



chemists helping chemists in research & industry

aldrich chemical co.

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DATE: 03/10/87
CUST # 938609 P.O. #

M A T E R I A L S A F E T Y D A T A S H E E T

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IDENTIFICATION

PRODUCT # B8590-0
CAS # 71-36-3

NAME: 1-BUTANOL, 99%

TOXICITY HAZARDS

RTECS # E01400000

BUTYL ALCOHOL

IRRITATION DATA

EYE-HMN 50 PPM
SKN-RBT 405 MG/24H MOD
SKN-RBT 500 MG/24H MOD
EYE-RBT 1620 UG SEV
EYE-RBT 750 UG/24H SEV

JIHTAB 25,282.43
BIOFX# 2-5/69
28ZPAK -,34.72
AJOPAA 29,1363.46
28ZPAK -,35.72

TOXICITY DATA

ORL-RAT LD50:790 MG/KG
IHL-RAT LC50:8000 PPM/4H
IPR-RAT LD50:1122 MG/KG
IVN-RAT LD50:310 MG/KG
ORL-MUS LD50:5200 MG/KG
IPR-MUS LD50:1072 MG/KG
IVN-MUS LD50:377 MG/KG
SKN-RBT LD50:3400 MG/KG
ORL-BWD LD50:2500 MG/KG

SAMJAF 43,795.69
NPRI* 1,10.74
EVHPAZ 61,321.85
EVHPAZ 61,321.85
PSDTAP 9,276.68
OYYAA2 11,371.76
AIPTAK 135,330.62
NPRI* 1,10.74
AECTCV 12,355.83

REVIEWS, STANDARDS, AND REGULATIONS

MSHA STANDARD-AIR:TWA 100 PPM (300 MG/M3) DTLVS* 3,31.71
OSHA STANDARD-AIR:TWA 100 PPM FEREAC 39,23540.74
EPA GENETIC TOXICOLOGY PROGRAM, JANUARY 1984
REPORTED IN EPA TSCA INVENTORY, 1983
"NIOSH MANUAL OF ANALYTICAL METHODS, 3RD ED." SEE: METHOD 1401
MEETS CRITERIA FOR PROPOSED OSHA MEDICAL RECORDS RULE FEREAC 47,30420.
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ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)
DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

HEALTH HAZARD DATA

ACUTE EFFECTS

WARNING
IRRITANT.

CAUSES EYE IRRITATION.

VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.

HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.

SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING,
WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND
VOMITING.

GASTROINTESTINAL DISTURBANCES

MAY CAUSE NERVOUS SYSTEM DISTURBANCES.

FIRST AID

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES.

FIRST AID

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT,
GIVE OXYGEN.
CALL A PHYSICIAN.

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CATALOG # B8590-0

NAME: 1-BUTANOL, 99%

WASH CONTAMINATED CLOTHING BEFORE REUSE.

----- PHYSICAL DATA -----

MELTING POINT: -89.5 C
BOILING POINT: 117.7 C
SPECIFIC GRAVITY: 0.810

----- FIRE AND EXPLOSION HAZARD DATA -----

FLASH POINT: 95 F
EXTINGUISHING MEDIA
CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM.
WATER MAY BE EFFECTIVE FOR COOLING, BUT MAY NOT EFFECT EXTINGUISHMENT.
SPECIAL FIRE FIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.
USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS.
FLAMMABLE LIQUID.
UNUSUAL FIRE AND EXPLOSION HAZARDS
VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND
FLASH BACK.
CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS.

----- REACTIVITY DATA -----

INCOMPATIBILITIES
ACID CHLORIDES
ACID ANHYDRIDES
OXIDIZING AGENTS
REDUCING AGENTS
STRONG ACIDS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE

----- SPILL OR LEAK PROCEDURES -----

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
EVACUATE AREA.
SHUT OFF ALL SOURCES OF IGNITION.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
RUBBER GLOVES.
COVER WITH AN ACTIVATED CARBON ADSORBENT, TAKE UP AND PLACE IN CLOSED
CONTAINERS. TRANSPORT OUTDOORS.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
WASTE DISPOSAL METHOD
BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND
SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY
FLAMMABLE.

