

ISSUE DATE: OCTOBER 29, 1986 DATE UPDATED: MARCH 2, 1988

CHEMICAL NAME: 2-3-EPOXY-1-PROPANOL

GDL

MANUFACTURER NAME/ADDRESS:

DIXIE CHEMICAL COMPANY
635 W. DALLAS AT SHEPHERD
D. BOX 13410

HOUSTON TX 077219

MANUFACTURER PHONE NO:

213-424-3271 EMERG. NO.
800-424-9300 CHEMTREC

CAS OR TRADE NO. 00556-52-5

C

EPA REPORTABLE QTY:

CHEMICAL FAMILY: EPOXIDE

FORMULA: C₃H₆O₂

DOT SHIPPING NAME: OXIDIZER, N.O.S.

DOT HAZARD CLASS: OXIDIZER

SUBSIDIARY RISK:

NOT LISTED

UN I.D. NUMBER:

1429

ALIAS:

GLYCIDOL

GDL

* SECTION 1 PHYSICAL DATA/HAZARDOUS INGRED *

BOILING POINT

@760MM HG

161 DEG. C

VAPOR DENSITY

(AIR=1)

2.15

SOLUBILITY

(WEIGHT% IN WATER)

COMPLETE

FREEZING/MELTING POINT

-54 DEGR. C.

VOLUME & VOLATILE

100%

PH OF SOLUTIONS:

NOT LISTED

VAPOR PRESSURE:

MMHG @ 25 DEGREES C

EVAPORATION RATE:

N/A

SPECIFIC GRAVITY(H₂O=1)

1.114 @ 25 DE C

BULK DENSITY

NOT LISTED

HEAT OF SOLUTION

NOT LISTED

APPEARANCE AND ODOR:

CLEAR AND ODORLESS LIQUID

INGREDIENT:

GLYCIDOL

METHYL GLYCERINE

%

95-99

1-

1.5

INGREDIENT:

DIGLYCIDYL ETHER

CHLORO GLYCERINE

%

0-2

1-.5

* SECTION 2 & 3 FIRE/EXPLOSION HAZARD DATA *

FLASH POINT DEG F
(METHOD USED)
82 DEGREES C TOC

FLAMMABLE LIMITS IN AIR(% BY VOLUME)
LEL: UEL:
UNKNOWN UNKNOWN

EXTINGUISHING MEDIA:
WATER OR CHEMICAL FOAM

SPECIAL FIRE FIGHTING PROCEDURES:

IF POSSIBLE IMMEDIATELY ISOLATE FROM FLAME.

UNUSUAL FIRE AND EXPLOSION INFORMATION: AVOID CONTACT WITH ACIDS, BASIS OR METAL HALIDES.

FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

* SECTION 4.1 HEALTH HAZARD DATA *

PERMISSIBLE EXPOSURE LIMITS:
ACGIH TLV: GLYCIDOL - 25 PPM

OSHA-PEL: GLYCIDOL - 50 PPM

MFRS REC: NOT LISTED

CARCINOGENICITY STATUS (SOURCE):

NATIONAL CANCER INSTITUTE BIOASSAY, RESULTS NOT YET PUBLISHED (NCI-C55549)

TOXICITY DATA: EFFECTS OF OVEREXPOSURE, ETC.

ACUTE OVEREXPOSURE:

INHALATION - MARKED RESPIRATORY IRRITATION.

INGESTION - MODERATE EFFECT. GDL LD50 IN RATS: 0.85 G/KG.

SKIN CONTACT - GDL: READILY ABSORBED THROUGH SKIN.

CHEMICAL BURN.

DGE: IN MICE, NERVOUS EXCITATION FOLLOWED BY DEPRESSION
EYE CONTACT - SEVERE IRRITATION BUT REVERSIBLE

CHRONIC OVEREXPOSURE:

INHALATION - GDL: RESPIRATORY IRRITATION PROVIDES ADEQUATE WARNING

DGE: SEVERE IRRITATION TO LUNGS

INGESTION - GDL: NOT ESTABLISHED, CARCINOGENICITY TESTING IS IN PROGRESS (3)

DGE: SEVERE INGESTION HAZARD

SKIN CONTACT - GDL: NOT ESTABLISHED

DGE: SEVERE HAZARD BY ABSORPTION. LONG-TERM REPEATED APPLICATION CAUSES SKIN CANCER IN RATS (1)

EYE CONTACT - NOT ESTABLISHED -

* SECTION 4.2 EMERGENCY/FIRST AID PROCEDURE *

INHALATION:
NOT LISTED.

