

FISHER SCIENTIFIC, CHEMICAL DIV. -- A399-500 1-BUTANOL -- 6810-00-939-5390

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Product Identification
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Product ID:A399-500 1-BUTANOL

MSDS Date:09/02/1997

FSC:6810

NIIN:00-939-5390

MSDS Number: CHHPS

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC, CHEMICAL DIV.

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Country:US

Info Phone Num:201-796-7100 OR 201-796-7523

Emergency

Phone Num:201-796-7100/800-424-9300(CHEMTREC)

CAGE:1B464

=== Contractor Identification ===

Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV

Address:1 REAGENT LANE

Box:City:FAIRLAWN

State:NJ

ZIP:07410-2802

Country:US

Phone:201-796-7100

CAGE:1B464

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Composition/Information on Ingredients
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Ingred Name:N-BUTYL ALCOHOL (SARA 313) (CERCLA)

CAS:71-36-3

RTECS #:EO1400000

Fraction by Wt: >99%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:100 PPM

ACGIH TLV:S, C 50 PPM; 9596

EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL,RAT:LD50=790MG/KG.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EYE:MAY CAUSE MODERATE IRRIT.MAY
RESULT IN CORNEAL INJURY VAP MAY CAUSE IRRIT.SKIN:CAUSES IRRIT.MAY
BE ABSORBED THRU SKIN IN HARMFUL AMTS.PROL &/OR RESP CONTACT MAY
CAUSE DEFATTING OF SKIN,D
ERM.INGEST :MAY CAUSE SYST TOXICITY
W/ACIDOSIS.MAYCAUSE LIV/KID DMG.MAY CAUSE CNS
DEPRESS(HEAD,DIZZ,DROWS,NAU.ADV STAGE-(SIGN/SYM)
Explanation of Carcinogenicity:PER MSDS:CARCINOGENICITY:NOT LISTED BY
ACGIH,IARC,NIOSH,NTP,OSHA.
Effects of Overexposure:HEALTH:COLLAPSE,UNCONSC,COMA,DEATH-RESP
FAILURE).MAY BE HARMFUL.INHAL:HI CONC MAY CAUSE CNS
EFFECTS(HEAD,DIZZ,UNCONSC,COMA).CAUSE RESP TRACT IRRIT,LIVER/KID
DMG.CHRONIC:REP EYE EXPO CAUSE VISUAL ABNOR MALITIES INCLUDE BLUR
VISION,PHOTOSENSITIVITY.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.
TARGET ORGANS:KIDNEYS,CENTRAL NERVOUS SYSTEM,LIVER.

===== First Aid Measures =====

First Aid:EYE:IMMED FLUSH W/LOTS OF H2O @LEAST 15MIS,LIFT LIDS.GET MED
AID.DONT ALLOW TO RUB OR KEEP EYES CLSD.SKIN:FLUSH W/LOTS OF
SOAP/H2O @LEAST 15MINS.REMOVE CONTAM CLOTH/SHOE.IRRIT DVLPS/PERSIST
GET EMD AI D.INGEST:CONSC/ALERT GIVE 2-4CUP OF MILK/H2O.NEVER GIV
E
ANYTHING BY MOUTH IF UNCONSC.GETE MED AID IMMED.INHAL:MOVE TO FRESH
AIR.NOT BREATH GIVE ART RESP;BREATH DIFFI GIVE OXY.GET MED
AID.(SUPPLE)

===== 98 =====

Autoignition Temp:=365.C, 689.F
Autoignition Temp Text:689F
Lower Limits:1.4
Upper Limits:11.2
Extinguishing Media:SM:DRY CHEM,CO2.H2OSPRAY,ALCO-RESIST
FOAM.LG:H2OSPRAY,FOG,ALCO-RESIST FOAM.USE H2OSPRAY TO COOL
FIRE-EXPO CNTNR.(SUPPLE)
Fire Fighting Procedures:WEAR S

CBA IN PRESSURE-DEMAND

MSHA/NIOSH(APPROV/EQUIV),FULL PROT GEAR.COOL FIRE-EXPO CNTNR W/H2OSPARY.H2O MAY BE INEFFECTIVE;MATL LIGHTER THAN H2O FIRE MAY(SUPP)

Unusual Fire/Explosion Hazard:WARNING!FLAMM LIQ.CAN RELEASE VAP FORM EXPLO MIX @TEMP >FLASHPT.VAP MAY FORM EXPLO MIX W/AIR.VAP TRAVEL TO IGN SOURCE-FLASHBK.

