

MALLINCKRODT BAKER, INC. (FORMERLY J.T. BAKER INC) -- 2136-03, GLYCEROL --  
6810-01-476-7258

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

Product ID:2136-03, GLYCEROL

MSDS Date:02/25/1999

FSC:6810

NIIN:01-476-7258

Status Code:A

MSDS Number: CLLGS

=== Responsible Party ===

Company Name:MALLINCKRODT BAKER, INC. (FORMERLY J.T. BAKER INC)

Address:222 RED SCHOOL LANE

City:PHILLIPSBURG

State:NJ

ZIP:08865-2219

C

Country:US

Info Phone Num:800-582-2537

Emergency Phone Num:908-859-2151

Resp. Party Other MSDS Num.:G4774

Chemtec Ind/Phone:(800)424-9300

CAGE:70829

=== Contractor Identification ===

Company Name:DOE & INGALLS OF NORTH CAROLINA

Address:607 ELLIS RD BLDG 54

Box:UNKNOW

City:DURHAM

State:NC

ZIP:27703

Country:US

Phone:919-598-1986; FAX:-1707

Contract Num:SP0450-01-M-ZG43

CAGE:0BEF1

Company Name:MALLINCKRODT BAKER, INC.

Address:222 RED SCHOOL LANE

Box:City:PHILLIPSBURG

State:NJ

ZIP:08865

Country:US

Phone:800-582-2537  
CAGE:70829

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Composition/Information on Ingredients  
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Ingred Name:GLYCERIN  
CAS:56-81-5  
RTECS #:MA8050000  
Minumum % Wt:90.  
Maxumum % Wt:100.  
OSHA PEL:15 MG/M3 T. DUST  
ACGIH TLV:10 MG/M3

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Hazards Identification  
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LD50 LC50 Mixture:ORAL,RAT, LD50: 12,600 MG/KG  
Reports of Carcinogenicity:NTP:NO IARC:NO  
Health Hazards Acute and Chronic:INHALATION: DUE TO LOW VAPOR PRESSURE,  
INHALATION OF THE VAPORS AT R  
OOM TEMPERATURE IS UNLIKELY.  
INHALATION OF MIST MAY CAUSE IRRITATION OF RESPIRATORY TRACT.  
INGESTION: LOW TOXICITY. MAY CAUSE NAUSEA , HEADACHE, DIARRHEA.  
SKIN CONTACT: MAY CAUSE IRRITATION. EYE CONTACT: MAY CAUSE  
IRRITATION. CHRONIC EXPOSURE: MAY CAUSE KIDNEY INJURY.  
Explanation of Carcinogenicity:GLYCERIN: NTP CARCINOGEN: KNOWN: NO;  
ANTICIPATED: NO. IARC CATEGORY: NONE.  
Effects of Overexposure:INHALTION: IRRITATION OF RESPIRATORY TRACT.  
INGESTION: NAUSEA, HEADACHE, DIAR  
RHEA. SKIN CONTACT: IRRITATION.  
EYE CONTACT: IRRITATION. CHRONIC: KIDNEY INJURY.  
Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN  
DISORDERS OR EYE PROBLEMS OR IMPAIRED LIVER OR KIDNEY FUNCTION MAY  
BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

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First Aid Measures  
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First Aid:INHALATION: REMOVE TO FRESH AIR. GET MEDICAL ATTENTION FOR  
ANY BREATHING DIFFICULTY. INGESTION: INDUCE VOMITING IMMEDIATELY AS  
DIRE  
CTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN  
UNCONSC IOUS PERSON. GET MEDICAL ATTENTION. SKIN CONTACT: FLUSH  
WITH WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES.  
WASH CLOTHING AND THOROUGHLY CLEAN SHOES BEFORE REUSE. GET MEDICAL  
ATTENTIO N IF IRRITATION DEVELOPS. EYE CONTACT: FLUSH WITH WATER  
FOR 15 MINUTES, LIFTING UPPER AND LOWER EYELIDS OCCASIONALLY. GET  
MEDICAL ATTENTION IF IRRITATION PERSISTS.

