

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

Product ID:1,4-DIOXANE

MSDS Date:12/01/1989

FSC:6810

NIIN:00-174-6592

MSDS Number: BWPRK

=== Responsible Party ===

Company Name:BURDICK AND JACKSON DIV OF BAXTER HEALTHCARE CORP.

Address:1953 S HARVEY STREET

City:MUSKEGON

State:MI

ZIP:49442-6101

Country:US

Info Phone Num:616-726-3171

Emergency Phone Num:616-726-3171, CHEMTREC 800-424-9300

CA

GE:2H215

=== Contractor Identification ===

Company Name:HONEYWELL, BURDICK AND JACKSON

Address:1953 S HARVEY STREET

Box:City:MUSKEGON

State:MI

ZIP:49442-6101

Country:US

Phone:800-368-0050/800-707-4555

CAGE:2H215

===== Composition/Information on Ingredients =====

Ingred Name:1,4-DIOXANE (DIETHYLENE DIOXIDE) (SARA III)

CAS:123-91-1

RTECS #:JG8225000

Fraction by Wt: 100%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:S, 100 PPM

ACGIH TLV:S, 25 PPM; 9394

EPA Rpt Qty:100 LBS

DOT Rpt

Qty:100 LBS

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:INHAL:IRRIT, HEADACHE, DIZZ, DROW,
NAUSEA. EASILY ABSORBE THRU LUNGS & CAN DAMAGE LIVER, KIDNEYS, CNS.
EYE:LIQ/HI VAP CONC CAN IRRIT. SKIN:PRLONG/REPEAT CONTACT CAN CAUSE
IRRIT & DERM THRU DEFATTING. ABSORPTION THRU SKIN CAN PRODUCE
TOXIC EFFECTS. INGES
T:GASTROINTESTINAL TRACT DISCOMFORT, NAUSEA,
BLOOD DISORDERS.
Explanation of Carcinogenicity:PER MSDS:LISTED AS CARCINOGEN BY IARC &
NTP & DOES NOT CONTAIN ANY OTHER TOXIC CHEM >1% CONC OR CARCINO
>0.1%.
Effects of Overexposure:1,4-DIXOIDE IS AN EYE/MUCOUS MEMBRANE IRRIT,
PRIMARY SKIN IRRIT, CNS DEPRESSANT, NEPHROTOXIC, HEPATOTOXIN. ACUTE
EXPO CAUSES IRRIT, HEADACHE, DIZZINESS, NARCOSIS. CHRONIC INHAL
EXPO CAN PRODUCE DAMAGE TO LIVER & KIDNEYS, & BLOOD DISORDERS.
Medical
Cond Aggravated by Exposure:PRECLUDE FROM EXPO THOSE
INDIVIDUALS WITH DISEASE OF THE BLOOD, LIVER, KIDNEYS, CENTRAL
NERVOUS SYSTEM, & THOSE SUSCEPTIBLE TO DERMATITIS.

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

First Aid:INHAL:IMMED REMOVE TO FRESH AIR.NOT BREATH GIVE
MOUTH-TO-MOUTH RESCUE BREATHING.NO PULSE GIVE CPR.CALL PHYSICIAN
IMMED. EYE:RINSE W/COPIOUS AMTS OF WTER FOR @LEAST 15MINS.GET EMERG
MED ASSIST. SKIN:FL USH THOROUGHLY FOR @LEAST 15MI
NS.WASH
W/SOAP/WATER.REMOVE CONTAMIN CLOTH/SHOES.GET EMERG MED ASSIST.
INGEST:CALL LOC POISON CNTRL CNTR FOR HELP.CALL DR IMMED.NEVER
INDUCE VOMIT/GIVE ANYTHING BY(SUPPL)

===== Fire Fighting Measures =====

Flash Point Method:TCC
Flash Point:53.6F,12.0C
Autoignition Temp:Autoignition Temp Text:180C
Lower Limits:1.97
Upper Limits:22.5
Extinguishing Media:CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL FOAM, WATER
MIST OR FOG.
Fire Fighting Procedures:WEAR

FULL PROT CLOTHING & SELF-CONTAINED

BREATHING APPARATUS.HEAT WILL BUILD PRESSURE & MAY RUPTURE CLSD
STORAGE CNTNRS.KEEP FIRE-EXPO CNTNRS COOL W/WATERSPRAY.