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

Spill Release Procedures:USE PROPER PPE AS INDICATED IN MSDS.AVOID RUNOFF INTO STORM SEWERS/DITCHES WHICH LEAD TO WATERWAYS.REMOVE ALL SOURCES OF IGNITION.ABOSRB SPILL USING ABSORBENT,NON-COMBUSTIBLE MATL SUCH AS EARTH,SAND, VERMICULITE.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:USE ONLY IN WELL VENTILATED AREA.GROUND/BOND CNTNR WHEN TRANSF MATL.USE SPARK-PROOF TOOLS/EXPLO PROOF EQMPT.EMPTY CNTNR RETAIN RESIDUE-CAN BE DANGEROUS.
Other Precautions:AVOID CONTACT W/HEAT/SPARKS/FLAME.AVOID INGEST/INHAL.DONT PRESSURIZE,CUT,WELD,BRAZE,SOLDER,DRILL,GRIND,EXPOSE EMPTY CNTNR TO HEAT/SPARK/OPN FLAME.STORE IN TIGHTLY CLSD CNTNR,IN COOL DRY WELL-VENTI AREA AWAY FROM INCOMPAT SUBSTANCES.

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

Respiratory Protection:FOLLOW OSHA RESPIRATOR REGULATIONS FOUND IN 29CFR1910.134.ALWAYS USE NIOSH-APPROVED RESPIRATOR WHEN NECESSARY.
Ventilation:USE ADEQUATE GENERAL/LOCAL EXHAUST VENTILATION TO KEEP

AIRBORNE CONCENTRATIONS BELOW PERMISSIBLE EXPO LIMITS.

Protective Gloves:PROTECTIVE GLOVES

Eye Protection:PROTECTIVE EYEGLASS,CHEM SAF GOGG,FACE PROTECT

Other Protective Equipment:WEAR APPROP PROT CLOTH TO PREVENT SKIN EXPO.EYES-29CFR1910.133.

Work Hygienic Practices:WASH WELL AFT HNDLG.REMOVE CONTAM CLOTH;WASH BEF REUSE.

Supplemental Safety and Health

1ST AID:DR NOTE:TREAT SYMPT/SUPPORT. FIREFIGHT:BE SPREAD BY USE OF H2O.VAP HEAVY THAN AIR;CAN SPREAD ALONG GROUND/COLLECT IN LOW/CONF

AREAS. EXT MEDIA:COOL CNTNR W/FLOOD QUANT OF H2O TIL WELL AFT FIRE
OU T. DISPO:CONSISTENT W/FED/STATE/LOC REGS.RCRA WASTE#U031(IGN
WASTE).BAN FRM LAND DISPO PER RCRA.SARA 313,RQ=5000LBS.

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

HCC:F3

Boiling Pt:=117.2C, 243.F

Melt/Freeze Pt:=-90.C, -130.F

Decomp Temp:Decomp Text:N/AVAI

Vapor Pres:6.5

Vapor Density:2.6

Spec Gravity:0.8

pH:N/AVAI

Viscosity:2.94 CP @20C

Evaporation Rate & Reference:0.46, BUTYL ACETATE=1

So

lubility in Water:9.1ML/10ML H2O,APPRE

Appearance and Odor:COLOURLESS LIQUID, SWEETISH ODOR,PUTRID
ODOR,BANANA-LIKE

Percent Volatiles by Volume:NP

Corrosion Rate:NP

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

Stability Indicator/Materials to Avoid:YES

ALUMINUM,CHROMIUM TRIOXIDE,ORGANIC PEROXIDES,STRONG OXIDIZERS.

Stability Condition to Avoid:HIGH TEMPERATURES, INCOMPATIBLE

MATLS,IGNITION SOURCES.

Hazardous Decomposition Products:CAROBN MONOXIDE,CARBON DIOXIDE.

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

Waste Disposal Methods:WHEN RELEASE TO SOIL EXPECTED TO
BIODEGRADE,LEACH TO GROUND H2O OR VOLATILIZE;IN H2O-BIODEGRADE OR
VOLATILIZE.BIOCONC POT PREDICTED TO BE LOW.SUBST MODERATELY-HI
MOBILE.SUBST RXS W/AIR W/HYDROXYL RADI
CAL(1/2LIFE-2.3DAYS).DISPOSE OF IN MANNER(SUPPE)

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