MALLINCKRODT BAKER, INC -- ACETIC ACID GLACIAL, V194 \_\_\_\_\_ MSDS Safety Information \_\_\_\_\_ FSC: 6810 MSDS Date: 09/08/1997 MSDS Num: CHKTR LIIN: 00N086671 Product ID: ACETIC ACID GLACIAL, V194 MFN: 01 Responsible Party Cage: H0851 Name: MALLINCKRODT BAKER, INC Address: 222 RED SCHOOL LANE City: PHILLIPSBURG NJ 08865 Info Phone Number: 800-582-2537 Emergency Phone Number: 908-859-2151;800-424-9300(CHEMTREC) Published: Y \_\_\_\_\_ Contractor Summary \_\_\_\_\_ Cage: H0851 Name: MALLINCKRODT BAKER INC Address: 222 RED SCHOOL LANE City: PHILLIPSBURG NJ 08865 Phone: 800-582-2537 Cage: 70829 Name: MALLINCKRODT BAKER, INC. Address: 222 RED SCHOOL LANE City: PHILLIPSBURG NJ 08865 Phone: 800-582-2537 \_\_\_\_\_ Ingredients \_\_\_\_\_ Cas: 64-19-7 RTECS #: AF1225000 Name: ACETIC ACID (CERCLA) % Wt: 100 OSHA PEL: 10 PPM ACGIH TLV: 10 PPM/15 STEL EPA Rpt Qty: 5000 LBS DOT Rpt Qty: 5000 LBS \_\_\_\_\_ Name: EFTS OF OVEREXP: CHRONIC: REPEATED/PROLONGED EXPOS MAY CAUSE DARKENING OF SKIN, EROSION OF EXPOSED FRONT TEETH,

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Name: ING 2: & CHRONIC INFLAMMATION OF THE NOSE, THROAT, AND BRONCHIAL

TUBES.

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Name: FIRST AID PROC: EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, LIFTING LOWER AND UPPER

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Name: ING 4: EYELIDS OCCASIONALLY. GET MEDICAL ATTENTION IMMEDIATELY.

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Name: SPILL PROC: & PLACE IN CHEM WASTE CONTR. USE NON-SPKG TOOLS & EQUIP. DO NOT USE COMBUST MATLS, SUCH AS SAWDUST.

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Name: ING 6: DO NOT FLUSH TO SEWER! US REGS (CERCLA) REQUIRE REPORTING SPILLS & RELEASES TO SOIL, WATER & AIR IN

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Name: ING 7: EXCESS OF REPORTABLE QTYS. THE TOLL FREE NUMBER FOR US COAST GUARD NATIONAL RESPONSE CENTER IS (800) 424-8802.

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Name: WASTE DISP METH: DISPOSE OF CONTAINER AND UNUSED PRODUCT IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS.

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Name: OTHER PREC: STORE ABOVE 63F (17C). CONTAINERS MAY BE HAZARDOUS WHEN EMPTY SINCE THEY RETAIN PRODUCT RESIDUES

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Name: ING 10: (VAPORS, LIQUID); OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

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Name: RESP PROT: EXPOSURE LEVELS ARE NOT KNOWN, USE A FULL-FACEPIECE POSITIVE-PRESSURE, AIR-SUPPLIED RESPIRATOR.

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Name: ING 12: WARNING: AIR PURIFYING RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENCY ATMOSPHERES.

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- Name: VENT: PREF BECAUSE IT CAN CTL EMISSIONS OF CONTAMINANT AT ITS SOURCE, PREVENTING DISPERSION OF IT INTO GEN WORK
- Name: ING 14: AREA. PLEASE REFER TO ACGIH DOCUMENT, INDUS VENT, A MANUAL OF REC PRACTICES, MOST RECENT EDITION, FOR DETAILS.

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Health Hazards Data

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LD50 LC50 Mixture: LD50 (ORAL RAT): 3310 MG/KG.

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: YES

Carcinogenicity Inds - NTP: NO

IARC: NO

- OSHA: NO
- Effects of Exposure: ACUTE: INHAL: CONCENTRATED VAPS MAY CAUSE SERIOUS DMG TO LINING OF NOSE, THROAT, & LUNGS. BRTHG DFCLTYS MAY OCCUR. NEITHER ODOR

NOR DEGREE OF IRRIT ARE ADEQ TO INDICATE VAP CONC. INGEST: CAN CAUSE SEV INJURY LEADING TO DEATH. SYMPS INCL SORE THROAT, VOMIT, & DIARR. INGEST OF AS LITTLE AS 1.0 ML HAS (EFTS OF OVEREXP)

Explanation Of Carcinogenicity: NOT RELEVANT.

