

336 -07  
EFFECTIVE: 01/04/94

GLYCEROL, ANHYDROUS

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ISSUED: 01/15/94

J.T.BAKER INC., 222 RED SCHOOL LANE, PHILLIPSBURG, NJ 08865

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SECTION I - PRODUCT IDENTIFICATION

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PRODUCT NAME: GLYCEROL, ANHYDROUS  
COMMON SYNONYMS: 1,2,3-PROPANETRIOL; GLYCERIN; GLYCYL ALCOHOL  
CHEMICAL FAMILY: CARBOHYDRATES AND POLYSACCHARIDES  
FORMULA: HOCH2CHOHCH2OH  
FORMULA WT.: 92.10  
CAS NO.: 56-81-5  
NIOSH/RTECS NO.: MA8050000  
PRODUCT USE: LABORATORY REAGENT  
PRODUCT CODES: M778, 2141, 2136, 2135, 4043

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PRECAUTIONARY LABELING

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BAKER SAF-T-DATA\* SYSTEM

HEALTH	-	1	SLIGHT
FLAMMABILITY	-	1	SLIGHT
REACTIVITY	-	0	NONE
CONTACT	-	1	SLIGHT

LABORATORY PROTECTIVE EQUIPMENT

GOGGLES; LAB COAT

U.S. PRECAUTIONARY LABELING

CAUTION

MAY CAUSE IRRITATION. MAY BE HARMFUL IF SWALLOWED.  
DURING USE AVOID CONTACT WITH EYES, SKIN, CLOTHING. WASH THOROUGHLY AFTER  
HANDLING. WHEN NOT IN USE KEEP IN TIGHTLY CLOSED CONTAINER.

INTERNATIONAL LABELING

AVOID CONTACT WITH EYES. AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH  
PLENTY OF WATER. KEEP CONTAINER TIGHTLY CLOSED.

SAF-T-DATA\* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

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SECTION II - COMPONENTS

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COMPONENT	CAS NO.	WEIGHT %	OSHA/PEL	ACGIH/TLV
GLYCEROL, ANHYDROUS	56-81-5	90-100	10 MG/M	10 MG/M

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SECTION III - PHYSICAL DATA

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BOILING POINT: 290 C (554 F)  
(AT 760 MM HG)

VAPOR PRESSURE (MMHG): <0.1  
(20 C)

MELTING POINT: 18 C (64 F)  
(AT 760 MM HG)

VAPOR DENSITY (AIR=1): 3.1

SPECIFIC GRAVITY: 1.26  
(H2O=1)

EVAPORATION RATE: N/A

SOLUBILITY(H2O): COMPLETE (100%)

% VOLATILES BY VOLUME: 0  
(21 C)

P... N/A

ODOR THRESHOLD (P.P.M.): N/A

PHYSICAL STATE: LIQUID

COEFFICIENT WATER/OIL DISTRIBUTION: N/A

APPEARANCE & ODOR: CLEAR, COLORLESS LIQUID. OODORLESS.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT (CLOSED CUP): 198 C (390 F)

NFPA 704M RATING: 1-1-0

AUTOIGNITION TEMPERATURE: N/A

FLAMMABLE LIMITS: UPPER - N/A

LOWER - 0.9 %

FIRE EXTINGUISHING MEDIA  
USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

SPECIAL FIRE-FIGHTING PROCEDURES  
FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA (CONTINUED)  
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UNUSUAL FIRE & EXPLOSION HAZARDS  
CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE OR EXPLOSION.

TOXIC GASES PRODUCED  
CARBON MONOXIDE, CARBON DIOXIDE, ACRROLEIN

EXPLOSION DATA-SENSITIVITY TO MECHANICAL IMPACT  
NONE IDENTIFIED.

EXPLOSION DATA-SENSITIVITY TO STATIC DISCHARGE  
NONE IDENTIFIED.