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Fire Fighting Mea  
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sures =====

Flash Point Method:CC

Flash Point:=199.C, 390.2F

Autoignition Temp:=370.C, 698.F

Extinguishing Media:USE MEDIA SUITABLE FOR SURROUNDING FIRE. WATER SPRAY MAY BE USED TO EXTINGUISH SURROUNDING FIRE AND COOL EXPOSED CONTAINERS. WATER SPRAY WILL ALSO REDUCE FUME AND IRRITANT GASES.

Fire Fighting Procedures:IN THE EVENT OF A FIRE, WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESS

URE DEMAND OR OTHER POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:SLIGHT FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. ABOVE FLASH POINT, VAPOR-AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS.

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

Spill Release Procedures:VENTILATE AREA OF LEAK OR SPILL. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. CONTAIN AND RECOVER LIQUID WHEN POSSIBLE. COLLECT LIQUID IN AN APPROPRIATE CONTAINER OR ABSORB WITH

AN INERT MATERIAL ( VERMICULITE, SAND, EARTH), AND PLACE IN A CHEMICAL WASTE CONTAINER. DO NOT USE COMBUSTIBLE MATERIALS, SUCH AS SAW DUST. DO NOT FLUSH TO SEWER.

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

Handling and Storage Precautions:KEEP IN TIGHTLY CLOSED CONTAINER; STORED IN A COOL, DRY, VENTILATED AREA. PROTECT AGAINST PHYSICAL DAMAGE. ISOLATE FROM INCOMPATIBLE SUBSTANCES. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY SINCE THEY

RETAIN PRODUCT RESIDUES; OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

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

Respiratory Protection:IF EXPOSURE LIMITS EXCEEDED, WEAR NIOSH APPROVED PERSONAL RESPIRATOR. PLEASE NOTE THAT "N" FILTERS ARE NOT RECOMMENDED FOR THIS MATERIAL. FOR EMERGENCIES OR INSTANCES WHERE EXPOSURE LEVELS ARE NOT KNO WN, USE A FULL-FACEPIECE POSITIVE-PRESSURE, AIR-SUPPLIED RESPIRATOR. WARNING: AIR-PURIFYING

RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENT ATMOSPHERES.  
Ventilation:LOCAL AND/OR GENERAL EXHAUST RECOMMENDED TO KEEP EXPOSURES  
BELOW EXPOSURE LIMITS. LOCALEXHAUST VENTILATION IS GENERALLY  
PREFERRED.

Protective Gloves:WEAR PROTECTIVE GLOVES AND CLEAN BODY-COVERING  
CLOTHING.

Eye Protection:USE CHEMICAL SAFETY GOGGLES.

Other Protective Equipment:WEAR CLEAN BODY COVERING CLOTHING. MAINTAIN  
EYE WASH FOUNTAIN AND QUICK DRENCH FACILITIES IN WORK AREA.

Supplemental Safety and  
Health

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

HCC:V5

Boiling Pt:=290.C, 554.F

Melt/Freeze Pt:=18.C, 64.4F

Decomp Temp:>290.C, 554.F

Vapor Pres:0.0025 MM HG @50C

Vapor Density:3.17(AIR=1

Spec Gravity:1.26

pH:NEUTRAL(LITMUS)

Evaporation Rate & Reference:NO INFORMATION FOUND.

Solubility in Water:MISCIBLE

Appearance and Odor:CLEAR OILY LIQUID; ODORLESS.

Percent Volatiles by Volume:0 AT 70F

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

Stab

ility Indicator/Materials to Avoid:YES

STRONG OXIDIZERS. CAN REACT VIOLENTLY WITH ACETIC ANHYDRIDE, CALCIUM  
OXYCHLORIDE, CHROMIUM OXIDES, AND ALKALI METAL HYDRIDES.

Stability Condition to Avoid:STABLE UNDER ORDINARY CONDITIONS OF USE  
AND STORAGE. AVOID HEAT, FLAMES, IGNITION SOURCES, AND  
INCOMPATIBLES.

Hazardous Decomposition Products:TOXIC GASES AND VAPORS MAY BE RELEASED  
IF INVOLVED IN A FIRE. GLYCERINE DECOMPOSES UPON HEATING ABOVE  
290C, FORMING CORROSIVE GAS (ACROLEIN).

