

MAGNAFLUX CORPORATION -- ZP-9E ZYGLO DEVELOPER (NEW FORMULATION) --
6850-01-265-7234

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

Product ID:ZP-9E ZYGLO DEVELOPER (NEW FORMULATION)

MSDS Date:01/06/1989

FSC:6850

NIIN:01-265-7234

MSDS Number: BHQRK

=== Responsible Party ===

Company Name:MAGNAFLUX CORPORATION

Address:7300 W.LAWRENCE AVENUE

City:CHICAGO

State:IL

ZIP:60656

Country:US

Info Phone Num:708-867-8000

Emergency Phone Num:708-867-8000

CAGE:37676

=== Contractor Identification ===

Company Name:ILLINOIS TOOL WORKS INC MAGNAFLUX DIV

Address:3624 WEST LAKE AVENUE

Box:City:GLENVIEW

State:IL

ZIP:60025

Country:US

Phone:847-657-5300/

CAGE:37676

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===== Composition/Information on Ingredients =====

Ingred Name:METHYL CHLOROFORM (1,1,1-TRICHLOROETHANE) (SARA III)

CAS:71-55-6

RTECS #:KJ2975000

Fraction by Wt: 65%

OSHA PEL:350 PPM/450 STEL

ACGIH TLV:350 PPM/450STEL;9192

EPA Rpt Qty:1000 L

BS
DOT Rpt Qty:1000 LBS
Ozone Depleting Chemical:1

Ingred Name:METHYLAL (DIMETHOXYMETHANE)
CAS:109-87-5
RTECS #:PA8750000
Fraction by Wt: 2%
OSHA PEL:1000 PPM
ACGIH TLV:1000 PPM; 9192

Ingred Name:TERT-BUTYL ALCOHOL (SARA III)
CAS:75-65-0
RTECS #:EO1925000
Fraction by Wt: 1%
OSHA PEL:100 PPM
ACGIH TLV:100PPM 9394

Ingred Name:CHLORODIFLUOROMETHANE
CAS:75-45-6
RTECS #:PA6390000
Fraction by Wt: 25%
OSHA PEL:1000 PPM
ACGIH TLV:1000PPM; 9192
Ozone Depleting Chemical:2

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Hazard Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:IRRITATES EYES BY SOLVENT ACTION.
Effects of Overexposure:INHALATION:CAUSES
DIZZINESS,DROWSINESS,NAUSEA.CAUSES UNCONSCIOUSNESS AT HIGH
EXPOSURE; SKIN:NOT ABSORBED THROUGH SKIN IN SIGNIFICANT
AMOUNTS.HOWEVER,IRRITATES BY DISSOLVING SKIN OILS; EYES:IRRITATING
DUE TO STRONG SOLVENT ACTION; INGESTION:
LOW SINGLE DOSE TOXICITY IN
TEST ANIMALS.
Medical Cond Aggravated by Exposure:NONE KNOWN TO MANUFACTURER.

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First Aid Measures =====

First Aid:INHALATION:REMOVE TO FRESH AIR.IF NOT BREATHING,GIVE CPR.IF
BREATHING IS DIFFICULT,GIVE OXYGEN; SKIN:WASH OFF IN FLOWING WATER
OR SHOWER.RMV CONTAMINATED CLOTHING AND WASH BEFORE RE-USE.USE
SOOTHING LOTION; EYES:FLUSH EYES WITH A STEADY,GENTLE FLOW OF
WATER.GET MEDICAL ASST; INGESTION:DO NOT

INDUCE VOMITING. IF VOMIT
IS INHALED, IT MAY CAUSE ASPHYXIATION. GET MED ATTN IMMEDIATELY; IN
EMERGENCY CALL MD

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

Extinguishing Media: USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING
FIRES.

Fire Fighting Procedures: KEEP CONTAINERS COOL WITH WATER SPRAY.

Unusual Fire/Explosion Hazard: AEROSOL CANS CAN BURST IF HEATED ABOVE
130F(54.4C).

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

Spill Release

Procedures: LESS THAN ONE QUART: WIPE UP BUT DO NOT BREATHE
VAPORS; ONE QUART OR MORE: WEAR ALL PERSONAL SAFETY EQUIPMENT TO
AVOID VAPOR/LIQ CONTACT OR BREATHING. EVACUATE UNPROTECTED
PERSONS. ELIMINATE IGN SOURCES. DI KE LIQ. PLACE IN COVERED DRUMS. SENT
TO RECLAIMER.

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

Handling and Storage Precautions: STORE AWAY FROM HEAT SOURCES TO
MINIMIZE THE DANGER FROM EXPOSURE TO FIRES. STORE IN
DRY, COOL, VENTILATED AREA.

Other Precautions: DO NOT USE AROUND FLAMES/RED HOT SURFACES. DO NOT HEAT
ABOVE 130F. AVOID BREATHING VAPORS. AVOID FREQUENT/PROLONGED EXPOSURE
TO SKIN.

===== Exposure Controls/Personal Protection =====

Respiratory Protection: WEAR A RESPIRATOR WITH CHEMICAL CARTRIDGE. IN
CONFINED AREAS, WEAR A FULL MASK WITH SEPARATE AIR SUPPLY.

Ventilation: GENERAL VENTILATION TO KEEP BELOW 350PPM LIMIT.

Protective Gloves: NITRILE RUBBER GLOVES

Eye Protection: FULL GOGGLES

Other Protective

Equipment: EITHER USE IN A SPRAY BOOTH OR NEXT TO AN
EXHAUST VENT.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING. LAUNDRY
CONTAMINATED CLOTHES BEFORE RE-USE.

Supplemental Safety and Health

ITEM IS A ONE PART PRODUCT; SUPPLIER MAY SUPPLY EITHER SKD-LT OR ZP-9E
DEVELOPER UNDER THIS NSN. THIS PNIND: C IS A NEW FORMULATION FOR
ZP-9E, WHICH REPLACES PNIND: B.

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

HCC: V2

Spec Gravity: 1.3 (OF LIQUID)

Evaporation

Rate & Reference:0.7 (ETHER=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLOUDY,COLORLESS LIQUID BEFORE FILLING IN AEROSOL CANS.

Percent Volatiles by Volume:90.0

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

Stability Indicator/Materials to Avoid:YES

ALKALI METALS

Stability Condition to Avoid:HEAT/HIGH TEMPERATURES.

Hazardous Decomposition Products:PHOSGENE,HYDROCHLORIC ACID GAS & OXIDES OF CARBON.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF AS EPA HAZARDOUS WASTE NO:F002; MAY BE SENT TO SOLVENT RECLAIMER.INSURE THAT AEROSOL CANS ARE EMPTY AND DEPRESSURIZED BEFORE DISCARDING,UNLESS A WASTE TREATMENT FACILITY IS APPROVED TO ACCE PT THEM AS IS.COMPLY WITH FED,ST,& LOCALREGS.

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