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SECTION V - HEALTH HAZARD DATA  
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THRESHOLD LIMIT VALUE (TLV/TWA): 10 MG/M

(S) RT-TERM EXPOSURE LIMIT (STEL): NOT ESTABLISHED

PERMISSIBLE EXPOSURE LIMIT (PEL): 10 MG/M

TOXICITY OF COMPONENTS

ORAL RAT LD50 FOR GLYCEROL, ANHYDROUS	12.6 G/KG
INTRAPERITONEAL MOUSE LD50 FOR GLYCEROL, ANHYDROUS	63 MG/KG
SUBCUTANEOUS RAT LD50 FOR GLYCEROL, ANHYDROUS	100 MG/KG
INTRAVENOUS RAT LD50 FOR GLYCEROL, ANHYDROUS	5566 MG/KG
CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO	

CARCINOGENICITY  
NONE IDENTIFIED.

REPRODUCTIVE EFFECTS  
NONE IDENTIFIED.

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SECTION V - HEALTH HAZARD DATA (CONTINUED)  
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EFFECTS OF OVEREXPOSURE

INHALATION: COUGHING, DIFFICULT BREATHING  
SKIN CONTACT: IRRITATION, PROLONGED CONTACT MAY CAUSE DERMATITIS  
EYE CONTACT: IRRITATION  
SKIN ABSORPTION: NONE IDENTIFIED  
INGESTION: HEADACHE, NAUSEA, VOMITING, GASTROINTESTINAL IRRITATION,  
CONVULSIONS, UNCONSCIOUSNESS  
CHRONIC EFFECTS: NONE IDENTIFIED

TARGET ORGANS

EYES, SKIN, MUCOUS MEMBRANES

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

NONE IDENTIFIED

PRIMARY ROUTES OF ENTRY

EYE CONTACT, SKIN CONTACT, INHALATION, INGESTION

EMERGENCY AND FIRST AID PROCEDURES

INGESTION: IF SWALLOWED AND THE PERSON IS CONSCIOUS, IMMEDIATELY GIVE  
LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION.  
INHALATION: IF A PERSON BREATHES IN LARGE AMOUNTS, MOVE THE EXPOSED  
PERSON TO FRESH AIR.  
SKIN CONTACT: IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH PLENTY OF  
SOAP AND WATER FOR AT LEAST 15 MINUTES.  
EYE CONTACT: IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH WITH PLENTY OF  
WATER FOR AT LEAST 15 MINUTES.

SARA/TITLE III HAZARD CATEGORIES AND LISTS

ACUTE: YES CHRONIC: YES FLAMMABILITY: NO PRESSURE: NO REACTIVITY: NO

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SECTION V - HEALTH HAZARD DATA (CONTINUED)  
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EXTREMELY HAZARDOUS SUBSTANCE: NO  
CERCLA HAZARDOUS SUBSTANCE: NO  
SARA 313 TOXIC CHEMICALS: NO  
TSCA INVENTORY: YES

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SECTION VI - REACTIVITY DATA  
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STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR  
CONDITIONS TO AVOID: NONE IDENTIFIED  
INCOMPATIBLES: STRONG OXIDIZING AGENTS, STRONG ACIDS, STRONG BASES  
DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, ACROLEIN

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SECTION VII - SPILL & DISPOSAL PROCEDURES  
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STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE  
WEAR SUITABLE PROTECTIVE CLOTHING. TAKE UP WITH SAND OR OTHER  
NON-COMBUSTIBLE ABSORBENT MATERIAL AND PLACE INTO CONTAINER FOR LATER  
DISPOSAL. FLUSH SPILL AREA WITH WATER.

DISPOSAL PROCEDURE  
DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL  
ENVIRONMENTAL REGULATIONS.