EYE CONTACT:
IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.
CONSULT PHYSICIAN, IF NECESSARY.

SKIN CONTACT:
REMOVE CONTAMINATED CLOTHING, WASH AFFECTED AREA WITH SOAP AND WATER FOR AT
LEAST 15 MINUTES. CONSULT A PHYSICIAN, IF NECESSARY.
TREATMENT OF BLISTERS BY PHYSICIAN - DRAW OFF FLUID AVOIDING OTHER PARTS OF
SKIN, COVER WITH 1% SILVER SULFADIAZINE AND STERIL DRESSING.

INGESTION:
NOT LISTED.

NOTES TO PHYSICIAN (INCLUDING ANTIDOTES)
NOT LISTED.

* SECTION 5 REACTIVITY DATA *

STABILITY:
UNSTABLE IF PH (6 OR) 8
CONDITIONS TO AVOID:
NOT LISTED

HAZARDOUS POLYMERIZATION:
MAY OCCUR

CONDITIONS TO AVOID:
STORE AT 30 DEGREES F OR BELOW TO PREVENT POLYMERIZATION

INCOMPATIBILITY (MATERIALS TO AVOID):
AVOID CONTACT WITH STRONG ACIDS OR ALKALIS AND METAL HALIDES SUCH AS

STANNIC AND FERRIC CHLORIDES -

HAZARDOUS DECOMPOSITION PRODUCTS:
GLYCERINE AND/OR POLY GLYCIDOL PRODUCTS.

* SECTION 6 SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:
CONTAIN AND RECOVER. HANDLE WASTE CONSISTENT WITH STATE REGULATIONS.
SMALL QUANTITIES MAY BE CONVERTED TO GLYCERINE WITH LESS THAN 0.1% GLYCIDOL
BY DILUTING INTO A TEN FOLD EXCESS OF WATER, ADJUSTING THE PH TO 4 OR LESS
WITH SULFURIC ACID, AND ALLOWING TO STAND FOR THREE DAYS. A LOWER PH, MORE
WATER, AND HEAT WILL ACCELERATE THE PROCESS.

WASTE DISPOSAL METHOD:
DISPOSE OF BY INCINERATION.

* SECTION 7.1 SPECIAL PROTECTION

RESPIRATORY PROTECTION:
NIOSH APPROVED RESPIRATORY PROTECTION OR ORGANIC VAPORS
IF FIRE - WEAR SELF-CONTAINED BREATHING APPARATUS FOR RESCUE.

* SECTION 7.2 SPECIAL PROTECTION DATA

VENTILATION(TYPE):
LOCAL EXHAUST - USE LOCAL VENTILATION TO REMOVE VAPORS AT THE SOURCE.
GENERAL EXHAUST - DO NOT RELY ON GENERAL EXHAUST.

EYE PROTECTION:
CHEMICAL GOGGLES

GLOVES:
IMPERVIOUS GLOVES

OTHER PROTECTIVE EQUIPMENT:
WEAR PROTECTIVE CLOTHING AS REQUIRED TO PREVENT SKIN CONTACT.

* SECTION 8.1 SPECIAL PRECAUTIONS *

SPECIAL PRECAUTIONS AND COMMENTS:
STORE AT 30 DEGREES F OR BELOW TO PREVENT POLYMERIZATION CONTROLS AIR-BORNE
VAPORS USUALLY NEAR OR LESS THAN DETECTABLE LEVELS OF 1 PPM.
AVOID INHALATION, SKIN AND EYE CONTACT, AND INGESTION.

* SECTION 8.2 REFERENCES *

REFERENCES:
NOT LISTED

* SECTION 8.4 MISC INFORMATION *

MISC INFORMATION:
DOT HAZARD CLASS: OXIDIZER
DOT SHIPPING NAME: OXIDIZER NO. 5 IMCO CLASS 5.1 PG. 5046
SHIPPING CONTAINED: DRUMS - DOT CD. POLY PAK