =====

Boiling Pt: B.P. Text: 232 F TO 418 F

Vapor Pressure: 15

Vapor Density: 4.800

Specific Gravity:

1.2670

VOC Grams/Liter: 3.37

Evaporation Rate & Reference: 1.6000 (N-BU AC=1)

Solubility in Water: REACTS WITH WATER

Appearance and Odor: OPAQUE LIQUID, SOLVENT ODOR

Percent Volatiles by Volume: 49.050

===== Stability and Reactivity Data =====

Stability Indicator/ Materials to Avoid: YES

WATER/MOISTURE, EPOXY CATALYSTS, ALCOHOLS, GLYCOL ETHERS, BASES, METAL COMPLEXES, OR OTHER ACTIVE MATERIALS.

Stability Condition to Avoid: ONCE PRODUCT IS EXPOSED TO ANY MATERIALS LISTED

D BELOW (INCLUD ATMOSPHERIC MOISTURE), DO NOT RESEAL CONTR AS
HAZ CO2 GAS COULD BUILD UP IN CONTR RESULTING IN RAPID
DEPRESSURIZATION.

Hazardous Decomposition Products:MAY PRODUCE HAZ FUMES WHEN HEATED TO
DECOMP POINT(AS IN WELDING). FUMES MAY CONTAIN:CO2, CO,
CHLORINE, HYDROGEN CHLORIDE & POSSIBLE CYANIDE, HEXAMETHYLENE
DIISOCYANATE.

===== Toxicological Information =====

Toxicological Information:*CONT HEALTH HAZ CHRONIC EFFECTS:POSSIBLE
PER
MANENT BRAIN,NERVOUS SYSTEM,LUNG,LIVER&KIDNEY DAMAGE.CERTAIN
PERSONS DEVELOP ISOCYANATE SENSITIZATION(CHEMICAL ASTHMA)CAUSING
REACTIONS TO LATER EXPOSURE W ELL