

MAGNAFLUX CORPORATION -- ZL-27 A ZYGLO PENETRANT -- 6850-01-267-4345

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Product Identification
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Product ID:ZL-27 A ZYGLO PENETRANT

MSDS Date:01/01/1991

FSC:6850

NIIN:01-267-4345

MSDS Number: BPHVM

=== Responsible Party ===

Company Name:MAGNAFLUX CORPORATION

Address:7300 W LAWRENCE AVE

City:CHICAGO

State:IL

ZIP:60656-3504

Country:US

Info Phone Num:708-867-8000

Emergency Phone Num:708-867-8

000/CHEMTREC 800-424-9300

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
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Ingred Name:WHITE MINERAL OIL (PETROLEUM)

CAS:8042-47-5

RTECS #:PY8047000

Fraction by Wt: 30%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5 MG/M3 AS OIL MIST

ACGIH TLV:5 MG/M3 AS OIL MIST

Ingred Nam

e:ALIPHATIC PETROLEUM SOLVENT/KEROSENE

CAS:8008-20-6

RTECS #:OA5500000

Fraction by Wt: 10%

Other REC Limits:NONE RECOMMENDED

ACGIH TLV:100 MG/M3 (MFR)

Ingred Name:ISOBUTANE

CAS:75-28-5

RTECS #:TZ4300000

Fraction by Wt: 30%

Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:OSHA PEL FOR OILY MIST IS 5 MG/M3.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Ha

zards Acute and Chronic:ACUTE- INHALATION:DIZZINESS, NAUSEA.

EXPOSURE ABOVE TLV CAN RESULT IN CLUMSINESS & POOR JUDGMENT, LIKE
INGESTING TOO MUCH ALCOHOL. IF VICTIM IS UNCONSCIOUS, DEATH IS
POSSIBLE. SKIN:IRRITATION. DISSOLV ES SKIN OILS. EYE:MILDLY
IRRITATING. INGESTION:GASTRIC UPSET. CHRONIC- MAY CAUSE DRYNESS OF
SKIN AND DERMATITIS.

Effects of Overexposure:INHALATION OF MISTS OR VAPORS CAN CAUSE

DIZZINESS AND NAUSEA. SKIN CONTACT CAUSES IRRITATION. DISSOLVES
SKIN O

ILS. MILDLY EYE IRRITATING. INGESTION CAN LEAD TO GASTRIC
UPSET.

Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN DISORDERS MAY BE
MORE SUSCEPTIBLE TO THIS MATERIAL.

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

First Aid:GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. SKIN:WASH WITH
SOAP & WATER. EYE:FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS
OPEN. INHALED:REMOVE TO FRESH AIR & PROVIDE OXYGEN/CPR IF NEEDED.
ORAL:CALL A PHYSICIAN IF SEVERE.

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Fire Fighting Measures
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Flash Point Method:PMCC

Flash Point:FLAMMABL AEROSOL

Lower Limits:1

Upper Limits:6

Extinguishing Media:CARBON DIOXIDE, FOAM. WATER SPRAY MAY BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL. DO NOT SPRAY WATER ON BURNING ZL-27A

Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion

Hazard:AEROSOL CANS MAY RUPTURE AND RELEASE FLAMMABLE LIQUIDS AND/OR GASES IF EXPOSED TO HEAT ABOVE 130F.

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Accidental Release Measures
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Spill Release Procedures:VENTILATE AREA.DO NOT BREATHE VAPORS.IF LESS THAN ONE QUART SPILLED:WIPE UP.FOR ONE QUART OR MORE:EVACUATE AREA.WEAR PROTECTIVE CLOTHING AND SELF-CONTAINED BREATHING APPARATUS.ABSORB WITH SAND/CLAY.RE MOVE FOR DISPOSAL.DO NOT ALLOW TO ENTERSEWERS.

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Handling and Storage
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Handling and Storage Precautions:STORAGE- DO NOT STORE NEAR HEAT SOURCES SUCH AS RADIATORS, OPEN FLAMES, STOVES. KEEP IN COOL, DRY PLACE.

Other Precautions:AVOID EXCESSIVE INHALATION. DO NOT INCINERATE OR PUNCTURE CONTAINERS, EVEN WHEN EMPTY. WASH THOROUGHLY AFTER HANDLING. KEEP AWAY FROM REACH OF CHILDREN. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

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Exposure Controls/Personal Protection
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Respiratory Protection:NONE REQUIRED WHERE ADEQUATE VENTILATION CONDITIONS EXIST. IF EXCESSIVE MISTS OR VAPORS PRESENT OR IN CONFINED SPACES, A NIOSH-APPROVED RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE IS REQUIRED OR WEAR SELF -CONTAINED BREATHING APPARATUS.

Ventilation:GENERAL VENTILATION MUST BE SUFFICIENT TO KEEP THE CONCENTRATION BELOW 350 PPM.

Protective Gloves:NITRILE

Eye Protection:CHEMICAL SPLASH GOGGLES/FACE SHIELD

Other Protective Equipment:EYE WASH STATION & SAFETY SHOWERS SHOULD BE
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AVAILABLE IN THE IMMEDIATE VICINITY OF ANY POTENTIAL EXPOSURE.

Work Hygienic Practices:USE ONLY AS DIRECTED ON LABEL. READ LABEL BEFORE USING PRODUCT.

Supplemental Safety and Health

FORMULA CHANGED. FOR PREVIOUS FORMULATIONS, SEE PNI A, B OR C UNDER THE SAME NSN. THE KIT CONSISTS OF ZL-27A (PENETRANT), ZP-9E (DEVELOPER), ZP-4B (DRY DEVELOPER) AND SKC-NF (CLEANER).

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

HCC:V3

Boiling Pt:B.P. Text:-44F,-42C

Vapor Pres:54

31 @ 75F

Vapor Density:>1

Spec Gravity:0.96

Evaporation Rate & Reference:NEGLIGIBLE

Solubility in Water:NEGLIGIBLE

Appearance and Odor:GREEN OILY LIQUID

Percent Volatiles by Volume:35

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

Stability Indicator/Materials to Avoid:YES

POWDERED ZINC AND POWDERED ALUMINUM

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES, DIRECT SUNLIGHT, TEMPERATURES ABOVE 130F

Hazardous Decomposition Products:PHOSGENE, HYDROCHLORIC ACID

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

Waste Disposal Methods:DISPOSE OF AS EPA HAZARDOUS WASTE #F002.MAY BE SENT TO SOLVENT RECLAIMER.ENSURE THAT AEROSOL CANS ARE EMPTY & DEPRESSURIZED BEFORE DISCARDING,UNLESS AN APPROVED WASTE TREATMENT FACILITY ACCEPT THEM A S IS.OBSERVE ALL LOCAL,STATE & FEDERAL REGULATIONS

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