- Signs And Symptions Of Overexposure: HLTH HAZ: RESULTED IN PERFORATION OF ESOPHAGUS. SKIN: CONCENTRATED SOLUTION MAY CAUSE SERIOUS DMG. EFTS MAY INCL REDNESS, PAIN, BURNS. HIGH VAP CONCS MAY CAUSE SENSIT. EYES: CONCENTRATED SOLUTIONS MAY CAUSE SEV DMG FOLLOWED BY LOSS OF SIGHT. EXPOS TO VAP MAY CAUSE INTENSE WATERING & IRRIT.
- Medical Cond Aggravated By Exposure: PERSONS WITH PREEXISTING SKIN DISORDERS OR EYE PROBLEMS, OR IMPAIRED RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.
- First Aid: INHAL: REMOVE TO FRESH AIR. IF NOT BRTHG, GIVE ARTIFICIAL RESP. IF BRTHG IS DIFFICULT, GIVE OXYGEN. CALL MD. INGEST: DO NOT INDUCE VOMIT! GIVE LARGE QUANTITIES OF WATER/MILK IF AVAILABLE. NEVER GIVE A NYTHING BY MOUTH TO AN UNCON PERSON. GET MED ATTN IMMED. SKIN: IMMED FLUSH W/PLENTY OF WATER FOR AT LEAST 15 MIN WHILE REMOVING CONTAM CLTHG & SHOES. WASH CLTHG BEFORE REUSE. CALL MD.

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Handling and Disposal

- Spill Release Procedures: VENT AREA. REMOVE ALL SOURCES OF IGNIT. WEAR APPROP PERS PROT EQUIP. ISOLATE HAZ AREA. KEEP UNNEC & UNPROT PERS FROM ENTERING. USE WATER SPRAY TO DILUTE SPILL TO NON-FLAM MIXT. CONTAIN & RECOVER W/INE RT MATL (VERMICULITE, DRY SAND, EARTH),
- Neutralizing Agent: JT BAKER NEUTRASORB(TM) OR TEAM(M) 'LOW NA+' ACID NEUTRALIZERS ARE RECOMMENDED.
- Waste Disposal Methods: WHATEVER CANNOT BE SAVED FOR RECOVERY/RECYCLING SHOULD BE HANDLED AS HAZ WASTE & SENT TO RCRA APPRVD WASTE FACILITY. PROCESSING, USE/CONTAM OF THIS PROD MAY CHANGE WASTE MANAGEMENT OPTIONS. STATE & LO C DISP REGS MAY DIFFER FROM FED REGS.
- Handling And Storage Precautions: PROTECT AGAINST PHYSICAL DMG. STORE IN COOL, DRY, WELL-VENTD LOCATION, AWAY FROM ANY AREA WHERE FIRE HAZ MAY BE ACUTE. OUTSIDE/DETACHED STOR IS PREF.
- Other Precautions: SEPARATE FROM INCOMPATIBLES. CONTRS SHOULD BE BONDED & GROUNDED FOR TRANSFERS TO AVOID STATIC SPARKS. STOR & USE AREAS SHOULD BE NO SMOKING AREAS. USE NON-SPARKING TYPE TOOLS & EQUIP, INCL EXPLO-PROOF VENT. PROTECT FROM FREEZING.

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Fire and Explosion Hazard Information

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Flash Point Method: CC

Flash Point Text: 104F,40C

Lower Limits: 4.0%

Upper Limits: 16.0%

- Extinguishing Media: WATER, DRY CHEMICAL, FOAM OR CARBON DIOXIDE. WATER SPRAY MAY BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL.
- Fire Fighting Procedures: WEAR NIOSH APPRVD SCBA & FULL PROT EQUIP (FP N).