C

onditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:ORAL, RAT, LD50:12,600 MG/KG. INVESTIGATED AS A MUTAGEN, REPRODUCTIVE EFFECTOR. CANCER LISTS: INGREDIENT: GLYCERIN (56-81-5) :NTP CARCINOGEN: KNOWN: NO; ANTICIPATED: NO. IARC CATEGORY: NONE. MANUFACT URER'S HAZARD RATING: HEALTH: 1 (SLIGHT); FLAMMABILITY: 0 (NONE); REACTIVITY: 0 (NONE); CONTACT RATING: 1 (SLIGHT). NFPA RATINGS: HEALTH: 1; FLAMMABILITY: 1; REACTIVITY: 0.

===== Ecological Information =====

Ecological:ENVIRONMENTAL FATE: WHEN RELEASED INTO SOIL, PRODUCT EXPECTED TO READLY BIODEGRADE. WHEN RELEASED INTO SOIL, PRODUCT IS NOT EXPECTED TO EVAPORATE SIGNIFICANTLY. WHEN RELEASED INTO WATER, PRODUCT EXPECTED TO READLY BIODEGRADE. PRODUCT IS NOT EXPECTED TO SIGNIFICANTLY BIOACCUMULATE. WHEN RELEASED INTO AIR, PRODUCT MAY BE MODERATELY DEGRADED BY REACTION WITH PHOTOCHEMICALLY PRODUCED HYDROXYL RADICALS. WHEN RELEASED INTO AIR, PRODUCT MAY BE REMOVED FROM THE ATMOSPHERE TO A MODERATE EXTENT BY WET DEPOSITION. ENVIRONMENTAL TOXICITY: THIS MATERIAL IS NOT EXPECTED TO BE TOXIC TO AQUATIC LIFE

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

Waste Disposal Methods:WHAT CANNOT BE SAVED OR RECYCLED SHOULD BE MANAGED IN AN APPROVED WASTE DISPOSAL FACILITY. PROCESSING, USE, OR CONTAMINATION OF PRODUCT MAY CHANGE WASTE MANAGEMENT OPTIONS. STATE AND LOCAL DISPOSAL REGULATIONS MAY DIFFER FROM FEDERAL REGULATIONS. DISPOSE OF CONTAINER AND UNUSED CONTENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.

===== MSDS Transport Information =====

Transport Information:NOT REGULATED.

===== Regulatory Information =====

SARA Title III Information:SARA 311 / 312: ACUTE: YES; CHRONIC: YES; FIRE: NO; PRESSURE: NO; REACT

IVITY: NO (PURE / LIQUID).

Federal Regulatory Information:CHEMICAL INVENTORY STATUS, PART

1:GLYCERIN (56-81-5): TSCA: YES; EC: YES; JAPAN: YES; AUSTRALIA:

YES. CHEMICAL INVENTORY STATUS, PART 2: GLYCERIN (56-81-5): KOREA:

YES; CANADA DSL: YES; CANADA NDSL:NO ; PHIL.: YES. FEDERAL, STATE &

INTERNATIONAL REGULATIONS, PART 1: GLYCERIN (56-81-5): SARA 302:

RQ: NO; TPQ: NO. SARA 313: LIST: NO; CHEMICAL CATELOG: NO. FEDERAL,

STATE & INTERNATIONAL REGULATIONS, P ART 2: GLYCERIN

(56-81-5):

CERCLA: NO; RCLA 261.33: NO; TSCA B(D): NO. CHEMICAL WEAPONS

CONVENTION: NO; TSCA 12(B): NO; CDTA: NO.

State Regulatory Information:REGULATORY INFORMATION: AUSTRALIAN HAZCHEM

CODE: NO INFORMATION FOUND. POISON SCHEDULE: NO INFORMATION FOUND.

WHMIS: THIS MSDS HAS BEEN PREPARED ACCORDING TO THE HAZARD CRITERIA

OF THE CONTROLLED PROD UCTS REGULATIONS (CPR) AND THE MSDS CONTAINS

ALL OF THE INFORMATION REQUIRED BY THE CPR.

===== Other Informatio

n =====

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