

D-70 DEVELOPER

MSDS Number

BVFRY

National Stock Number

6850-00-782-2740

Product Name

D-70 DEVELOPER

Manufacturer

MET L CHEK COMPANY

Product Identification

Product ID:D-70 DEVELOPER

MSDS Date:03/15/1989

FSC:6850

NIIN:00-782-2740

Kit Part:Y

MSDS Number: BVFRY

Responsible Party

MET-L-CHEK COMPANY

1639 EUCLID ST

SANTA MONICA , CA 90404-3770

US

Emergency Phone: 310-450-1111

Info Phone: 310-450-1111

Cage: 98733

Contractor

MET-L-CHEK COMPANY

00000

SANTA MONICA, CA 90404

US

310-450-1111/FAX 310452-4046

Cage: 98733

Ingredients

ISOPROPYL ALCOHOL (SARA 313)

CAS: 67-63-0

RTECS: NT8050000

OSHA PEL400 PPM

ACGIH TLV: 400 PPM/500STEL;9495

BUTANE

CAS: 106-97-8

RTECS: EJ4200000

OSHA PEL800 PPM

ACGIH TLV: 800 PPM; 9495

PROPANE

CAS: 74-98-6

RTECS: TX2275000

OSHA PEL1000 PPM

ACGIH TLV: ASPHYXIA NT; 9495

ISOBUTANE

CAS: 75-28-5

RTECS: TZ4300000

Hazards

LD50 LC50 Mixture: LD50 (ORAL, RAT) 5,045 MG/KG (RTECS)

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

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

Health Hazards Acute and Chronic: TARGET ORGANS: EYE, SKIN, CNS, RESPIRATORY & GI TRACTS. ACUTE- HARMFUL IF INHALED OR INGESTED. MAY CAUSE CNS DEPRESSION. IN EXTREME CASES, UNCONSCIOUSNESS, RESPIRATORY DEPRESSION MAY OCCUR. EYE & SKIN IRRITANT. CHRONIC- UNKNOWN.

Explanation of Carcinogenicity: NONE

Effects of Overexposure: IRRITATION, HEADACHE, DIZZINESS, NAUSEA, VOMITING

Medical Condition Aggravated by Exposure: PERSONS WITH PRE-EXISTING SKIN DISORDERS, EYE PROBLEMS OR IMPAIRED RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS PRODUCT.

First Aid

First Aid: GET MEDICAL HELP IF SYMPTOMS PERSIST. INHALED: REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED. EYES: FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. SKIN: WASH WITH SOAP & WATER. ORAL: IF CONSCIOUS, INDUCE VOMITING. GET MEDICAL ATTENTION IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

Fire Fighting

Flash Point Method: TCC

Flash Point: 53.0F, 11.7C

Lower Limits: 2.0

Upper Limits: 2.0

Extinguishing Media: USE WATER FOG, "ALCOHOL" FOAM, DRY CHEMICAL OR CARBON DIOXIDE. WARNING. FLAMMABLE.

Fire Fighting Procedures: CLEAR FIRE AREA OF UNPROTECTED PERSONNEL. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR.

Unusual Fire/Explosion Hazard: CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE.

Accidental Release

Spill Release Procedures: WEAR PROTECTIVE EQUIPMENT. ELIMINATE SOURCES OF IGNITION. VENTILATE AREA. SOAK UP SPILL WITH NON-FLAMMABLE ABSORBENT SUCH AS SAND, EARTH, VERMICULITE. PLACE IN CONTAINER. GROUND ALL HANDLING EQUIPMENT. PREVENT LIQUID FROM ENTERING SEWERS OR WATERWAY

Neutralizing Agent: DILUTE WITH WATER

Handling

Handling and Storage Precautions: STORE IN COOL, DRY, WELL VENTILATED PLACE AWAY FROM SOURCES OF IGNITION AND INCOMPATIBLE MATERIALS. AVOID TEMPERATURES ABOVE 120F.

Other Precautions: AVOID BREATHING VAPORS. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR

DRINKING. REMOVE CONTAMINATED CLOTHING PROMPTLY. LAUNDER BEFORE REUSE. KEEP OUT OF REACH OF CHILDREN.

Exposure Controls

Respiratory Protection: IF TLV IS EXCEEDED OR FOR SYMPTOMS OF OVER EXPOSURE, WEAR NIOSH-APPROVED ORGANIC VAPOR RESPIRATOR OR SUPPLIED AIR RESPIRATOR. IN EMERGENCY, WEAR A NIOSH-APPROVED POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS.

Ventilation: MECHANICAL (GENERAL AND/OR LOCAL EXHAUST, EXPLOSION-PROOF) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves: NATURAL RUBBER, NEOPRENE

Eye Protection: SAFETY GLASSES + FACE SHIELD/CHEM GOGGLES

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

Work Hygienic Practices: WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. WASH CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

KEY1: F1. THIS PRODUCT IS A KIT CONSISTING OF THREE PARTS. SEE PNI D FOR PENETRANT; PNI H FOR CLEANER, SAME NSN. THIS IS FOR DEVELOPER.

FORMULA CHANGED. FOR PREVIOUS FORMULATIONS SEE PNI B AND C, SAME NSN.

Chemical Properties

HCC: V3

Boiling Pt: B.P. Text: 180F, 82C

Melt/Freeze Pt: M.P/F.P Text: -127F, -88C

Vapor Pres: 33

Vapor Density: 2.1

Spec Gravity: 0.8

Viscosity: NOT RELEVANT

Evaporation Rate & Reference: 1.4

Solubility in Water: LIQUID PORTION SOL.

Appearance and Odor: WHITE, MILKY SUSPENSION, MILD ODOR.

Stability

Stability Indicator/Materials to Avoid: YES

DO NOT STORE OR HANDLE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120F.

Stability Condition to Avoid: AVOID HEAT, FLAME AND CONTACT WITH STRONG OXIDIZING AGENTS.

Hazardous Decomposition Products: MAY EMIT CARBON MONOXIDE, CARBON DIOXIDE.

Disposal

Waste Disposal Methods: CONTRACT WITH LICENSED CHEMICAL WASTE DISPOSAL SERVICE. DISCHARGE, TREATMENT OR DISPOSAL IS SUBJECT TO FEDERAL, STATE OR LOCAL LAWS. DO NOT INCINERATE AEROSOL CANS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.