WATER MAY BE USED TO FLUSH SPILLS AWAY FROM EXPOS & TO DILUTE SPILLS TO NON-FLAM MIXTS. WATER-DILUTED (SUP DAT) Unusual Fire/Explosion Hazard: ABOVE FLASH POINT, VAP-AIR MIXTS ARE EXPLO W/IN FLAM LIMS NOTED ABOVE. VAPS CAN FLOW ALONG SURFS TO DISTANT IGNIT SOURCE & FLASH BACK. CONT W/STRONG (SUP DAT) \_\_\_\_\_\_ Control Measures \_\_\_\_\_\_ Respiratory Protection: IF EXPOS LIM IS EXCEEDED, A NIOSH APPRVD FULL FACEPIECE RESP W/ORG VAP CARTRIDGE MAY BE WORN UP TO 50 TIMES EXPOS LIM/MAX USE CONC SPECIFIED BY APPROP REGULATORY AGENCY/RESP SUPPLIER, WHICHEVER IS LOW EST. FOR EMER/INSTANCES WHERE Ventilation: A SYS OF LOC &/OR GEN EXHST IS REC TO KEEP EMPLOYEE EXPOS BELOW AIRBORNE EXPOS LIMITS. LOC EXHST VENT IS GEN Protective Gloves: IMPERVIOUS GLOVES. Eye Protection: ANSI APPRVD CHEM WORKERS GOGGLES (FP N). Other Protective Equipment: ANSI APPRVD EMER EYEWASH & DELUGE SHOWER (FP N). WEAR IMPERVIOUS PROT CLOTHING, INCL BOOTS, LAB COAT, APRON/COVERALLS. Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER. Supplemental Safety and Health: PH: 2.4 (1.0M SOLN). FIRE FIGHT PROC: ACID CAN REACT W/METALS TO FORM HYDROGEN GAS. EXPLO HAZ: OXIDIZERS MAY CAUSE FIRE. REACTS W/MOST METALS TO PRDCE HYDROGEN GAS, WHICH CAN FORM EXPLO MIXT W/AIR. FL AM LIQ & VAP! CNDTNS TO AVOID: FREEZINGWHICH MAY CAUSE CONTR TO BURST. MATLS TO AVOID: HYDROXIDES, OXIDES, PHOSPHATES. \_\_\_\_\_\_ Physical/Chemical Properties \_\_\_\_\_ B.P. Text: 244F,118C M.P/F.P Text: 63.0F,17.2C Vapor Pres: 11 @ 20C Vapor Density: 2.1 PH: SUPDAT Evaporation Rate & Reference: 0.97 (BUTYL ACETATE=1) Solubility in Water: INFINITELY SOLUBLE Appearance and Odor: CLEAR, COLORLESS LIQUID, WITH STRONG, VINEGAR-LIKE ODOR Percent Volatiles by Volume: 100 \_\_\_\_\_ Reactivity Data \_\_\_\_\_ Stability Indicator: YES Stability Condition To Avoid: HEAT, SUNLIGHT, WATER, FLAME, IGNIT SOURCES, FREEZING, INCOMPATIBLES. ACETIC ACID CONTRACTS SLIGHTLY UPON (SUP DAT) Materials To Avoid: OXIDIZERS, MOST METALS, CHROMIC ACID, SODIUM PEROXIDE, NITRIC ACID, STRONG CAUSTICS, HEAT, FLAME, CARBONATES, (SUP DAT) Hazardous Decomposition Products: CARBON DIOXIDE AND CARBON MONOXIDE MAY FORM WHEN HEATED TO DECOMPOSITION. MAY ALSO RELEASE TOXIC AND IRRITATING VAPORS. Hazardous Polymerization Indicator: NO Conditions To Avoid Polymerization: NOT RELEVANT.

\_\_\_\_\_ Toxicological Information \_\_\_\_\_\_ \_\_\_\_\_\_ Ecological Information \_\_\_\_\_\_ \_\_\_\_\_ MSDS Transport Information \_\_\_\_\_\_ \_\_\_\_\_\_ Regulatory Information \_\_\_\_\_\_ \_\_\_\_\_\_ Other Information \_\_\_\_\_\_ \_\_\_\_\_\_ Transportation Information \_\_\_\_\_ Responsible Party Cage: H0851 Trans ID NO: 43047 Product ID: ACETIC ACID GLACIAL, V194 MSDS Prepared Date: 09/08/1997 Review Date: 06/09/1998 MFN: 1 Multiple KIT Number: 0 Review IND: Y \_\_\_\_\_ Detail DOT Information \_\_\_\_\_ DOT PSN Code: XXX \_\_\_\_\_ Detail IMO Information \_\_\_\_\_ IMO PSN Code: XXX \_\_\_\_\_\_ Detail IATA Information \_\_\_\_\_ IATA PSN Code: XXX \_\_\_\_\_ Detail AFI Information \_\_\_\_\_ AFI PSN Code: XXX \_\_\_\_\_\_ HAZCOM Label \_\_\_\_\_ Product ID: ACETIC ACID GLACIAL, V194 Cage: H0851 Assigned IND: Y

Company Name: MALLINCKRODT BAKER INC Street: 222 RED SCHOOL LANE City: PHILLIPSBURG NJ Zipcode: 08865 Health Emergency Phone: 908-859-2151;800-424-9300(CHEMTREC) Label Required IND: Y Date Of Label Review: 06/09/1998 Status Code: C Label Date: 06/09/1998 Origination Chronic Hazard IND: Y Eye Protection IND: YES Skin Protection IND: YES Signal Word: DANGER Respiratory Protection IND: YES Health Hazard: Severe Contact Hazard: Moderate Fire Hazard: Moderate Reactivity Hazard: None Hazard And Precautions: COMBUSTIBLE. ACUTE: INHAL: CONCENTRATED VAPORS MAY

CAUSE SERIOUS DAMAGE TO LINING OF NOSE, THROAT, & LUNGS. BREATHING DIFFICULTIES MAY OCCUR. NEITHER ODOR NOT DEGREE OF IRRIT ARE ADEQUATE TO INDICATE VAPOR CONCENTRATION. INGEST: CAN CAUSE SEVERE INJURY LEADING TO DEATH. SYMPS INCLUDE SORE THROAT, VOMIT, & DIARR. INGEST OF AS LITTLE AS 1.0 ML HAS RESULTED IN PERFORATION OF ESOPHAGUS. SKIN: MAY CAUS E SERIOUS DAMAGE, REDNESS, PAIN, BURNS. MAY CAUSE SENSITIZATION. EYES: SEVERE DAMAGE, LOSS OF SIGHT, WATERING & IRRIT. CHRONIC: DARKENING OF SKIN, EROSION OF EXPOSED FRONT TEETH, INFLAMMATION OF NOSE, THROAT & BRONCHIAL TUBES. SKIN SENSITIZATION.

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