OBSERVE ALL FEDERAL, STATE & LOCAL LAWS.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE --- (R)

WEAR APPROPRIATE OSHA/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT
GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
AVOID CONTACT WITH EYES.
AVOID CONTACT AND INHALATION.
AVOID PROLONGED OR REPEATED EXPOSURE.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.
STORE IN A COOL DRY PLACE.

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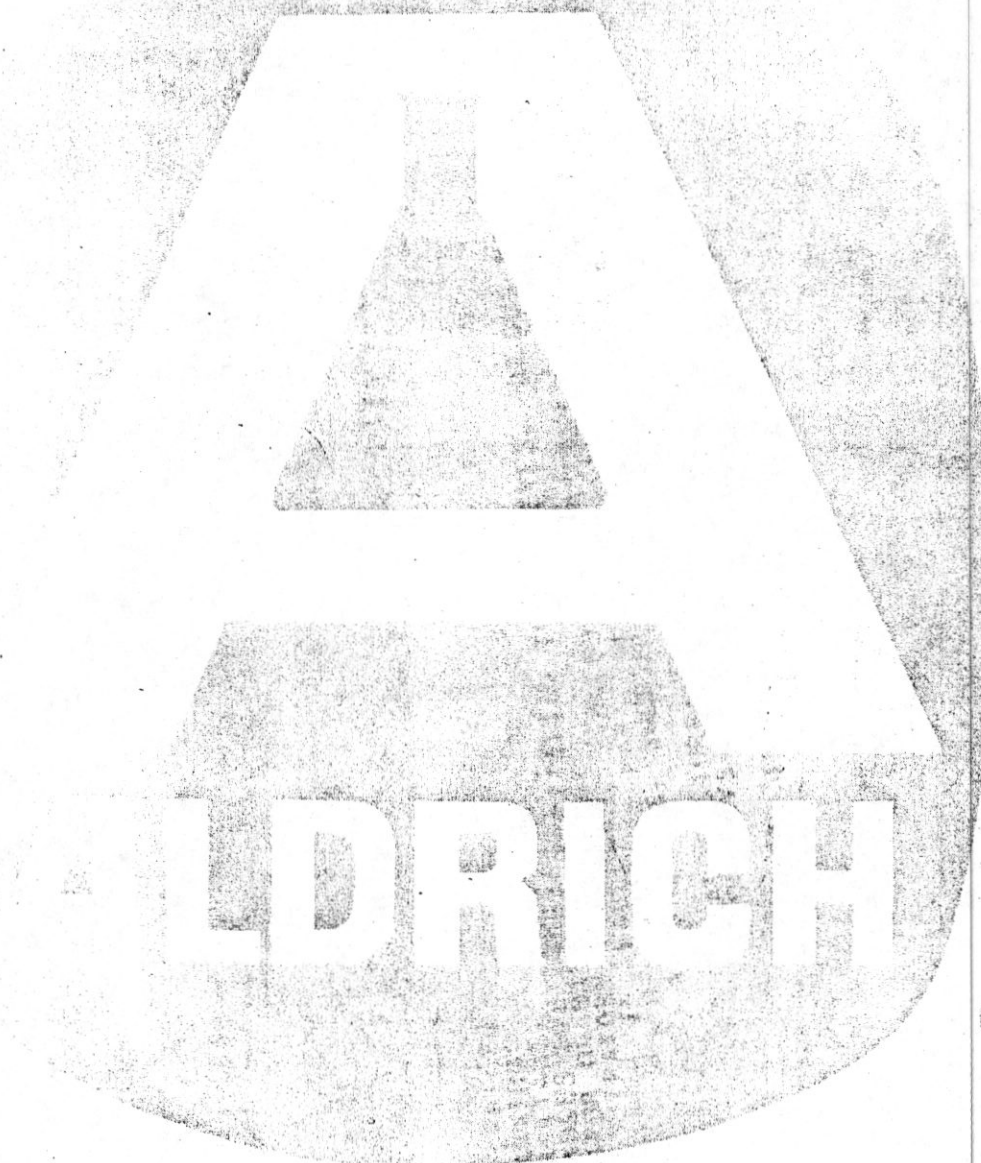
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----- ADDITIONAL PRECAUTIONS AND COMMENTS -----

NOT APPLICABLE

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