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SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT  
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VENTILATION: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV  
REQUIREMENTS.  
RESPIRATORY PROTECTION: RESPIRATORY PROTECTION REQUIRED IF AIRBORNE  
CONCENTRATION EXCEEDS TLV. AT CONCENTRATIONS ABOVE 10  
MG/M<sup>3</sup>, A DUST/MIST RESPIRATOR IS RECOMMENDED.  
EYE/SKIN PROTECTION: SAFETY GOGGLES, UNIFORM, APRON, PROPER GLOVES ARE  
RECOMMENDED.

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SECTION IX - STORAGE AND HANDLING PRECAUTIONS  
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SAF-T-DATA\* STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

STORAGE REQUIREMENTS

KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STORAGE AREA. ISOLATE FROM INCOMPATIBLE MATERIALS.

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SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION  
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DOMESTIC (D.O.T.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

INTERNATIONAL (I.M.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)  
MARINE POLLUTANTS: NO

AIR (I.C.A.O.)

PROPER SHIPPING NAME: CHEMICALS, N.O.S. (NON-REGULATED)

U.S. CUSTOMS HARMONIZATION NUMBER: 15209000000

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NOTE: WHEN HANDLING LIQUID PRODUCTS, SECONDARY PROTECTIVE CONTAINERS MUST BE USED FOR CARRYING.

-N/A = NOT APPLICABLE, OR NOT AVAILABLE;

N/E = NOT ESTABLISHED.-

THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET MEETS THE REQUIREMENTS OF THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ACT AND REGULATIONS PROMULGATED THEREUNDER (29 CFR 1910.1200 ET. SEQ.) AND THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PERSON TRAINED IN, OR SUPERVISED BY A PERSON TRAINED IN, CHEMICAL HANDLING. THE USER IS RESPONSIBLE FOR DETERMINING THE PRECAUTIONS AND DANGERS OF THIS CHEMICAL FOR HIS OR HER PARTICULAR APPLICATION. DEPENDING ON USAGE, PROTECTIVE CLOTHING INCLUDING EYE AND FACE GUARDS AND RESPIRATORS MUST BE USED TO AVOID CONTACT WITH MATERIAL OR BREATHING CHEMICAL VAPORS/FUMES.

EXPOSURE TO THIS PRODUCT MAY HAVE SERIOUS ADVERSE HEALTH EFFECTS. THIS CHEMICAL MAY INTERACT WITH OTHER SUBSTANCES. SINCE THE POTENTIAL USES

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J.T.BAKER INC. 222 RED SCHOOL LANE, PHILLIPSBURG, NJ 08865  
M A T E R I A L   S A F E T Y   D A T A   S H E E T  
24-HOUR EMERGENCY TELEPHONE -- (908) 859-2151  
CHEMTREC # (800) 424-9300 -- NATIONAL RESPONSE CENTER # (800) 424-8802

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ARE SO VARIED, BAKER CANNOT WARN OF ALL OF THE POTENTIAL DANGERS OF USE OR INTERACTION WITH OTHER CHEMICALS OR MATERIALS. BAKER WARRANTS THAT THE CHEMICAL MEETS THE SPECIFICATIONS SET FORTH ON THE LABEL. BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

THE USER SHOULD RECOGNIZE THAT THIS PRODUCT CAN CAUSE SEVERE INJURY AND EVEN DEATH, ESPECIALLY IF IMPROPERLY HANDLED OR THE KNOWN DANGERS OF USE ARE NOT HEEDED. READ ALL PRECAUTIONARY INFORMATION. AS NEW DOCUMENTED GENERAL SAFETY INFORMATION BECOMES AVAILABLE, BAKER WILL PERIODICALLY REVISE THIS MATERIAL SAFETY DATA SHEET.

NOTE: CHEMTREC, CANUTEC, AND NATIONAL RESPONSE CENTER EMERGENCY TELEPHONE NUMBERS ARE TO BE USED ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS. ALL NON-EMERGENCY QUESTIONS SHOULD BE DIRECTED TO CUSTOMER SERVICE (1-800-JTBAKER) FOR ASSISTANCE.

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/ APPROVED BY QUALITY ASSURANCE DEPARTMENT.

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