Unusual Fire/Explosion Hazard:VOLATILE & FLAMM. CAN FORM HEAT SENSITIVE
PEROXIDES WHICH COULD EXPLODE DURING CONC OR EVAPORATION.

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

Spill Release Procedures:PROTECT FROM IGN.WEAR PROT CLOTH/USE APPROVED
RESP EQPMT.ABSORB IN ABSORBENT RECOMMENDED FOR SOLVENT

SPILLS.REMOVE TO SAFE LOCATION FOR DISPOSAL BY APPROVED METHODS.IF
RELEASED TO ENVIRO COMPLY W/ALL REG NOTIFICATION REQMTS.CERCLA
RQ=100LBS.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:PROTECT FROM TEMP EXTREMES/DIRECT
SUNLIGHT.PROPER STORAGE DETERMINED BASED ON OTHER MATL STORE/THEIR
HAZ/POT CHEM INCOMPATIBILITY.

Other Precautions:STORE IN ACCEPTABLY PROT/SECURE FLAMM
LIQ STORAGE

RM.PERIODICALLY CHECK FOR PEROXIDES IN STORED MATL & PRIOR TO USE
EXPECIALLY BEFORE CONC/HEATING.GROUND/BOND METAL CNTNRS TO MIN
STATIC SPARKS.HAVE EM ERGY EYEWASH FOUNTAIN/SAF SHOWER IN AREA

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

Respiratory Protection:USE APPROVED RESP EQPMT.FOLLOW NIOSH & EQPMT
MFG'S RECOMMENDATIONS TO DETERMINE APPROPRIATE EQPMT
(AIR-PURIFYING,AIR-SUPLIED,OR SELF-CONTAINED BREATHING APPARATUS).

Ventilation:ADEQ V

ENTI REQUIRED TO PROTECT FRM EXPO TO CHEM VAP

EXCEEDING PEL/MIN FIRE HAZ.CHOICE(LOC/GEN)DEPEND ON (SUPPLEMENTAL)

Protective Gloves:NEOPRENE GLOVES

Eye Protection:SAF GLASSES MIN.GOGG/FACE SHIELD

Other Protective Equipment:PROT CLOTH RECOMMENDED.CHOICE BASED ON CHEM
RESIST/USER RQMTS.PEOPLE ACUTELY/SPECIFICALLY SENSITIVE TO MATL
ADDT PROTECT

Work Hygienic Practices:WASH CONTAMIN CLOTH BEFORE REUSE.DISCARD
CONTAMIN SHOES.WASH HANDS AFTER HANDLING.

Supplemental Safety and Health

1ST

AID:TO VICTIM UNCONSC OR HAVING CONVULSIONS. VENTIL:CONDITIONS OF
USE/QUANT OF MATL/OTHER OPERATING PARAMETERS.

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

HCC:F2

Boiling Pt:B.P. Text:214F,101C

Melt/Freeze Pt:M.P/F.P Text:53.2F,11.8C

Vapor Pres:29MM @20C

Vapor Density:3.0

Spec Gravity:1.034 @20C

Evaporation Rate & Reference:3,(N-BUTYL ACETATE=1)

Solubility in Water:COMPLETE @20C

Appearance and Odor:CLEAR, COLORLESS LIQUID WITH A LSIGHT ETHER-LIKE
ODOR.

Perc

ent Volatiles by Volume:100

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

OXIDIZING AGENTS & STRONG ACIDS AND BASES.

Stability Condition to Avoid:HEAT, SPARKS, OPEN FLAME, OPEN CONTIANERS,
AND POOR VENTILATION.

Hazardous Decomposition Products:IMCOMPLETE COMBUST CAN GENERATE CO &
OTHER TOXIC VAP.EXPLO PEROXIDES CAN FORM AFT STANDING/UPON EXPO TO
AIR/DIRECT SUNLI

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

Waste Disposal Methods:DISPOS

E OF 1,4-DIOXANE AS EPA HAZ WASTE.CONTACT

STATE ENVIRO AGENCY FOR LISTING OF LICENSED HAZ WASTE DISPOSAL
FACILTIES & APPLICABLE REGULATIONS.HAZ WASTE NOS:U108 (TOXIC) &
D001 (IGNITABLE).SUBJECT TO SEC 313 TITLE III OF SARA.

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