

HERBERT-VERKAMP-CALVERT CHEM. CO. -- 08610KUZ-GD ALIPHATIC POLYISOCYANATE 37030
BLACK ZENTHANE -- 8010-01-229-7540

===== Product Identification =====

Product ID:08610KUZ-GD ALIPHATIC POLYISOCYANATE 37030 BLACK ZENTHANE

MSDS Date:08/31/1995

FSC:8010

NIIN:01-229-7540

MSDS Number: CBTVR

=== Responsible Party ===

Company Name:HERBERT-VERKAMP-CALVERT CHEM. CO.

Address:4600 DUES DRIVE

City:CINCINNATI

St

ate:OH

ZIP:45246-1009

Country:US

Info Phone Num:513-874-9261

Emergency Phone Num:513-874-9261

Preparer's Name:JANE FREEMAN

CAGE:1HD53

=== 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

CAGE:09225

Company Name:HERBERT-VERKAMP-CALVERT CHEMICAL

Address:4600 DUES DRIVE

Box:18642

City:CINCINNATI

State:OH

ZIP:45246-1009

Country:US

Phone:513-874-9261

CAGE:1HD53

===== Composit

ion/Information on Ingredients =====

Ingred Name:METHYL ISOAMYL KETONE SOLVENT
CAS:110-12-3
RTECS #:MP3850000
Fraction by Wt: 20.358%
Other REC Limits:NONE SPECIFIED
OSHA PEL:50 PPM
ACGIH TLV:50 PPM

Ingred Name:BLACK IRON OXIDE PIGMENT
CAS:1317-61-9
Fraction by Wt: 5-10%
Other REC Limits:NONE SPECIFIED
OSHA PEL:5 MG/M3
ACGIH TLV:5 MG/M3

Ingred Name:SILICA PIGMENT (SARA 313)
CAS:14808-60-7
RTECS #:VV7330000
Fraction by Wt: 20-30%
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1 MG/M3
ACGI
H TLV:0.1 MG/M3

Ingred Name:HOMOPOLYMER OF HEXAMETHYLENE DIISOCYANATE (HDI)(EXACT
PERCENTAGE IS A TRADE SECRET)
CAS:28182-81-2
RTECS #:HQ9170000
Fraction by Wt: 20-30%
Other REC Limits:MFR.5MG.M3STEL1MG/M3

Ingred Name:AROMATIC HYDROCARBONS (MIXTURE OF C8'S TO C10'S)
CAS:64742-95-6
Fraction by Wt: 1.187%
Other REC Limits:100 PPM = MFR'S

Ingred Name:BUTYL ACETATE SOLVENT
CAS:123-86-4
RTECS #:AF7350000
Fraction by Wt: 1.187%
Other REC Limits:NONE SPECIFIED
OSHA PEL:150 PPM/STEL 200 PPM
ACGIH

TLV:150 PPM/STEL 200 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:HEXAMETHYLENE DIISOCYANATE MONOMER (SARA 313)
CAS:822-06-0
RTECS #:MO1740000
Fraction by Wt: 0.047%
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.005 PPM
ACGIH TLV:0.005 PPM
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:VM&P NAPHTHA SOLVENT
CAS:8030-30-6
RTECS #:DE3030000
Fraction by Wt: 5.200%
Other REC Limits:NONE SPECIFIED
OSHA PEL:300 PPM
ACGIH TLV:300 PPM

Ingred Name:XYLENE (SARA 313)
CAS:1330-20-7
RTECS #:ZE210
0000
Fraction by Wt: 5.979%
Other REC Limits:NONE SPECIFIED
OSHA PEL:100 PPM/STEL 150 PPM
ACGIH TLV:100 PPM/STEL 150 PPM
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:VOC: 3.496 LBS/GAL; 418.925 GRAMS/LITER
RTECS #:9999999VO
Other REC Limits:NONE SPECIFIED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:CHRONIC: OVEREXPO TO

SOLVENTS CAUSE

PERMANENT BRAIN/NERVOUS SYSTEM/LIVER/KIDNEY DAMAGE. OVEREXPO TO ISOCYANATE LEADS TO RESPIRATORY SENSITIZATION CHARACTERIZED BY ALLERGIC DERMATITIS WHICH INCLUDES RA SH, ITCHING, HIVES, SWELLING. INGEST: IRRIT/CORROSIVE TO MOUTH/STOMAH TISSUE/DIGEST TRACT/SORE THROAT**

Explanation of Carcinogenicity:BASED UPON LABORATORY ANIMAL DATA, IARC HAS LISTED SILICA AS A "PROBABLE HUMAN CARCINOGEN."

Effects of Overexposure:SKIN/EYE/RESP TRACT IRRIT (NOSE/THROAT/LUNGS)

WATERING EYES/DRY THROAT/COUGHING/HEADACHE/TIGHT CHEST/BURNING SENSATION. SOLVENTS EXPOSURE MAY CAUSE HEADACHE/DIZZINESS/NAUSEA. SHORTNESS OF BREATH. EXP OSURE >LIMITS MAY LEAD TO BRONCHITIS/BRONCHIAL SPASM/PULMINARY EDEMA. CHEM/HYPERSENSITIVE PNEUMONITIS W/FLU-LIKE SYMPTOM

Medical Cond Aggravated by Exposure:SKIN ALLERGIES AND EXEMA, ASTHMA & OTHER RESPIRATORY AILMENTS, CHEMICAL SENSITIZATION.

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

First

Aid:INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. CONSULT DR. EYES: FLUSH IMMED W/LUKE WARM RUNNING WATER 15 MINUTES, LIFTING EYELIDS. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAM CLOTHES/WASH BEFORE REUSE. USE SAFETY SHOWER AFTER REMOVINGCLOTHES. GET MEDICAL AID. LESSER EXPOSURE, CONTACT DR IF IRRITATION DEVELOPS/PERSISTS. INGESTION: CALL DR IMMED. DON'T INDUCE VOMITING.

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

Flash Point Method:TCC

Flash

Point:54.0F,12.2C

Autoignition Temp:Autoignition Temp Text:450F

Lower Limits:0.9

Upper Limits:8.2

Extinguishing Media:CO2, DRY CHEMICAL, FOAM, ALCOHOL FOAM.

Fire Fighting Procedures:FULL PROTECTIVE EQUIPMENT W/SCBA SHOULD BE WORN. DURING A FIRE, IRRITATING & HIGHLY TOXIC GASES & SMOKE ARE PRESENT FROM THE DECOMPOSITION/COMBUSTION PRODUCTS.

Unusual Fire/Explosion Hazard:CLOSED CONTAINERS EXPOSED TO EXTREME HEAT MAY EXPLODE OR BURST WHEN CONTAMINATED W/H2O (CO2 RELEASED). DON'T WE

LD, CUT, TORCH DRUMFULL/EMPTY MAY IGNITE/EXPLODE.

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

Spill Release Procedures:EVACUATE NON-ESSENTIAL PERSONNEL. REMOVE IGNIT SOURCES (FLAMES/HOT SURFACES/ELECTRICAL/STATIC/SPARKS). VENTILATE AREA.AVOID BREATHING VAPORS. COVER W/INERT ABSORBENT.POUR DECONTAMINANT/ALLOW TO REACT >10 MIN.COLLECT IN OPEN CNTNR/ADD MORE DECONTAM***

Neutralizing Agent:3-8% CONCENTRAT AMMONIA/2% DETERGENT/90-95% H2O OR TERGITOL TNN-
10 20%/WATER 80%

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

Handling and Storage Precautions:DON'T STORE >120F OR