

BECTON-DICKINSON MICROBIOLOGY SYSTEMS INC -- BIOBAG TYPE A 4361214 --  
6640-01-231-7244

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

Product ID: BIOBAG TYPE A 4361214

MSDS Date: 11/07/1990

FSC: 6640

NIIN: 01-231-7244

MSDS Number: BVHJW

=== Responsible Party ===

Company Name: BECTON-DICKINSON MICROBIOLOGY SYSTEMS INC

Address: 250 SCHILLING CIR

Box: 243

City: COCKEYSVILLE

State: MD

ZIP: 21030

Country: US

Info Phone Num: 4

10-785-6257

Emergency Phone Num: 410-785-6257

CAGE: 05545

=== Contractor Identification ===

Company Name: BECTON DICKINSON AND CO MICROBIOLOGY SYSTEMS DIV

Address: 250 SCHILLING CIRCLE

Box: City: HUNT VALLEY

State: MD

ZIP: 21030-1103

Country: US

Phone: 410-771-0101

CAGE: 05545

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

Ingred Name: HYDROGEN CHLORIDE (HYDROCHLORIC ACID) (SARA III)

CAS: 7647-01-0

RTECS #: MW4025000

Fraction by Wt: 100% %

Other REC Limits: NONE RECOMMENDED

OSHA PEL: C

5 PPM  
ACGIH TLV:C 5 PPM; 9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:SODIUM HYDROXIDE (SARA III)  
CAS:1310-73-2  
RTECS #:WB4900000  
Fraction by Wt: 15.4% %  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:2 MG/M3  
ACGIH TLV:C 2 MG/M3; 9394  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:POTASSIUM BOROHYDRIDE  
CAS:13762-51-1  
RTECS #:TS7525000  
Fraction by Wt: 12.0%  
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixtu  
re:NOT GIVEN FOR PRODUCT AS A WHOLE  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:WILL CAUSE EYE IRRITATION. MAY CAUSE  
PERMANENT EYE INJURY. WILL CAUSE SKIN IRRITATION. MAY CAUSE BURNING  
SENSATION TO SKIN. INGESTION CAN CAUSE BURNING OF THROAT.  
INHALATION MAY CAUSE IRRITATION, BURN ING OF RESPIRATORY TRACT.  
Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT  
CONCEN  
TRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT  
CARCINOGENS.  
Effects of Overexposure:EYE IRRITATION, SKIN IRRITATION, UPPER  
RESPIRATORY TRACT IRRITATION, BURNING OF THROAT, EYE INJURY.  
Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN AND/OR  
RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS  
PRODUCT.

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

First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS  
OPEN. GET ME

DICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING.  
WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL  
ATTENTION. IN HALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. GET  
MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL  
ATTENTION.

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

Flash Point:NONFLAMMABLE  
Lower Limits:NOT GIVEN  
Upper Limits:NOT GIVEN  
Extinguishing Media:CARBON DIOXIDE, CLASS D FIRE EXTINGUISHING MATERIAL  
Fire Fight  
ing Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA &  
FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE.  
Unusual Fire/Explosion Hazard:POTASSIUM BOROHYDRIDE WILL REACT WITH  
WATER GENERATING HYDROGEN GAS. LIQUID CONTAINED IN AMPULE WILL NOT  
BURN.

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

Spill Release Procedures:WEARING GLOVES ABSORB ANY LIQUID ONTO PAPER  
TOWELS. PICKUP ALL OHTER CONTAMINATED MATERIAAL AND PLACE IN  
BIOBAG. AUTOCLAVE ALL  
MATERIAL BEFORE DISCARDING. DISINFECT THE  
EXPOSED AREA ACCORDING TO ESTAB LISHED PRECAUTIONS AGAINST  
MICROBIOLOGICAL HAZARDS  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:OBSERVE ESTABLISHED PRECAUTIONS  
AGAINST MICROBIOLOGICAL HAZRDS THROUGHOUT ALL PROCEDURES.  
Other Precautions:PRIOR TO DISCARDING STERILIZE SPECIMEN CONTAINERS AND  
OTHER CONTAMINATED MATERIALS BY AUTOCLAVIN  
G. ALL USUAL PRECAUTIONS  
ATTENDANT TO HANDLING HYDROGEN GAAS SHOULD BE OBSERVED WHEN  
EMPLOYING THIS PROD UCT.

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

Respiratory Protection:NOT NORMALLY REQUIRED.  
Ventilation:LOCAL EXHAUST AND MECHANICAL (GENERAL) VENTILATION TO  
MAINTAIN EXPOSURE LEVELS.  
Protective Gloves:LATEX  
Eye Protection:SAFETY GLASSES OR GOGGLES  
Other Protective Equipment:PROTECTIVE CLOTHING AS REQUIRED TO AVOID  
SKIN CONTACT. AN EMERGENCY EYE WA

SH STATION AND SHOWER SHOULD BE AVAILABLE.

Work Hygienic Practices:WASH WITH SOAP AND WATER AFTER HANDLING PRODUCT AND BEFORE EATING DRINKING OR SMOKING.

Supplemental Safety and Health

POTASSIUM BOROHYDRIDE IS THE WATER-REACTIVE METAL HYDRIDE IN THIS PRODUCT AND CONSTITUTES 12.0 % OF THE PELLET. PRODUCT CONSIST OF ONE ANAEROBIC GAS GENERATING UNIT CONTAINING: ONE AMPULE OF DILUTE H CL, ONE GAS GENERATING PILL WITH 12 % POTASSIU BOROHYDRIDE, DESICCANT, BIOBAG INCUBATION BAG TYPE A WITH CATALYST.

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

HCC:N1

Boiling Pt:B.P. Text:NOT GIVEN

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Vapor Pres:NOT GIVEN

Vapor Density:NOT GIVEN

Spec Gravity:NOT GIVEN

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:NOT GIVEN

Appearance and Odor:1 AMPULE OF DILUTE HCL, ONE PILL WITH 12% POTASSIUM BOROHYDRIDE, METAL CATALYST

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

Stability Indicator

Materials to Avoid:YES

ACIDS, ALCOHOLS

Stability Condition to Avoid:HEAT, OPEN FLAME

Hazardous Decomposition Products:HYDROGEN GAS

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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